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General Information

Welcome Message

Start Smart at Coconino Community College!

As Coconino Community College enters its 20th year, we invite you to Start Smart at Coconino Community College because it’s truly one of the most efficient ways to reach your higher education goals.

Whether you have your sights set on an Associate’s Degree, a transfer program to earn a Baccalaureate Degree, or you are a life-long learner seeking knowledge for personal enrichment, CCC is a smart way to begin your journey.

Smart; because CCC’s tuition rates are less than a third of the average of the state’s four-year universities.

Smart; because we’re convenient with campuses in Flagstaff and Page, and classes offered in Fredonia, Grand Canyon/Tusayan, Tuba City, Williams, and online.

Smart; because we’re flexible, providing opportunity to those who may not have the access they need to higher education with programs like Fast Fridays, which are designed for learners that work or commute long distances. Fast Fridays allow you to schedule many of the core classes you need in one day-Friday.

Smart; because at CCC, we change lives and build our community through workforce development, job creation, and by providing an affordable, convenient way to start on the path to a degree that will empower and sustain our learners throughout their lifetime.

Start Smart today by enrolling at Coconino Community College.
District Governing Board

Val Gleave
Board Chair
Page, Arizona
District 5

Patty Garcia
Flagstaff, Arizona
District 2

Patrick Hurley
Flagstaff, Arizona
District 4

Nathaniel "Nat" White
Flagstaff, Arizona
District 1

Jack Hadley
Williams, Arizona
District 3
Vision and Mission, Values Statement, Purposes

VISION
Leading our communities in life-long learning

MISSION
As a learning college, we enrich lives by embracing diversity and transforming the future through quality education.

PURPOSES
Coconino Community College has identified the following purposes to achieve its mission:

General Education to provide learners with the foundation of a liberal education, including a core of learning opportunities in reading, writing, quantitative and critical thinking which form a solid foundation for lifelong learning and success in academic, career, and life goals.

Transfer Education to provide learners with the curriculum necessary to transfer to baccalaureate-granting institutions.

Occupational Education to provide learners with the skills and knowledge necessary to pursue occupational careers and/or life goals.

Continuing Education to provide learners and constituencies who are not directly served by the College’s arts and sciences and occupational and professional technologies divisions with learning opportunities.

Developmental Education to provide the curriculum necessary to prepare learners for college-level course work and the workplace.

Economic Development to respond quickly in the advancement of regional economic development goals through curriculum development and skills training.

Technology Integration to provide state-of-the-art technological education and training opportunities for the student body and the community.

Student Services to facilitate access to the college and to support learners’ attainment of educational goals.

Cultural and Community Service to develop and provide activities and programs that celebrate and preserve cultural diversity and awareness, encourage volunteer service, support community awareness, protect public welfare, and support fine and performing arts.
CORE VALUES
We—the personnel and District Governing Board of Coconino Community College—are dedicated to providing quality educational opportunities to our community. In doing so, we commit to the following core values to guide our decisions and behaviors as we seek to meet the changing needs, aspirations, and goals of our community:

People—We strive to accept the uniqueness of each individual and the contribution each person makes. We strive to create a caring, accepting, and productive environment for our students, employees, and community.

Learning and Growth—We are dedicated to providing lifelong learning opportunities for our students, employees, and community to empower them to achieve their dreams. In this endeavor, we create learning opportunities that are accessible and relevant to our students and which place the learner first.

Quality—We recognize the importance of continually improving our educational offerings and services and the need to hold our students and ourselves to high expectations and standards. We employ a dynamic, strategic planning process and constantly assess our activities to be responsive and accountable to our students, employees, and community.

Ethics—We believe that to be effective we must demonstrate integrity. Therefore, we uphold the highest ethical standards in all of our activities resulting in a responsible and fair environment for our students, employees, and community and a responsive and open decision-making process.

Community—We exist for our community; therefore, we must be responsive to its changing needs and its diversity. To do so, we strive to provide services that are timely, accessible, and affordable. We also pursue partnerships and collaborations throughout our community to be responsive to the needs of our diverse populations.

Respect—We recognize that learning cannot occur without respect. We are committed to the acceptance of diverse cultures, differing ideas and beliefs, and the uniqueness of each individual since these are the foundations of respect.

Sustainability
We commit to innovative thinking to guide our decisions toward sustainable practices in our living and working environments. In this earnest endeavor, we strive to demonstrate adaptive leadership, eco-friendly stewardship and quality education in a mindful and economically feasible manner.
Assessment & College Strategic Goals

Assessment at Coconino Community College

Coconino Community College is committed to providing teaching and learning excellence in all its endeavors through a comprehensive assessment program that includes:

Assessment of Student Learning

This form of assessment involves identifying how competently students have attained learning outcomes in both general education and the major. Each curricular area at the College has articulated the learning outcomes expected of students completing each degree or certificate and the level of student performance expected. Students participate through examinations, portfolios, performance assessments, surveys, and related activities. The emphasis in these areas is directly focused on what a student has learned as a result of their educational experience at CCC. Data collected are used to both document and improve student learning.

Faculty, staff, and students share responsibility to assist with assessment efforts. As well, community members at large are asked to participate in our quality assurance program. In all instances assessment activities stem directly from the institution’s mission and purposes. Results are tied to the College’s strategic plan and used to improve student learning. Participation in these activities is appreciated and valued by members of the College community as CCC strives to achieve its vision of “leading our communities in life-long learning.”

More information on assessment of student learning at CCC can be found at:

www.coconino.edu/research/
Strategic Goals 2008-2011

GROWTH & ETHICS

Goal One: By December 31, 2011, CCC will develop and establish sustainable funding options and optimize the utilization of existing resources by:

Improving internal efficiencies

Strengthening the CCC Foundation

Developing new revenue streams

Enhancing recruitment and retention through innovative enrollment management strategies

QUALITY

Goal Two: By December 31, 2011, CCC will improve the use of technology to enhance learning by:

Strengthening technology infrastructure

Maximizing technology and facilities for learning

Improving access to and delivery of distance learning

Enabling anytime, anywhere use of college technology services

Strengthening technology operations to sustain a geographically dispersed, multi-campus environment

COMMUNITY

Goal Three: By December 31, 2011, CCC will build greater awareness of its services throughout the District and collaborate with community partners to promote the economic health and vitality of the County by:

Strengthening current collaborations with NAU and pursue new ones

Strengthening high school collaborations

Forming collaborations with outside entities

Increasing CCC’s visibility throughout the District

Developing ways to measure and understand the diverse learning needs of the County
Developing a clear branding for CCC describing how the College uniquely meets the needs of the County

LEARNING

Goal Four: By December 31, 2011, CCC will incorporate more innovative strategies to enable achievement of individual learning goals by:

Promoting and expanding post-secondary opportunities for high school students

Expanding non-credit offerings to better match opportunities present in the demographic profile of the County

Developing new and signature programs

Developing strategies to address the specific needs of distance learners

Ensuring institutional quality

PEOPLE & RESPECT

Goal Five: By December 31, 2011, CCC will establish a high quality workplace which values its employees and promotes a learner centered environment by:

Establishing multiple paths for high quality internal customer service and appreciation

Implementing an enhanced total compensation philosophy and plan which enhances recruitment and retention of quality employees

Integrating learning centered philosophy deeper into the CCC culture

SUSTAINABILITY is woven throughout the tactical plans of the document
Coconino Community College Foundation

Foundation Board of Directors

Mr. Kevin Stephens
President

Mr. Chris Bavasi
Past President

Mr. Joseph Donaldson
Secretary

Mr. LaVelle McCoy
Treasurer

Vacant
Student/Phi Theta Kappa Representative

Mrs. Karla Phillips
Faculty/Staff Representative

Mr. Andy Phillips
Market Area President NAZ

Mr. Michael Anderson
Antelope Point Marina

Ms. Susan Casebeer
Community Leader

Mr. Gary Smith
Community Leader

Ex-Officio

Dr. Leah Bornstein
College President

Supporting Members

Ms. Johanna Klomann
Certified Public Accountant

Mr. Scott Talboom
Director of Institutional Advancement

Mr. Whitney Cunningham
Legal Council

Mr. Jack Hadley
DGB Liaison

Ms. Stacy Wyman
Grant Writer Coordinator
The mission of the Foundation is to promote the purpose and goals of Coconino Community College to enhance the opportunities for Coconino County residents.

The Coconino County Community College Foundation, Inc. was founded in 1993 under Arizona law as a non-profit corporation. It is fiscally and organizationally separate from the college with its own Board of Directors. Its purpose is to receive private gifts, bequests, and donations; to account for, manage, and help appreciate monies or property submitted to the Foundation; and to help the college with projects and opportunities which may not be funded by public funds.

Funds for the Foundation are distributed to benefit and advance Coconino Community College and for the encouragement and subsidization of the students and faculty of CCC.

The Foundation Board of Directors is composed of selected residents of Coconino County who represent positive leadership and community influence and have expressed an interest and desire to use their influence on behalf of the college through the Foundation.

The Foundation is prepared to support programs and activities of the college which promote the objectives of the institution. Foundation activities and support include, but are not limited to, scholarships and financial aid for students, recognition of outstanding scholarship or leadership, recognition for cost savings suggestions, development of special facilities, awards for special achievement, management and investment of funds, support of the college library, procurement of special equipment, planning for special college activities and programs, and development of area-wide interest in support of the college.

Gifts to the Foundation may be made in several ways and may usually be arranged to simultaneously achieve maximum tax benefits for the donor and provide generous support for education. Contributions may be made by gifts of cash, real or personal property, securities, provision of a will, gifts of insurance policies, or the establishment of trusts. Gifts may be awarded for specific purposes or given without restrictions.

The Coconino County Community College Foundation, Inc. supports quality education through excellence, achievement and commitment.
Accreditation

Coconino Community College is accredited by the Higher Learning Commission and is a member of the North Central Association, 30 N. La Salle Street Suite 2400 Chicago, IL 60602-2504 312.263.0456 or 800.621.7440*

Equal Opportunity & Nondiscrimination Statement

Coconino Community College is committed to the policy of equal opportunity in employment and education regardless of race, color, religion, creed, age, gender, national origin, physical and mental disability or veteran status in accordance with applicable federal and state statutes and regulations. Coconino Community College is an Equal Opportunity/ Affirmative Action Institution.

Coconino County Community College District, in compliance with Title VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, the Americans with Disabilities Act and Sections 503 and 504 of the Rehabilitation Act of 1973, A.R.S. 41-1463 et. seg., the Age Discrimination in Employment Act of 1967 and A.R.S. 41-1463 - 41-1465, and section 402 of the Vietnam Era Veteran’s Readjustment Act of 1974 does not discriminate against any employee or student. This policy covers admission, access, and service in College programs and activities, and application and treatment in College employment.

Inquiries regarding equal opportunity policies, the filing of grievances or requests for a copy of procedures covering discrimination complaints may be directed to the Director of Human Resources.

This material may be made available in an alternative format upon request by contacting Disability Resource Services at (800) 350-7122, in Arizona, or (928) 226-4243.

Arizona Revised Statutes allows community colleges to use a student’s social security number as their student identification number, but must allow the student to request a system-generated identification number. Coconino Community College has elected to provide all students with a system-generated identification number. The student must still provide their social security number for tax reporting and financial aid and will be used only for such purposes as allowed under the FERPA regulations.

Affiliations

Coconino Community College is a member of the following organizations:

American Association of Collegiate Registrars and Admissions Officers
American Association of Community Colleges
American Council on Education
American Council on Education’s Commission on Women in Higher Education
American Institute of Certified Public Accountants
American Library Association (ALA)
Arizona Academic Administrators’ Association
Arizona Association for Institutional Research
Arizona Association of Career and Technical Education
Arizona Association of District Governing Boards
Arizona Association of Student Financial Aid Administrators
Arizona Association of Student Personnel Administrators
Arizona Association of Veterans’ Program Administrators
Arizona Community College Business Officials Council
Arizona Community College Association
Arizona Community College Presidents’ Council
Arizona Cooperative State Procurement Agreement
Arizona Language Associates
Arizona Library Association (AZLA)
Arizona Occupational Administrators’ Council
Arizona Society of Certified Public Accounts
Arizona State Small Business Development Center Network
Arizona Women in Higher Education (AWHE)
Association of Career and Technical Education (ACTE)
Association of College and Research Libraries (ACRL)
Association of Community College Trustees
Association of Energy Engineers
Association for Institutional Research (AIR)
Association of Small Business Development Centers
Chambers of Commerce: Flagstaff, Sedona, Page, Williams, Grand Canyon
Coconino County Sustainable Economic Development Initiative (SEDI)
College and University Personnel Association
Community College Business Officers
Conference of Interpreter Trainers
Educause
Flagstaff Alliance for the 21st Century
Flagstaff Community Advisory Council
Flagstaff Forty
Flagstaff Rotary
Government Finance Officers Association
Grand Canyon/Williams Community Advisory Council
Mojave Educational Services Cooperative
Mountain States Association of Community Colleges
National Association of Student Employment Administrators
National Association of Student Financial Aid Administrators
National Association of Tech Prep Leadership (Coconino Consortium)
National Association of Veterans' Program Administrators
National Council on Marketing and Public Relations
North Central Association of Community Colleges and Schools
Northern Arizona Community Advisory Council
Northern Arizona Human Resources Association
Society of Human Resource Management
Western Association of Student Employment Administrators
Western Association of Student Financial Aid Administrators
Western Interstate Commission for Higher Education

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.
Support Services & College Compliances

College Publications

College can be confusing—and sometimes scary—to students who have never attended a college or who are coming to college for the first time. Our goal is to help you understand some of the terms and tools used by CCC.

The College builds three publications each year. They are the College Catalog, Class Schedule, and Student Handbook. We want to share information about programs, classes we offer, and services for students. These tools can help you plan your educational goals and learn about services we have. Each publication is on the College's Web Site. The Office of Admissions, Records and Registration at each campus can also share this information with you.

The College Catalog has a list of all of our programs, degrees, certificates, and courses. It also states student’s rights and responsibilities as part of the College. The catalog also gives information on the College’s mission, staff, faculty, and services. CCC is a multi-campus college district. We have services in several locations and we have on-line courses. The catalog gives general information to all CCC students. Information about each campus is in the student handbook and class schedule.

CCC has two-year, or "associate" degrees made to meet a specific purpose. This may be preparing for a career or transferring to a four-year college. Degrees have areas of content. These areas are known as "majors." The catalog has a list of the types of degrees a student may seek. The catalog also has specific course requirements the student must meet to earn a degree. All degrees offered at CCC have courses that meet the "general education" requirements and the "major" requirements.

CCC also has certificates that help students with entry into a specific field of work or to learn new skills. Certificates do not have general education requirements. Students may earn certificates within a semester or year. It depends on how many classes a student takes while at CCC. The catalog has a list of the courses a student must complete to earn the certificate.

The course descriptions provide general information on each course. They are a brief summary of the course that includes prerequisites. Prerequisites are classes or conditions that must be met prior to enrollment in a course. The course descriptions also state credit hours earned for completion of the course and the number of lecture and lab hours the class meets.

The Class Schedule provides a list of when classes are offered in each college location. It also lists on-line courses each semester or session. CCC prints the schedule and posts it on the College’s web site prior to the start of each semester. The class schedule also has information about the academic calendar. These dates are deadlines that affect students. These dates include enrollment, withdrawal, and refunds. More information about when each
campus is open and their services such as advising, placement testing, and registration are listed for each campus location.

The Student Handbook is has more specific information about services and programs offered at CCC. The student handbook has information about each support service at a campus and how to contact the staff for the service or program. Also, the student handbook has a more detailed list of terms and definitions. The student handbook also contains the policies and procedures of student rights and responsibilities. This helps students to be informed of the rules and regulations affecting them while at CCC.

**Support Services**

**Advising**

Academic Advising is available through the office of Student Services and is also provided by faculty. Academic Advisors can assist with educational and career goal clarification, assist with schedule building and provide information on degrees and certificates offered by the college.

http://www.coconino.edu/sa/studentsupport/advising/Pages/default.aspx

**Learning Assistance**

Learning Assistance is offered at the Flagstaff and Page campuses, and information can be found online to help you succeed in college. Learning Assistants help you learn how to learn. We focus on critical thinking, planning, and being accountable for your learning. Learning assistance doesn't focus on mastering facts and theory. Learning assistance guides you in the learning process. We help you grasp what you've been presented in class, but we don't present new ideas for you to master.

You can get free assistance in math, science, writing, and more. Check the website or with the site coordinator at your campus to find out what assistance we have and when it is available. The website is http://www.coconino.edu/academics/arts_science/LEC.

You can get free assistance in math, science, writing, and more. Check the website or with the site coordinator at your campus to find out what assistance we have and when it is available. The web site is http://www.coconino.edu/academics/arts_science/LEC.

**Student Computing Services**

CCC provides learning assistance to help you learn how to use the technology in the computer labs. The labs have fast and reliable computers with current software installed on them. The labs also have quality Internet connections, printers, and scanners. In addition to accomplishing many tasks, students use our labs to do assignments, type papers, do research, access CCC online classes, and store student information on the College network.

If you are taking an online or traditional class that utilizes technology, we offer support and assistance through the Help Desk. We also have general technology assistance if you want to use computers for class presentations or
projects. The Help Desk staff is friendly and knowledgeable at all locations and they have two goals: one is to help you access your course materials, and the other is to help you build your problem-solving skills through the use of computer technology.

Check the website or with the site coordinator at your campus to find out more. The website is: [http://www.coconino.edu/its/user_services/Pages/ComputerLabs.aspx](http://www.coconino.edu/its/user_services/Pages/ComputerLabs.aspx).

**Library Services**

The library helps you succeed at college. Through the library, you can find answers to your study challenges. Library resources help you find and use quality information. Finding adequate, quality information about your topic will help you in understanding difficult concepts taught in your classes and be successful in completing research assignments.

The Library Resources Coordinator is available to answer questions about finding, evaluating and using information to improve your understanding of the course curriculum and to aid in the research and writing process. Here's how it works:

- Bring your research or study question to the Library Resources Coordinator or access the library web page ([http://www.coconino.edu/library/](http://www.coconino.edu/library/))
- Answer your research question with the articles and e-books in the library's online databases, through Cline Library videos and books, or other trusted online information.
- Use the citation tools available from the online databases and the library website to properly format citations for your papers and presentations.
- To deepen your understanding of your research question or the course curriculum, make an appointment to meet with the Library Resources Coordinator.

Here are some of the library services you can use:

- Access online databases and e-books using your Comet ID and password from your home computer or any other available computer connected to the Internet.
- Request or check out materials through Cline Library including books, media, and articles from other libraries worldwide.
- Use a laptop, computer, or study room at Cline Library and ask questions of their librarians through the Ask a Librarian online and phone service.
- Review the handouts, links, and videos on the library web page to learn more about citation styles, research skills, and plagiarism.
- View additional materials on course reserve in the Student Center assigned by your instructor.
- Meet with the Library Resources Coordinator for customized research assistance.

Suppose you want an answer to a study question right away. The library's web site has information that is ready-to-use. One of the valuable resources for you is academic databases. These resources allow searching for quality
information gathered from trusted sources. They contain magazine, journal, and newspaper articles along with reference book sources. These online sources are higher quality than the free information on the Internet and are what your instructor expects you to use to answer research questions. Using the best information helps you be successful.

Your community has other libraries that can help. Northern Arizona University’s Cline Library is a partner with CCC and you can use their library services freely. Here is a list of other community libraries:

- Flagstaff City-Coconino County Public Library
- Page Public Library
- Williams Public Library
- Grand Canyon Community Library

Visit the college’s library web page for more libraries. [http://www.coconino.edu/sa/library/](http://www.coconino.edu/sa/library/)

The library makes it easier to understand ideas presented in your classes. Students use library services to gather information to complete an assignment, learn more about a subject, or develop research skills. These skills in finding quality information help you with future problem-solving, both at home and at work. Get the help you need to succeed - use the library today!

Multimedia Information is found at [http://www.coconino.edu/its/media](http://www.coconino.edu/its/media)

**Online & Media Services**

The online & media services area within Information Technology Services includes all audio, video, web and iTV functions within the College district. The services provided by the online & media services department are:

- iTV
- College web site
- Audio/Visual multimedia setup
- Videography, including video editing and conversion
- Audio engineering

Have any questions concerning the above technologies? If so please contact the ITS Help Desk at (928) 226-HELP (4357) or helpdesk@coconino.edu.

Want to submit a help desk support request? The help desk support request form is available here. [www.coconino.edu/its/media](http://www.coconino.edu/its/media)
Testing Services

CCC uses tests, called placement and proficiency tests, to show that students have the skill level needed to do well in courses. These tests can also help students choose the best starting course for them.

CCC also offers the following tests:
- Proctored tests, supervised exams from other institutions
- Certification tests to obtain a professional certificate (Office of Pest Management (OPM) and WorkKeys (work skills assessment))
- DSST (Formerly DANTES) - credit for prior learning/life experience exams
- Private testing for qualifying students needing accommodations
- General Educational Development (GED) exams, high school equivalency exam

Financial Aid, Scholarships and Veterans’ Services

CCC offers a variety of financial aid and scholarships to full and part-time students. Financial aid includes the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work Study (FWS), Federal Direct Stafford Student Loans, Federal Direct PLUS Loans for parents, CCC Grant, and CCC Scholarship. In order to apply for these types of Financial Aid, students are required to fill out the Free Application for Federal Student Aid (FAFSA) which is located on-line at www.fafsa.ed.gov. CCC is approved to train students under government educational programs for veterans and eligible dependents of deceased or disabled veterans.

CCC has numerous scholarships available every year. Applications are usually accepted from early January to the last day of March for the following academic year. Depending on the sponsor of the organization providing the scholarship, applications are reviewed based on need, academic achievement, and/or community involvement in various areas. Some CCC scholarships, waivers and grants are funded in part or in whole with Arizona state monies. These funds are governed by Arizona State laws. A person who is not a citizen of the United States, who is without lawful immigration status, and who is enrolled as a student at any university under the jurisdiction of the Arizona Board of Regents, or at any community college under the jurisdiction of a community college district in this state is not entitled to tuition waivers, fee waivers, grants, scholarship assistance, financial aid, tuition assistance or any other type of financial assistance that is subsidized or paid in whole or in part with state monies. Please contact Financial Aid and Veterans’ Services at finaid@coconino.edu for more information.

Federal Work Study

Federal Work Study (FWS) is an exciting opportunity available to students who show financial need as determined by the FAFSA. FWS jobs are listed on our website at www.coconino.edu/finaid. Students interested in FWS must complete the FAFSA at www.fafsa.ed.gov and the CCC Federal Work Study Application. The Federal Work Study Application must be turned into the Office of Student Financial Aid in order to be considered for eligibility. CCC offices and community service agencies will review applications and contact students directly based on the skills and information listed on the application. FWS encourages community service work and work related to the student’s course of study. When completing the FAFSA for the next academic year, students deduct FWS earnings from their adjusted gross income. FWS earnings are considered financial aid and are not included in the calculation of EFC which can help some students qualify for more need-based aid in subsequent years. Please contact the
Office of Student Financial Aid for more information (928-226-4219).

http://www.coconino.edu/academics/curriculum/collegecatalog/Pages/CollegeCompliances.aspx

Career Exploration and Educational Planning (Career Services)
The comprehensive Career Center at CCC provides assistance in career/major selection, resume building, interviewing skills, job search strategies and job applications. We also have two free electronic programs available for student use. The AZCIS system provides various career search inventories, occupational searches and college and financial aid info. The College Central Network system allows students to search for current positions and post their resumes for businesses to view. Please call 226-4337 for information.

Internships
Internships can be a great part of each student’s experience at CCC. Some programs have internships built into the program of study. If you want more information about these choices, please contact the department chair who oversees the program you are looking at. The college posts internship opportunities in the Lone Tree Campus Student Lounge.

Educational Opportunity Center (EOC) at Northern Arizona University
It can be hard trying to figure out the right steps to go to school. The Educational Opportunity Center helps students learn about these steps. The program helps students who want to go to CCC. It can also help students who want to go to school outside of Arizona. The program has information about schools throughout the United States. The program also helps students with admissions and financial aid at CCC. The EOC Office is on the CCC Fourth Street Campus.

Tech Prep/Dual Enrollment Program
Connect to Your Future
High school students can earn community college credit for taking specific high school dual enrollment courses. High school students not only earn college and high school credit simultaneously, they also:
• Save money on college tuition
• Reduce college completion time, and
• Eliminate duplication of course work during their freshman year of college.

Coconino Community College offers Tech Prep/Dual Enrollment Programs in:
• Accounting
• Allied Health
• Automotive
• Biology
• Building Trades
• Business
• Chemistry
• Computer Information Systems
• Drafting/Computer-Aided Drafting
• Early Childhood Education
• Elementary Education
• English
• Graphic and Web Page Design
• History
• Hospitality Management
• Office Information Systems
• Political Science
• Marketing
• Math
• Navajo
• Nursing/Allied Health
• Spanish
• Welding

CCC currently works with the following high schools:
• Coconino High School
• Flagstaff High School
• Fredonia High School
• Tuba City High School
• Page High School
• Williams High School
• Grand Canyon High School
• Greyhills Academy High School
• Ganado High School
• Ponderosa High School

For more information go to the Tech Prep web page: http://www.coconino.edu/academics/career/

CAVIAT Co-Enrollment Programs
The Coconino Association for Vocations, Industry and Technology (CAVIAT) has partnered with CCC and Flagstaff Unified School District schools to provide co-enrollment classes for high school juniors and seniors at no cost to students. The CAVIAT Co-Enrollment programs are two-year programs designed for high school juniors. Classes offered from 1:00 pm to 4:00 at the CCC Flagstaff campuses.

Coconino Community College offers CAVIAT Co-enrollment Programs in:

• Alternative Energy
• Business
• Computer Software Technology
• Education Professions
• Electrical Technology
• Law Enforcement
• Nursing Services - Certified Nursing Assistant
• Pre-Health Careers

For more information, go to the CAVIAT webpage at: http://www.coconino.edu/academics/career/highschool/Pages/CAVIAT.aspx
Passages Program
The Passages Program provides assistance for single parents & displaced homemakers who are beginning or returning to college in a career or technical major. We help guide students to success in a number of career and technical programs. Support services for eligible students may include:
  • Financial assistance for childcare and transportation
  • Academic advising
  • Crisis intervention and referral to community resources
  • Textbook loan

Disability Resources (DR)
CCC is committed to providing college-wide educational support and assistance for students with documented disabilities. Services are individually determined to provide you with the opportunity to fully participate within College-sponsored courses and/or activities. Disability Resources works closely with other College departments and community agencies to enhance and support your educational choices. All efforts will be made to promote independence and the highest extent of integration into our learning community.

If you have a documented disability and feel you require accommodations, please contact the Disability Resources office. Services include intake assistance, eligibility determination with appropriate documentation, faculty notification of accommodations, a variety of academic assistance, and continued services throughout your educational experience at CCC. Please be aware that you must contact the Disability Resources office each semester you request accommodations. This should occur at least six weeks before classes start. Without six weeks notice we cannot assure the timely availability of materials or arrangements. Visit the Disability Resources website for more detailed information. [http://www.coconino.edu/sa/studentsupport/dr/](http://www.coconino.edu/sa/studentsupport/dr/)

Reserve Officers Training Corps (ROTC)
Through an arrangement with Northern Arizona University (NAU), CCC students in Flagstaff can take freshmen and sophomore-year classes in ROTC. The goal of the ROTC classes is to provide a foundation of military knowledge and skills needed by junior officers in the military. These classes provide Army ROTC Basic Course credit to students who intend to enroll in, or continue their participation in Army ROTC classes at Northern Arizona University or other universities hosting Army ROTC programs. Students can register for these classes at CCC and take the courses at NAU. For further information, contact Air Force ROTC at (928) 523-2060 or CCC’s Student Support Services.

Bookstore
Purchase of textbooks and supplies are available at our Lone Tree campus bookstore. Bookstore hours are available in the class schedule and student handbook as well as on-line at [www.coconino.bkstr.com](http://www.coconino.bkstr.com). Distance learners may acquire textbook services on-line or by phone at (928) 226-4360. The CCC Bookstore offers free FedEx ground shipping to all Arizona residents (Sorry, no PO boxes please). Used books go fast so make plans to order them soon!
Student Activities and Student Life
Students can get involved with the campus community through activities sponsored by the college and through participation in student organizations. Students are also represented on college council, student government, and have the opportunity to participate in monthly student forums. Students interested in starting new clubs or organizations should contact the Office of Student Support Services.

http://www.coconino.edu/sa/studentsupport/studentlife/Pages/default.aspx

Phi Theta Kappa
Phi Theta Kappa Honor Society was founded for community colleges in 1918. Since that time it has become the largest and one of the most prestigious honor societies in higher education. Nationwide, over $37 million in scholarship opportunities are available to members.

The CCC Beta Gamma Chi chapter recognizes and encourages scholarship by providing the opportunity for the development of leadership and service, an intellectual climate for exchange of ideas and ideals, lively fellowship for scholars, and stimulation of interest in continuing academic excellence. New members are inducted each fall and spring semesters. Requirements for membership include a 3.5 overall GPA in at least 12 (degree level) credit hours earned at CCC.

Distance Learning
CCC offers a variety of courses via instructional television (ITV) and the World Wide Web. These learning opportunities make your education more accessible and flexible. ITV courses are available at seven locations throughout the District, and Web courses can be accessed through most Internet connections at home, work, and/or in a CCC computer lab. Success in distance learning courses depends on students' comfort with instructional technologies and their levels of self-motivation. Additionally, the College provides an array of technical and academic support services for distance learning students. For more information, visit the Extended Learning website: http://www.coconino.edu/extended/.

College Security
Coconino Community College is responsible for maintaining a professional and safe environment, conducive to educational pursuits throughout its district. In its commitment to the provision of a secure environment, procedures are established through review of the College Safety and Security Committee regarding dissemination of accurate and timely information concerning individual safety and security in compliance with related federal and state regulations. Security on locations where CCC classes are held is generally available during regularly scheduled classes and lab hours. A Campus Security Report is also available from CCC and may be accessed at the college web site: http://www.coconino.edu/business/facilities/security/CRIME%20STATISTICS/. Students needing to file restraining orders and/or orders of protection should contact the Security Office at any of the campus locations. For further information on safety tips, emergencies, or reporting assistance, contact the Security Department. http://www.coconino.edu/business/facilities/security/

Student Handbook
The Student Handbook provides information on services and programs offered at CCC. The Student Handbook directs students to policies and procedures for processes offered by the college including student discipline, grade appeals and other academic processes. The student handbook can be found at 
http://www.coconino.edu/sa/studentsupport/studentlife/studenthandbook/

**Student ID Cards**
Photo student ID cards are provided by Security at the Lone Tree Campus. Students at the Page/Lake Powell campus may have their photo taken and information collected on site, and will receive their ID card shortly thereafter. Although the ID card is not generally required to access campus services, it does serve as proof of identity in accessing educational records and other information. Students are issued a “system generated” identification number at the time of initial admissions; social security numbers are NOT used by CCC for student identification purposes.

**Parking and Parking Permits**
Adequate parking and secure parking lots are established at all CCC campuses and locations. Parking permits are required at the Lone Tree and Fourth Street campuses. The permits regulate access to parking at these locations only. Emergency phones are installed throughout the Lone Tree campus parking lot. Violations of parking and traffic regulations and procedures are subject to fines and disciplinary action.

**Lost and Found**
Campus Security is responsible for lost and found items at each campus location. Lost or stolen items may also be reported to Campus Security.

**Small Business Development Center (SBDC)**
Has this thought ever crossed your mind, “What a great idea for a new business! Now, how do I get started?”

Or, maybe you already run your own business. “Seems like I’m doing OK, but I wonder how I can be more profitable. How can I get more customers?”

If you are an entrepreneur or you’re considering self-employment, these and similar questions can be answered by the staff of CCC’s Small Business Development Center. The SBDC is a partnership between CCC and the U.S. Small Business Administration (SBA). SBDCs were established by Congress in 1980 and are currently located in over 1,100 community colleges and universities nationwide.

The CCC SBDC provides direct counseling, pertinent business management training and up-to-date information resources to the Coconino County business community. No-cost, confidential counseling services focus on a variety of business management issues including business planning, financial management and analysis, marketing strategies, international trade, and funding sources. Perhaps the best counseling service the SBDC offers is an
objective third-party perspective to help clients identify and solve problems, as well as determine realistic priorities and goals.

Business owners in the outlying communities are not required to travel to Flagstaff for assistance, as SBDC counseling staff visits all over Coconino County, and telephone or email appointments are also available.

The SBDC maintains a comprehensive information resource library of reference books and other publications. Most books and materials in our resource library are available to lend out to clients.

The SBDC is located at CCC’s Flagstaff Fourth Street campus. Feel free to stop by anytime or call (928) 526-7653 (Flagstaff and Williams) or (800) 350-7122 ext. 7653 (elsewhere in Coconino County). SBDC’s website is http://www.coconino.edu/academics/community/sbdc/ which contains a calendar of upcoming seminars & events as well as other helpful information & links.

Community and Corporate Learning

The College provides customized and affordable courses and workshops devoted to fulfilling the workforce development needs of individual firms or industry clusters. These courses are offered at the College or at the employers’ places of business. Signature programs include our customized “Basic Supervision” and “Leadership” Academies. Courses and programs are delivered using traditional and computer-based instructional methods. CCC has provided on-site training for major employers in Coconino County including Nestle Purina Pet Products, W.L. Gore & Associates, Salt River Project/Navajo Generating Station, New England Business Service, Joy Cone, Flagstaff Medical Center, and Navajo Army Depot. In addition, many other public and private sector firms enrolled their employees in specially-designed course offerings at CCC.

The College is also an authorized service center for ACT WorkKeys®. WorkKeys is a comprehensive assessment system that tests skills in problem solving, applied mathematics, reading comprehension, applied technology, communication and teamwork. It also identifies the skill levels needed to do specific jobs. In many communities, WorkKeys has enhanced the retention and productivity of incumbent workers, and helped improve the entry-level skills of prospective workers

For additional information about work force development and community and corporate learning, call the Executive Director of Community and Corporate Learning at 928-526-7606. http://www.coconino.edu/academics/community/
College Compliances and Consumer Information

Federal regulations require that colleges provide specific consumer information about the school and financial aid to enrolled and prospective students. Each semester (three times per year) the CCC Schedule of Classes is mailed to all Coconino County residents and is made available at all CCC campuses and other designated locations in Coconino County. On the back page of the Schedule of Classes, students are given a brief listing of consumer information and a link to expanded information on the CCC College Compliance webpage at www.coconino.edu/compliances. Individuals may request a free, printed copy of this page (CCC College Compliances and Consumer Information) by visiting the Office of Student Financial Aid at 2800 S. Lone Tree Road, Flagstaff AZ 86001.

Accreditation
Coconino Community College is accredited by the Higher Learning Commission and is a member of the North Central Association, 30 N. La Salle Street Suite 2400 Chicago, IL 60602-2504 800.621.7440.

Affirmative Action / Equal Employment Opportunity
Coconino Community College is committed to providing an excellent working and educational environment for all qualified persons without regard to race, color, religion, gender, age, national origin, sexual orientation, and individuals with disabilities. Our Affirmative Action procedure is available here (https://login.coconino.edu/president/policies/Pages/103-01.aspx). CCC is also committed to provide equal employment opportunity in decisions involving hiring, evaluation, promotion, advancement and discipline, and educational opportunity to all applicants and employees. Our Equal Employment Opportunity procedure is located here (https://login.coconino.edu/president/policies/Pages/102-01.aspx).

Americans with Disabilities Act (ADA)
Coconino Community College maintains programs, policies and procedures, which are required under the provisions of the Americans with Disabilities Act (ADA) which establishes a clear, comprehensive federal prohibition of discrimination against persons with disabilities. The College ensures compliance with applicable building standards for existing, new and remodeled owned structures, development of standards of compliance for non-owned structures, support for an ongoing process of reasonable accommodation to applicants, employees, students and the general public using or seeking to use College facilities and services.

The College prohibits discrimination against a qualified individual with a disability in regard to admissions, registration, access to instruction, hiring, compensation, advancement, training, and other terms or conditions of employment and termination. The College evaluates each request for accommodation individually and provides reasonable accommodations as applicable to qualified applicants and employees with disabilities.

Campus Security Act and Crime Report
Coconino Community College is in compliance with the Crime Awareness and Campus Security Act of 1990 which
requires that colleges collect, prepare and publish information related to crime and campus security and distribute it to all current and potential students and employees, and to any applicant for enrollment or employment, upon request. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act or Clery Act is a federal statute codified at 20 U.S.C. 1092(f), with regulations in the U.S. Code of Federal Regulations at 34 C.F.R. 668.46. CCC’s Annual Campus Security Report may be accessed at the following web site: http://www.coconino.edu/business/facilities/security/CRIME%20STATISTICS/Pages/CampusCrimeReport.aspx. This report includes statistics for the three most recent calendar years concerning the crimes on campus, in or on non campus buildings or property, and public property. Printed copies are also available upon request through security.

Carl Perkins Career and Technical Education Act
Coconino Community College receives grant funding under the federal Carl Perkins Career and Technical Education Act of 2006 to improve career and technical education (CTE) programs and to ensure the full participation of individuals who are members of special populations in CTE programs. Special populations in the Act are defined as individuals with disabilities; economically disadvantaged individuals; individuals preparing for nontraditional training and employment for their gender; single parents; displaced homemakers; and individuals with other barriers to educational achievement, including limited English proficiency. CCC provides assistance to special populations in overcoming barriers that may result in decreased access and success in postsecondary education and does not discriminate against members of special populations.

College Navigator School Profile for CCC
The National Center for Education Statistics’ College Navigator web site is a comprehensive site maintained by the Department of Education. It contains information on many aspects of CCC (and most other colleges) including costs, financial aid, enrollment breakdown, accreditation, graduation rate, retention rate and faculty to student ratio.

Completion/graduation rate report
The CCC Graduation rate is defined as the proportion of full-time, first-time students who enrolled at the beginning of the fall semester and subsequently completed a degree or certificate program within 3 years compared to the proportion found at all Arizona community colleges. CCC’s graduation rate is 24% compared to 21% for all Arizona community colleges.

The CCC Transfer rate is defined as the proportion of first-time degree-seeking students enrolling at CCC who subsequently transfer to 4-year College programs in Arizona.

Based on the 2002-03 degree/certificate seeking cohort of students, the overall cohort transfer rate within five years is 22.5% for CCC. This compares to 18.5% for all Arizona Community Colleges.
30.4% of transfer intent first-time students entering CCC in 2002-03 transferred to an Arizona university within 5 years.

40% of transfer behavior first-time students entering CCC in 2002-03 transferred to an Arizona university within five years.

20.6% of transfer intent first-time students entering all Arizona community colleges in 2002-03 transferred to an Arizona university within 5 years.
24.4% of transfer behavior first-time students entering all Arizona community colleges transferred to an Arizona university within 5 years.

Completion/graduation rate report measure: First-time students entering higher education at a community college who declare an intent to transfer or enroll in transfer bearing courses that are found enrolled at an Arizona university within a five year time period after entry. Determined by records contained on Arizona State System for Information on Student Transfer (ASSIST).

Consumer Information
Colleges participating in federal student aid programs are required to make certain information available to all students and staff. Coconino Community College has compiled the required information at www.coconino.edu/compliances in accordance with federal law. We provide this compliance information via email distribution each semester and on the back page of the Schedule of Classes which is mailed to Coconino County residents.

Copyrighted Material, Illegal Downloading and Peer to Peer file sharing
CCC has a written procedure to effectively combat the unauthorized distribution of copyrighted material by users of the institution's network without unduly interfering with the educational and research use of the network. Students who illegally download or distribute copyrighted materials using the institution's information technology system are subject to CCC disciplinary actions up to and including suspension and expulsion. Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement. Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than $750 and not more than $30,000 per work infringed. For "willful" infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505. Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense. For more information, please see the
Web site of the U.S. Copyright Office at [www.copyright.gov](http://www.copyright.gov), and their frequently asked questions at [www.copyright.gov/help/faq](http://www.copyright.gov/help/faq).

**Core Values**

CCC’s vision, mission, purpose, strategic goals and core values are available at [www.coconino.edu/research/Pages/MissionStatement.aspx](http://www.coconino.edu/research/Pages/MissionStatement.aspx).

**Directory Information**

Coconino Community College designates the following items as Directory Information: student name, address, telephone number, date of birth, major field of study, participation in officially recognized activities, dates of attendance, degrees and awards received, most recent previous school attended, e-mail address, and photograph. The College may disclose any of those items without prior consent, unless notified in writing to the contrary prior to or by the first day of classes each semester.

**Drug-Free College**

Coconino Community College is committed to the Drug Free Schools and Communities Act Amendments of 1989 specified by Public Law 101-206 and to the Drug-Free Workplace Act of 1988 as specified by Public Law 101-690. The College prohibits, at a minimum, the unlawful possession, use, or distribution of drugs and alcohol by students and employees on the College’s property, or as part of the College’s activities. Complete information regarding the Drug Free College is listed under College policy/procedure 106.1 which is available at [https://login.coconino.edu/president/policies/Pages/106-01.aspx](https://login.coconino.edu/president/policies/Pages/106-01.aspx). Violations of the Drug-Free College by employees may lead to termination of employment and referral for prosecution consistent with local, state and federal laws. The College provides information to employees regarding the Drug-Free College through the Human Resources Department and through publications such as the Schedule of Classes. Students receive the information in the Schedule of Classes.

There are significant health risks associated with the use of alcohol and illegal substances. Alcohol or illegal drugs can lead to arrest, fines, imprisonment, illness, disability and death. The health consequences of substance abuse may be immediate and unpredictable, such as cardiac arrest with cocaine use, or more subtle and long term such as liver deterioration associated with the prolonged use of alcohol. Regular users of alcohol and other drugs may have erratic lifestyles which interfere with sleep, nutrition, and exercise. Alcohol and substance use and abuse may lead to financial difficulties, domestic violence, deterioration of the family structure, motor vehicle accident injuries, and reduced job performance. Repeated use of alcohol can lead to dependence. The Human Resources department is available to assist employees in finding resources in the community to assist with drug and alcohol questions. The Student Support Services office is available to assist students in finding resources in the community.

**FERPA- Notification of Rights**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:
1. The right to inspect and review the student’s education records within 45 days of the day the College receives a request for access. Students should submit to the Registrar, Dean, Division Chair, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student’s education records that the student believes is inaccurate or misleading.

Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right of a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the District Governing Board; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the College discloses education records without consent to officials of another school, in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Coconino Community College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C., 20202-4605

Financial Aid

The Office of Student Financial Aid consumer disclosures are below. In addition, the public policies and procedures for the Office of Financial Aid and Veterans Services are CCC procedure 520-00 and policies 520-10, 520-20, 520-30, 520-40, 520-50, 520-60, 520-70.

Financial Aid Ability to Benefit
In order to receive financial aid, a student must have an earned high school diploma, completed home schooling, a GED or equivalent. Students who do not have the above must pass an independently approved examination to qualify for Title IV financial aid funds. Students may also have the ability to benefit if they have satisfactorily completed and transferred in at least six credits of coursework that apply towards the certificate or degree they are pursuing. For more information contact the Financial Aid Office.

Financial Aid Administrative Capability
CCC’s office of Student Financial Aid meets the standards of administrative capability. The coordinating official for Financial Aid at CCC is Bob Voytek, Director of Student Financial Aid and Veterans Services. The office has systems in place to detect conflicting student information, provide financial aid counseling and has a system of checks and balances to find errors. CCC separates functions of awarding financial aid in the financial aid office with disbursing financial aid in the cashier’s office. Our Satisfactory Academic Progress policy is available to students at http://www.coconino.edu/sa/finaid/Pages/SAP.aspx. CCC participates in electronic processes with the Department of Education to transmit FAFSA data, Grant data, Loan data and other relevant related data. We ensure that our technology for delivering financial aid is up to date, meeting or exceeding Department of Education Standards.

Financial Aid available at CCC and how to apply
CCC offers the following types of financial aid: Federal Pell Grant (PELL); Federal Supplemental Educational Opportunity Grant (FSEOG); Federal Academic Competitiveness Grant (ACG), Federal Work Study (FWS); Leveraging Education Assistance Partnership (LEAP), Coconino Community College Grant, William D. Ford Federal Direct Loan (Direct Loan Subsidized, Unsubsidized, Parent PLUS) Loan Program and scholarships. For more details and for information on how to apply, please visit http://www.coconino.edu/sa/finaid/Pages/TypesofFinancialAidAvailable.aspx.

Financial Aid Award Adjustments
Adjustments (increases/decreases/cancelations) will be made to your financial aid award through the last day of the refund period. After this period no adjustments to your financial aid will be made. Students who are not making Satisfactory Academic Progress (SAP) will have their financial aid awards canceled for all future enrollments.

Financial Aid Bookstore Vouchers
Bookstore vouchers are made available to CCC students with awarded Pell Grants in excess of the cost of tuition and fees. The bookstore vouchers are typically available about a week prior to classes starting if the student has been awarded the Pell Grant by that time. Students who wish to opt out of using the Bookstore Voucher so that they may purchase books and supplies elsewhere may use the Bookstore Voucher Opt Out form on the financial aid forms page. Students who opt out will have a check cut or direct deposit generated for the cost of their books and supplies no later than the last day of the first week of class.
Financial Aid Cost of Attendance

The average cost of attendance, as used for determining financial aid eligibility is available at [http://www.coconino.edu/sa/finaid/Pages/CostofAttendance.aspx](http://www.coconino.edu/sa/finaid/Pages/CostofAttendance.aspx).

Financial Aid Disbursement

Students may receive their financial aid funding one of two ways:

1. Direct Deposit- Students initiate this process by completing a Direct Deposit Request Form and returning it to the Cashier by the specified deadline. This form is available [online](http://www.coconino.edu/sa/finaid/Pages/CostofAttendance.aspx), at the Cashier or the Office of Student Financial Aid at the Lone Tree Campus.

2. Mail- For students who do not have Direct Deposit, checks will be sent to the mailing address listed in [Web4 Students](http://www.coconino.edu/sa/finaid/Pages/CostofAttendance.aspx) the following business day. Students should allow 5-7 days for the check to arrive in the mail. It is the student's responsibility to keep their address updated in Web4.

In order to be eligible for Financial Aid Disbursement, students must be registered for at least the number of credits for which they were awarded, be in a financial aid eligible program and be making Satisfactory Academic Progress (SAP). Students owing previous semester charges will not receive their financial aid until the debt has been satisfied. Refer [http://www.coconino.edu/sa/finaid/Pages/Disbursement.aspx](http://www.coconino.edu/sa/finaid/Pages/Disbursement.aspx) for more information.

Financial Aid Free Application for Federal Student Aid (FAFSA)

The primary responsibility for financing a college education rests with the student and his or her family. If a Free Application for Federal Student Aid (FAFSA) determines that a family is unable to completely or partially fund an education, the College makes every effort to assist the student to the extent that funds are available. The Office of Student Financial Aid gives top priority of available grant funds to those students who demonstrate the highest need as determined by the FAFSA. The FAFSA may be filled out for free at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). You may request a paper FAFSA by calling 1.800.4FEDAID and one will be mailed to you. CCC’s school code for the FAFSA is 031004.

Financial Aid Return of Title IV Funds Calculation

Students who withdraw from classes may need to repay some of their financial aid. The college must calculate the amount of federal financial aid the recipient did not earn and those funds must be returned. Title IV aid is earned in a prorated manner up to and including the 60% point in the semester. Title IV aid and all other aid is viewed as 100% earned after that point in time. A copy of the Return of Title IV Funds worksheet used for this calculation can be obtained from CCC’s Financial Aid Office or at [http://www.ifap.ed.gov/aidworksheets/currentoptions.htm](http://www.ifap.ed.gov/aidworksheets/currentoptions.htm) - choose credit hour program.

The withdrawal date is:

a) The date that the student began the withdrawal process

b) The date that the student otherwise provided official notification to the school of the intent to withdraw; or
c) If the student did not begin the withdrawal process or otherwise notify the school of the intent to withdraw, the last date of attendance as recorded by the instructor, the midpoint of the semester for which federal financial aid was disbursed, or a later date documented by the school.

Students who receive Title IV aid but do not begin attendance are not subject to Return of Title IV Funds Calculation. Instead, the full amount of disbursement is immediately due back from the student if the student never begins attendance.

For withdrawals, the percentage of Title IV aid earned is calculated by taking the number of days completed by the student divided by the total number of days in the term. The percent of the semester completed is the percentage of Title IV aid earned by the student.

The percentage of Title IV aid unearned (i.e., to be returned to the appropriate program) is 100% minus the percent earned. CCC will return the unearned aid to the federal programs or lender by debiting the student’s account.

The total required institutional charges $\times$ the percent of unearned aid $=$ amount returned to program(s) by CCC

The student shall return the unearned aid to the federal programs or lender as follows: Total unearned aid - the institution’s share $=$ amount returned to the program(s) by the student

Unearned Title IV aid shall be returned to the following programs in the following order: 1) unsubsidized Stafford Loan; 2) subsidized Stafford Loan; 3) Parent PLUS Loan; 4) Federal Pell Grant; 5) Federal Academic Competitiveness Grant; 6) Federal Supplement Educational Opportunity Grant; 7) Leveraging Education Assistance Partnership.

When the total amount of unearned aid is greater than the amount returned by CCC from the student’s account, the student is responsible for returning unearned aid to the appropriate program(s). Loan amounts are returned by the student within the terms of the master promissory note (MPN). A student does not have to repay grant overpayments of $50 or less per program.

Financial Aid Return of Title IV Funds Calculation Sample

A student withdraws after attending 11 days of a 110 day enrollment period. The student received a $1000 Pell Grant and a $2500 Federal Subsidized Loan. The students’ institutional costs were $1000.

a) Days attended (11) / Days in semester (110) = Percentage completed (10%);

b) Total Title IV aid disbursed; $1000 in Federal Pell Grant + $2500 in a Subsidized Loan ($3500) $\times$ Percentage Completed (10%) = Earned Aid ($350)

c) Total disbursed aid ($3500 - Total Earned Aid ($350) = Unearned Aid ($3150)

d) 100% of Semester - Percentage Completed (10%) = Percentage of Unearned Aid (90%)

e) Percentage of Unearned Aid (90%) $\times$ Institutional Charges ($1000) = Unearned Charges ($900)

f) CCC will return the lesser of the Unearned Aid ($3150) or Unearned Charges = ($900)

g) CCC’s Share ($900) will be returned to the Federal Subsidized Loan lender.

h) Unearned Aid ($3150) - CCC’s Share ($900) = Student’s Share ($2250)
i) Total amount of Loans ($2500) - CCC’s Share ($900) = $1600; this is the amount the student will return to the Lender according to the terms of the master promissory note (MPN).

j) Initial amount of unearned Title IV aid due from the student ($2250) - student’s repayment to the student’s loan ($1600) = Initial amount of Title IV Grants for Student to Return ($650)

k) Grant aid disbursed ($1000) X 50% = Title IV Grant Protection ($500) 50% of Grant aid is protected based on HERA 2005.

l) Initial amount of Title IV Grants for Student to Return ($650) - Title IV Grant Protection ($500) = Title IV Grant Funds for the Student to Return ($150)

Financial Aid Satisfactory Academic Progress Policy
Federal regulations require that financial aid students maintain Satisfactory Academic Progress (SAP) toward an eligible degree or certificate program. This policy applies to students applying for Title IV financial aid, including: Federal Pell Grant, Academic Competitiveness Grant (ACG), Federal Supplemental Education Opportunity Grant (FSEOG), Federal Work Study (FWS), Leveraging Educational Assistance Program (LEAP), Federal Family Education Loans (Stafford Subsidized, Stafford Unsubsidized, and PLUS), and any other state funded financial aid.

SAP is reviewed at the end of each semester to determine financial aid eligibility for the upcoming semester. SAP is evaluated on students’ previous enrollment, regardless of whether or not they received financial aid. A student’s entire academic history at CCC is considered when evaluating SAP standing even when financial aid was not received in the past. Even if students have never received financial aid, they may be placed on financial aid probation or suspension based on low cumulative GPA and / or exceeding the 150% rule and / or a low credit completion rate during their most recent semester at CCC.

For more information on SAP at CCC, please visit www.coconino.edu/sa/finaid/Pages/SAP.aspx.

Financial Aid Student Loan Cohort Default Rate
For the Fiscal Year 2008 cohort (reported September 2010): 16.7%
For the Fiscal Year 2007 cohort (reported September 2009): 19.4%
For the Fiscal Year 2006 cohort (reported September 2008): 10.5%
For the Fiscal Year 2005 cohort (reported September 2007): 0.0%

Financial Aid Student Responsibilities
a) Financial Aid Students are responsible for becoming familiar with the Return of Title IV policy and how dropping classes or withdrawing (officially or unofficially) affects eligibility for Title IV aid; and
b) Notifying the Office of Student Financial Aid when the student has completed an official withdrawal through the Office of Admissions, Records and Registration or stopped attending all classes.
c) Completing loan exit counseling if a loan was received at CCC when the student withdraws, graduates or drops below six credit hours.
Gainful Employment Disclosures
Certificate programs at CCC are disclosed on our website and in marketing materials where appropriate. In order to view CCC Gainful Employment certificates, visit the CCC College Catalog.

Governmental Accounting Standards
Coconino County Community College District is an independent reporting entity within the criteria established by generally accepted accounting principles (GAAP) and the Governmental Accounting Standards Board (GASB). Although CCC shares the same geographic boundaries of Coconino County, financial accountability for all activities related to public community college education in Coconino County is exercised solely by the District. In accordance with GASB Statement No. 14, the financial reporting entity consists of a primary government and a component unit. Coconino County Community College District is a primary government because it is a special-purpose government that has a separately elected governing body, is legally separate, and is fiscally independent of other state and local governments. In accordance with GASB Statement No. 39, the financial activity of the Coconino Community College Foundation is presented as a component unit of the District. The District is not included in any other governmental financial reporting entity. You may view CCC’s Financial Reports at http://www.coconino.edu/business/Business%20Office/Pages/default.aspx.

Harassment & Discrimination
Coconino Community College is committed to maintaining a work and educational environment free of discrimination and harassment. All persons associated with CCC including, but not limited to, the District Governing Board, the administration, faculty, staff, students, and members of the public will provide an environment free from harassment and discrimination. Any person who engages in harassment and/or discrimination against others on the basis of race, gender, sexual orientation, religion, color, national origin, age, disability or Veteran status while acting as a member of the College community or while on college property will be in violation of college policy. Inquiries regarding the policy or the filing of a complaint should be directed to the Director of Human Resources.

Health Insurance Portability and Accountability Act (HIPPA)
The CCC Human Resources Office protects confidential health information of CCC employees. Please view our HIPPA procedure for more information.

Holidays
Coconino Community College observes certain holidays and vacation periods, which are detailed in each semester’s class schedule. The College conducts classes at a variety of sites throughout Coconino County including local public school facilities. The College endeavors to follow the holiday schedule and vacation periods of the local school district to ensure access to facilities and reduce schedule conflicts for students. In general, no classes are taught on the following district-wide holidays: New Year’s Day, Martin Luther King Day, President’s Day, Memorial Day, Independence Day, Labor Day, Veteran’s Day, Thanksgiving (two days) and Christmas Day.
Scheduled vacations may vary with site and local school calendars but generally includes a Winter Break beginning just prior to Christmas Day and a Spring Break in March or April. Students shall have the right to observe major religious holidays without penalty or reprisal by any administrator, faculty member, or employee of the College. The student will be required to make up any work missed. Absences for such holidays shall not count against the number of absences allowed by an instructor. At least one week prior to the holiday, students shall submit to their instructor(s) a written statement which contains the date of the holiday and the reason class attendance is not possible.

Human Subjects in Research
Coconino Community College complies with the human subjects in research procedures found in Federal Regulations 45 CFR 46.1. Please visit our Research Integrity procedure, Human Participation procedure and Research Integrity Manual for more information.

Institutional Effectiveness and Assessment of Student Learning
Coconino Community College is committed to its mission to promote student success through comprehensive learning opportunities. Assessment is the ongoing process of analyzing and evaluating CCC’s functions and activities. Information gathered enables the College to understand its effectiveness and improve its educational offerings and services. Assessment and institutional effectiveness activities at CCC emphasize feedback on teaching and learning. The information is used to plan and improve instruction, support services and administrative functions. Coconino Community College is committed to providing teaching and learning excellence in all its endeavors through a comprehensive assessment program. More information on CCC’s institutional effectiveness program can be found at: http://www.coconino.edu/research/Pages/InstitutionalEffectiveness.aspx

All instances of assessment activities stem directly from the institution’s mission and purposes. Results are tied to the College’s strategic plan and used to improve student learning. Assessment of student learning involves identifying how competently students have attained learning outcomes in both general education and the major. Each curricular area at the College has articulated the learning outcomes expected of students completing each degree or certificate and the level of student performance expected. Students participate through examinations, portfolios, performance assessments, surveys, and related activities. The emphasis in these areas is directly focused on what a student has learned as a result of their educational experience at CCC. Data collected are used to both document and improve student learning through curricular changes and program improvements. Faculty, staff, and students share responsibility to assist with assessment efforts. As well, community members at large are asked to participate in our quality assurance program. More information on assessment of student learning at CCC can be found at: www.coconino.edu/research/Pages/AssessmentofStudentLearning.aspx

Lobbying Information
No individual or groups of individuals employed by CCC or acting on its behalf shall accept or expend Federal
appropriated funds for the purpose of lobbying or attempting to influence an officer or employee of any governmental agency, Member of Congress, officer or employee of Congress, or any employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement.

**Mission**

CCC’s vision, mission, purpose, strategic goals and core values are available at [www.coconino.edu/research/Pages/MissionStatement.aspx](http://www.coconino.edu/research/Pages/MissionStatement.aspx)

**Occupational Health and Safety / Environmental Safety and Hazardous Materials**

Coconino Community College shall, in compliance with the Occupational Safety and Health Act of 1987, state, local and federal regulations, establish and maintain a comprehensive hazardous materials communication program which shall cover container labeling, material, safety data sheets and employee training. For more information please view our [Environmental Health and Safety policy](#).

**Plans for Improving Academic Programs**

Coconino Community College regularly assesses our academic programs to ensure that we are coordinated with the vision and mission documents of the College and doing our best to ensure student learning and success is supported through maintaining quality and currency of our courses and programs. Specific program enhancements are available on our [Assessment of Student Learning website](#).

**Red Flag Rules and Identity Theft Program**

In accordance with the provisions outlined in the Federal Trade Commission’s Red Flag Rule, which implements Section 114 of the Fair and Accurate Transactions Act (FACTA) of 2003, Coconino Community College District implemented a program for Identity Theft Prevention. Annually the Chief Technology Officer, Vice President of Business and Administrative Services, and Vice President of Academic Affairs consider the College’s experiences with identity theft, changes in identity theft methods, changes in identity theft detection and prevention methods, changes in types of accounts the College maintains and changes in the College’s business arrangements with other entities, as they relate to this program. After considering these factors, the College determines whether changes to the Program, including the listing of red flags, are warranted. If warranted, the Program is updated.

**Reporting Mandates**

Periodically, the institution is required to submit student data in response to federal and state reporting mandates.

**Retention Rate**

**Sanction Agencies**

No accrediting agency (specialized, professional, or institutional) has applied sanctions or withdrawn accreditation on CCC within the last year. Click [here](http://www.coconino.edu/sa/finaid/Documents/College_Compliance_Docs/2087_AIDU_2009_NFI_Report.pdf) for more information.

**State Authorization**

CCC has applied to the following states to deliver distance education to their students. AZ, CA, CO, UT, NM, NV, TX, HI, AK, VT.

**Strategic Goals**

CCC's vision, mission, purpose, strategic goals and core values are available at [www.coconino.edu/research/Pages/MissionStatement.aspx](http://www.coconino.edu/research/Pages/MissionStatement.aspx)

**Student Code of Conduct**

Student conduct is expected to be consistent with the learning environment and is subject to standards set by the College. The Student Code of Conduct is designed for the promotion and protection of such an environment at the College and to balance the rights and needs of the individual with the responsibility of the individual to the College community. Copies of the Student Code of Conduct Policies and Procedures are available on the College’s web site at [http://www.coconino.edu/president/policies/Pages/503-01.aspx](http://www.coconino.edu/president/policies/Pages/503-01.aspx).

**Student Complaints**

Complaints and grievances by students and other constituents are addressed through various college policies and procedures and administrative offices. The College keeps a record of formal complaints. Student grievance procedures are included in the Student Code of Conduct, available from the Director of Student Support Services or on the web. The privacy of the parties involved is protected. Administrator contact information is below.

Vice President for Academic Affairs: Dr. Kathleen Corak 928.226-4224
Vice President for Administrative Support: Jami Van Ess 928.226-4209
Director of Student Support Services: Veronica Hipolito: 928.226-4334
Director of Human Resources Theresa Alvarado: 928.226-4204

**Student Right-to-Know and Campus Security Act**

Student Identification Number
Coconino Community College will provide all students with a system-generated identification number in the admissions process. The student must still provide their social security number for tax reporting and financial aid and will be used only for such purposes as allowed under the FERPA regulations.

Textbook Pricing Information
Textbook pricing information for both required and recommended materials for classes are linked from the class schedule (https://webapp2.coconino.edu/prod/bwckschd.p_disp_dyn_sched). For each class, there is a “View Book Information” link. Once clicked, students are connected with Follett’s Booklook which displays pricing information including the International Standard Book Number (ISBN) and retail price of the materials charged by the CCC bookstore (Follett). If no ISBN is available, the author, title, publisher, and copyright date of the textbook or supplemental material is provided.

Timely Warning of Emergencies
Coconino Community College maintains a Timely Warning Policy to notify the campus community of reported crimes including hate crimes that are considered by CCC to be a threat to students and employees. Timely Warnings will be issued via a variety of media including but not limited to postings, email, telephone, word of mouth and other means as appropriate. For more information, please visit our campus security website (https://login.coconino.edu/business/facilities/security/Pages/default.aspx).

Transfer of Credit
Coconino Community College explains the procedure for transferring credit (http://www.coconino.edu/president/policies/Pages/501-10.aspx) to and from the College. The information is available to students from the CCC Registration webpage.

Verification of Student Identity
Students, including those in web-based and distance education courses, have their identities validated by the College. When a student is admitted to the College, the Admissions office requires photo identification for purposes of proving lawful presence in the United States per Arizona law. This identification is kept on file. Once admitted, students are assigned a Comet ID and PIN number that constitutes their signature for transcript requests, enrollment verification, as well as online classes. Students use their unique Comet ID and PIN number to log into courses, submit assignments and take exams.

Vision
CCC’s vision, mission, purpose, strategic goals and core values are available at www.coconino.edu/research/Pages/MissionStatement.aspx

Voter Registration
In compliance with the National Voter Registration Act (42 U.S.C. 1973gg-2(b)), mail in voter registration forms for Coconino County are available for all CCC students and the public. Voter registration forms are available at all CCC campuses. For more information contact the Coconino County recorder’s office at (928) 779-6585 or the Arizona Voter Registration Hotline at 1-877-843-8683. Voter registration can also be done online at the Arizona Secretary of State Voter Outreach website at www.azsos.gov/election/VoterRegistration.htm.

You may request a written copy of the CCC College Compliances listed on this page. Please visit the Office of Student Financial Aid and ask for a copy of this webpage for your free, printed copy.

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General Education

General Education Outcomes, Transfer Guidelines and Requirements

General Education Values Statement
The General Education curriculum provides the core of learning in all degree programs and demonstrates the commitment of Coconino Community College to student success. This core of learning includes skills in reading, writing, quantitative and critical thinking which provide a basis for university study or lifelong education. Specific courses emphasize the principles of mathematics, science, or technology. Others focus on greater awareness of self, society, and the history and culture of humankind. General Education presents skills and knowledge for students to succeed in academic, career, and life goals.

*Note: The General Education Core Curriculum is not a degree*

Education for Life!

General Education Learning Outcomes
Coconino Community College offers General Education courses that provide students with the highest quality experience. To that end, we measure the effectiveness of our program using the following student learning outcomes as our guide. Students who complete our General Education program, whether as part of degree program or the AGEC, can expect to acquire or improve their skills in the following areas:

Communication Skills
• Plan, construct, and present logical, coherent, well-supported arguments with consideration of target audience.
• Communicate clearly and effectively, orally and in writing, at a college-level.
• Demonstrate listening and comprehension skills for effective communications.
• Use appropriate technology for communication and information gathering.

Thinking Skills
• Formulate vital questions and problems in a clear and precise manner
• Gather, assess, and interpret information within a theoretical framework
• Develop well-reasoned conclusions and solutions to problems
• Recognize and assess the assumptions, implications, and consequences of various theoretical frameworks

Diversity and Global Awareness
• Analyze the complexity of humanity and its significance for the individual and for society
• Describe the interaction between individuals, their culture, and the physical environment
• Evaluate the continuity of events/issues over time

Ethical and Civil Values
  • Recognize the consequences and significance of one’s actions
  • Understand social values and the implications of those values

Thinking about transferring? Make your credits count!

What is AGEC?
• AGEC stands for Arizona General Education Curriculum. AGEC is the best way to make your credits count for most transfer degrees.
• The purpose of AGEC is to provide students attending any Arizona public community college with the opportunity to build a General Education curriculum that is transferable upon completion without a loss of credit to another Arizona public community college or university.
• AGEC is a statewide agreement between Arizona public community colleges, Northern Arizona University (NAU), Arizona State University (ASU), and the University of Arizona (U of A). Coconino Community College began implementing the AGEC starting spring of 1999.
• AGEC is a 35-credit block of lower division General Education curriculum that fulfills the lower-division General Education requirements at any Arizona public community college or university.

Why complete an AGEC?
1. When you complete an AGEC with a 2.5 Grade Point Average (GPA), all admission requirements are waived at all Arizona public universities. This means that you are unconditionally admitted to any Arizona public university of your choice after completing an AGEC1 with a 2.5 GPA.
2. AGEC satisfies ALL lower-division liberal studies requirements at all Arizona public universities.
3. For most majors, if you complete an AGEC and specific courses you need for transfer, you can enter any Arizona public university as a junior. Please see an advisor for more information.
4. Save money by completing your lower-division liberal studies requirements at CCC2. On the average, Coconino
Community College tuition rates are about one-third of the Arizona public universities’ tuition.
5. Classes are generally smaller than university freshman and sophomore liberal studies classes.
6. If you have some high school concurrent enrollment credits, and/or CLEP credits that satisfy our General Education requirements, these credits can be counted toward an AGEC and will transfer to all Arizona public universities.

1 Depending on the major or department you plan to transfer to at the university, you might still need to meet departmental admission requirements.
2 You may or may not choose to complete a degree at Coconino Community College.
Why complete a CCC transfer degree?
All CCC transfer degrees result in an AGEC\(^1\). Therefore, you get all the benefits of completing an AGEC and more.
• You may be able to transfer into the university as a junior. See an advisor for more information.
• You will have an associate degree, making you more competitive in the job market.

When might AGEC not be necessary?
Some university majors require you to take very specific courses from the beginning of your college education. See an advisor for these majors and to discuss your academic plan.

What happens if you don’t complete an AGEC?
• You will need to meet ALL standard university admission requirements.
• You will need to complete university liberal studies requirements which may or may not be the same as Coconino Community College’s General Education requirements.
• Your General Education courses will be evaluated one by one using the Course Equivalency Guide (CEG) instead of being transferred as a General Education block, satisfying ALL lower-division General Education requirements.

Tips for students planning to transfer
• See an advisor as soon as possible. The earlier you develop an educational plan with an advisor, the less of a chance you have of losing credits after transferring to an Arizona public university. Don’t wait until you almost graduate to see an advisor.
• Explore your career interest to help you decide on a major early.
• Don’t take any more than 64 transferable credit hours, because all Arizona public universities accept only a maximum of 64 transferable credit hours\(^2\).

1 At CCC, you don’t need to switch catalogs to get the benefits of an AGEC.
2 This does not mean that they will accept ALL transferable courses. Please see an advisor to discuss which courses you should take to ensure that you are taking courses that will be counted toward the university graduation requirements.

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Arizona General Education Curriculum - AGEC-A

AGEC-A is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of liberal arts majors at all three Arizona State Universities. (e.g., Anthropology, Social Science, Fine Arts, and Humanities).

Minimum credit hours required: 35

General Education Requirements: 35 Credit Hours

**Composition 6**
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

**Mathematics 3-5**
MAT 142 College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

**Arts/Humanities 6-9**
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

**Social/Behavioral Sciences 6-9**
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

**Physical/Biological Sciences 8-10**
Any two courses may be taken from the Physical/Biological Sciences category.

**Options* 0-6**
General Education Options may be selected from the above categories or from the Options category.

*0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

**Special Requirements**
Each Special Requirement must be met within the General Education Requirements:
- Intensive Writing/Critical Inquiry
- Ethnic/Race/Gender Awareness
- Contemporary Global/International Awareness or Historical Awareness

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University Degrees that Include AGEC-A

http://www.coconino.edu/academics/curriculum/collegecatalog/Pages/UniversityDegreeswithAGEC-A.aspx

For **AA/GR (General Requirements Pathway)** University majors complete the corresponding CCC degree, if available, or complete:
**AGEC-A**

**Foreign Language Requirement (if *)**

**Common courses (optional)**

**AA in General Studies (optional)**

\[\text{ASU}=\text{Arizona State University} \quad \text{NAU}=\text{Northern Arizona University} \quad \text{UA}=\text{University of Arizona}\]

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-BA History (ASU) *
-BA/BS History (NAU) *
-BA History (UA) *

Sociology:
-BS Social & Behavioral Science (ASU) *
-BA/BS Sociology (ASU)
-BA Sociology (NAU) *
-BS Sociology (NAU) *
-BA Sociology (UA) *

Humanities:
-BIS Bachelor of Interdisciplinary Studies (ASU)
-BA Classics (UA) *
-BA Humanities (NAU) *

Women’s Studies:
-BS Women’s Studies (ASU) *
-BA Women & Gender Studies (ASU) *
-BA Women’s & Gender Studies (NAU) *
-BS Women’s & Gender Studies (NAU)

Journalism & Media Arts:
-BA Journalism (UA) *

For AA/SR (Special Requirements Pathway) University majors below complete the corresponding CCC degree, if available, or complete:

AGEC-A
Common courses (see Advisor)
Foreign Language Requirement (if *)
AA in General Studies (optional)

Administration of Justice:
-BA/BS Interdisciplinary Studies (NAU)
-BS Criminal Justice & Criminology (ASU)
-BS Criminology and Criminal Justice (NAU)
-BS Justice Studies (ASU)
-BA/BS Public Agency Service (NAU)

Geography:
-BS Geographic Information Science (NAU)
-BS Geography, extended (NAU)

Anthropology:
-BA Anthropology (NAU)
-BA Anthropology (ASU)
-BA Anthropology (UA)
-BA/BS Public Agency Service (NAU)

Journalism and Media Arts:
-BS Advertising (NAU)
-BS Electronic Media and Film (NAU)
-BSJ Journalism (NAU)
-BA Journalism & Mass Communication (ASU) *
-BS Journalism & Political Science (NAU)
-BA Media Arts (UA) *
-BFA Media Arts (UA) *
-BS Photography (NAU)
-BS Public Relations (NAU)
### Art:
- BFA Art (ASU)
- Drawing
- Fibers,
- Intermedia
- Metals
- Photography
- Print Making
- Sculpture
- BFA Art Education (UA) *
- BS Art Education (NAU)
- BFA Art Education (ASU)
- BA Art Studies (ASU)
- BFA Ceramics (NAU)
- BFA Jewelry & Metalsmithing (NAU)
- BFA Painting (NAU)
- BFA Printmaking (NAU)
- BFA Sculpture (NAU)
- BFA Theatre Arts Education (UA)
- BA Studio Art (UA) *
- BFA Studio Art (UA) *
- BFA Visual Communication (NAU)

### Languages:
- BA Asian Languages (ASU) *
- BA East Asian Studies (UA) *
- BA French (ASU) *
- BA French (UA) *
- BA French (NAU) *
- BA German (NAU) *
- BA German (ASU) *
- BA German Studies (UA) *
- BA Italian (ASU) *
- BA Italian (UA) *
- BA Linguistics (UA) *
- BA Modern Languages (NAU) *
- BA Russian (ASU) *
- BA Russian (UA) *
- BSED French Secondary Ed (NAU) *
- BSED German Secondary Ed (NAU) *
- BSED Spanish Secondary Ed (NAU) *
- BAE French Secondary Ed (ASU) *
- BAE German Secondary Ed (ASU) *
- BAE Japanese Secondary Ed (ASU) *
- BAE Spanish Secondary Ed (ASU) *
- BA Spanish (ASU) *
- BA Spanish (NAU) *
- BA Spanish Secondary Ed (UA) *
- BAED Spanish (UA) *

### Communication:
- BA/BS Communication (ASU) *
- BA Communication (UA) *
- BA/BS Communication Studies (ASU)
- BA/BS Speech Communication (NAU)*

### Mathematics:
- BA Mathematics (ASU) *
- BS Mathematics (ASU)
- BS Mathematics (NAU)
- BS Mathematics Secondary Ed (NAU)
- BA/BS Mathematics (UA) *

### Economics:
- BS Economics (NAU)
- BA Economics (UA) *
- BS Economics (ASU)

### Music:
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- BAE Secondary Ed Mathematics (ASU)
- BAE Secondary Ed Physical Education (ASU)
- BAE Secondary Ed Social Studies (ASU)
- BA Social Studies Secondary Ed (UA)*
- BAE Special Education (ASU)
- BS Special Ed and Rehab (UA) *
- BS Special Ed & Elementary Ed (NAU)
- BFA Theatre Arts Education (UA)*

Exercise Science, Kinesiology
- BS Exercise & Wellness Promotion (ASU)
- BS Health Promotion (ASU)
- BS Health Sciences: Community Health (NAU)
- BS Health Sciences Secondary Ed (NAU)
- BS Kinesiology (ASU)
- BS Physical Education (UA)
- BAS Wellness (ASU)

Family Studies & Consumer Sciences:
- BS Family & Consumer Sciences Education (UA) *
- BS Family & Human Development (ASU)
- BS Family Studies & Human Development (UA) *
- BS Merchandising (NAU)
- BS Nutrition Dietetics (ASU)
- BS Food & Nutrition Management (ASU)
- BS Human Nutrition (ASU)
- BS Nutrition Communication (ASU)
- BS Retailing & Consumer Sciences (UA) *
- BAS Wellness (ASU)

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Arizona General Education Curriculum - AGEC-B

AGEC-B is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of business majors at all three Arizona State Universities. (e.g. Business Administration, Computer Information Systems) Note: Associate in Business degree core courses may not be used to satisfy AGEC-B requirements.

Minimum credit hours required: 35
General Education Requirements: 35 Credit Hours

Composition 6
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics 3–5
MAT 212 Business Calculus (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities 6–9
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences 6–9
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral category.

Physical/Biological Sciences 8–10
Any two courses may be taken from the Physical/Biological Sciences category.

Computer Science 3
CIS 120 Introduction to Computer Information Systems

Options* 3
Course may be selected from the above categories or from the Options category.

*3 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

Special Requirements
Each Special Requirement must be met within the General Education Requirements:
• Intensive Writing/Critical Inquiry
• Ethnic/Race/Gender Awareness
• Contemporary Global/International Awareness or Historical Awareness

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University Degrees that Include AGEC-B

For ABus/GR (General Requirements Pathway) For ABus/SR (Special Requirements Pathway)
University majors complete the corresponding CCC degree, if available, or complete:

<table>
<thead>
<tr>
<th>AGEC-B</th>
<th>AGEC-B</th>
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<tbody>
<tr>
<td>Foreign Language Requirement (if *)</td>
<td>Common courses (see Advisor)</td>
</tr>
<tr>
<td>Common courses (optional)</td>
<td>Foreign Language Requirement (if *)</td>
</tr>
<tr>
<td>AA in General Studies (optional)</td>
<td>AA in General Studies (optional)</td>
</tr>
</tbody>
</table>

ASU = Arizona State University  NAU = Northern Arizona University  UA = University of Arizona

### ABus/GR

#### Business:
- BS Accountancy (ASU)
- BS Accountancy (NAU)
- BS Business Admin Accounting (UA) *
- BA Business (ASU)
  - Sustainability
  - Tourism
  - Urban Policy
- BS Business Admin (ASU)
- BS Business Admin, Business Management (UA) *
- BS Commerce (UA) *
- BS Public Admin, Criminal Justice Admin (UA) *
- BS Economics (ASU)
- BS Business Admin (UA) *
  - Entrepreneurship
  - Finance
- BS Finance (ASU)
- BS Bus Admin, Finance (NAU)
- BS Global Business (ASU)
  - Financial Management
  - Leadership & Management
  - Marketing
- BS Public Admin, Health Human Services Admin (UA) *
- BS Management (ASU)
- BS Business Admin, Management (NAU)
- BS Business Admin, Marketing (UA) *
- BS Business Admin, Marketing (NAU)
- BS Marketing (ASU)

#### Computer Information Systems:
- BS Computer Information Systems (ASU)
- BS Business Admin (NAU)
  - BS Business Admin, Management Information Systems (UA) *

### ABus/SR

#### Business Economics:
- BS Business Admin (NAU)
-BS Business Admin (UA) *

Computer Information Systems:
-BS Business Admin, Operations Management (UA) *
-BS Public Admin, Public Management & Policy (UA) *
-BS Real Estate (ASU)
-BS Supply Chain Management (ASU)

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Arizona General Education Curriculum - AGEC-S

AGEC-S is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of majors with more stringent mathematics and mathematics-based science requirements at all three Arizona State Universities. (e.g. Biology or Chemistry).

Minimum credit hours required: 35

General Education Requirements: 35-41 Credit Hours

Composition 6
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics 3-5
MAT 220 Calculus & Analytic Geometry I (5)

Arts/Humanities 6
Courses from two or more disciplines must be selected from the approved general education courses in the Arts/Humanities category.

Social/Behavioral Sciences 6
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral category.

Physical/Biological Sciences 8-10
BIO 181 - Unity of Life I: Life of the Cell (4) &
BIO 182 - Unity of Life II: Multi-cellular Organisms (4)
or
CHM 151 - General Chemistry I (5) &
CHM 152 - General Chemistry II (5)
or
PHY 161 - University Physics I (4) &
PHY 262 - University Physics II (4)

Options 6-8
Subject based on Major - Using a transfer guide, select two courses in Mathematics above calculus and/or Science from the following content areas: Astronomy, Biology, Botany, Environmental Science, Chemistry, Geology, Physics, Physical Geography, or Zoology
Special Requirements

Each Special Requirement must be met within the General Education Requirements:

- Intensive Writing/Critical Inquiry
- Ethnic/Race/Gender Awareness
- Contemporary Global/International Awareness or Historical Awareness

University Degrees that Include AGEC-S

For AS/SR (Special Requirements Pathway) University majors complete:

**AGEC-S**

Common Courses (see Advisor)

Foreign Language Requirement (with *)

Other transferrable courses

CCC degree (optional)

ASU=Arizona State University  NAU=Northern Arizona University  UA=University of Arizona

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<thead>
<tr>
<th>Allied Health/Health Related Professions:</th>
<th>Secondary Education, Chemistry Teaching:</th>
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<tr>
<td>-BS Health Sciences, Health Education (UA) *</td>
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<td><strong>Biology:</strong></td>
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<td>-BS Applied Biological Sciences (ASU)</td>
<td><strong>Computer Sciences, Computer Information Systems:</strong></td>
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<td>Secondary Education Biology</td>
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<td>Urban Horticulture</td>
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<td>Wildlife &amp; Restoration Ecology</td>
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<td>Animal Physiology &amp; Behavior</td>
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<td>Cellular &amp; Molecular Ecology Evolution Fish &amp; Wildlife Management Physiology Pre-Health Professions Zoology</td>
<td>Physics, Physical Sciences &amp; Astronomy: -BS Astronomy (UA) * -BS Astronomy (NAU) -BS Physics (ASU) -BS Science Education, Physics (UA) * -BS Physics (NAU) -BS Physics (UA) * -BS Physics &amp; Astronomy (NAU) -BS Physics &amp; Mathematics (NAU)</td>
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<td>-BA/BS Ecology &amp; Evolutionary Biology (UA) * -BS Life Sciences (ASU) -BS Microbiology (ASU) -BS Microbiology (UA) * -BS Microbiology (NAU) -BS Molecular &amp; Cellular Biology (UA) * -BS Health Sciences, Physiology (UA) *</td>
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*This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.*
General Education Core Curriculum: GECC

English Composition (6)
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics (3–5)
MAT 142 College Mathematics (3)
MAT 151 College Algebra (4)
MAT 187 Precalculus (5)
MAT 211 Business Calculus (4)
MAT 220 Calculus & Analytic Geometry I (5)
MAT 230 Calculus & Analytic Geometry II (5)
MAT 241 Calculus & Analytic Geometry III (4)
MAT 261 Differential Equations (4)
Note: AAS and AGS Degrees may substitute MAT 121 or higher or BUS 100. See specific degree program for requirement listing.

Arts and Humanities (6–9)
Courses from two or more disciplines must be selected to meet the requirement.
ANT 102E,C Introduction to Cultural Anthropology (3)
ART 100 Art Appreciation (3)
ART 201E Art History: Prehistoric to 1400 (3)
ART 202C Art History: 1400 - 2000 (3)
ART 220E Art of the United States (3)
ART 221C,E Art of the Southwest (3)
CPS 100E,C,S Overview of the Colorado Plateau (3)
DAN 201E,C Dance History (3)
ENG 236E Introduction to the American Short Story (3)
ENG 237E Women in Literature (3)
ENG 238E Literature of the Southwest (3)
ENG 272W Creative Writing: Nonfiction (3)
HUM 205W,C Technology and Human Values (3)
HUM 235 American Arts & Ideas (3)
HUM 241W Humanities I (3)
HUM 242W,C Humanities II (3)
MUS 100 Music Appreciation (3)
MUS 145 Jazz History & Literature (3)
MUS 207E American Popular Music (3)
PHI 101C Introduction to Philosophy (3)
PHI 105E Introduction to Ethics (3)
REL 201C Comparative Religions (3)
REL 241C Asian Religions (3)
THR 101 Introduction to Theatre (3)

**Social and Behavioral Sciences (6-9)**
Courses from two or more disciplines must be selected to meet the requirement.
AJS 101 Introduction to Administration of Justice (3)
AJS 230 Deviant Behavior(3)
AJS 280 Criminology (3)
ANT 102E,C Introduction to Cultural Anthropology (3)
ANT 103C Culture and Language (3)
ANT 110 Exploring Archeology (3)
ANT 230E,C Peoples of the Southwest (3)
ANT 250E,C,W Peoples of the World (4)
ASL 110C Introduction to Deaf Studies
BUS 214 Legal, Ethical & Regulatory Issues in Business (3)
CPS 100E,C Overview of the Colorado Plateau (3)
ECN 204W Macroeconomic Principles (3)
ECN 205 Microeconomic Principles (3)
EDU 230E Cultural Diversity in Education (3)
GEO 102 C Human Geography (3)
GEO 133E World/Regional Geography (3)
HIS 131E,C United States History to 1877 (3)
HIS 132E,C United States History from 1877 (3)
HIS 136E,C Women in American History (3)
HIS 201C Western Civilization to 1660 (3)
HIS 202C Western Civilization from 1660 (3)
HIS 211C World History to 1500 (3)
HIS 212C World History form 1500 (3)
POS 101 Introduction to Politics (3)
POS 110 American National Government (3)
POS 120C Introduction to World Politics (3)
POS 220W Arizona & National Constitution (3)
POS 233C Global Environmental Politics (3)
PSY 101E Introduction to Psychology (3)
PSY 227 Personality Theory (3)
PSY 236C Psychology of Women (3)
PSY 240E Developmental Psychology (3)
PSY 250W,E,C Social Psychology (4)
SOC 101E Introduction to Sociology (3)
SOC 140E Marriage & the Family in Contemporary America(3)
SOC 210E Sociology of Gender (3)
SOC 215E Race & Ethnic Relations (3)
SOC 250E,W Contemporary Social Problems (4)

Physical and Biological Sciences (8-10)

ANT 101 Introduction to Physical Anthropology (4)
BIO 100 Biology Concepts (4)
BIO 105W,C Environmental Biology (4)
BIO 109 Natural History of the Southwest (4)
BIO 160 Introduction to Human Anatomy & Physiology (4)
BIO 181 Unity of Life I: Life of the Cell (4)
BIO 182 Unity of Life II: Multicellular Organisms (4)
BIO 201 Human Anatomy & Physiology I (4)
BIO 202 Human Anatomy & Physiology II (4)
BIO 205 Microbiology (4)
BIO 253 Biotechnology & Social Issues (4)
CHM 130 Fundamental Chemistry (4)
CHM 151 General Chemistry I (5)
CHM 152 General Chemistry II (5)
GEO 131 Introduction to Physical Geography (4)
GLG 101 Physical Geology (4)
GLG 102 Historical Geology (4)
GLG 105 Introduction to Planetary Science (4)
GLG 110 Natural Disasters (4)
GLG 232 Geology of the Colorado Plateau (4)
PHY 111 College Physics I (4)
PHY 112 College Physics II (4)
PHY 161 University Physics I (4)
PHY 180 Introduction to Astronomy (4)
PHY 253E Archaeoastronomy (4)
PHY 262 University Physics II (4)

General Education Options may be selected from the above lists or from the following: (0-6)

ASL 101 American Sign Language I (4)
ASL 102 American Sign Language II (4)  
ASL 201 American Sign Language III (4)  
ASL 202 American Sign Language IV (4)  
BUS 232 Business Statistics & Analysis (3)  
CIS 120 Introduction to Computer Information Systems (3)  
FRE 101 Beginning French I (4)  
FRE 102 Beginning French II (4)  
FRE 201 Intermediate French I (4)  
FRE 202 Intermediate French II (4)  
GER 101 Beginning German I (4)  
GER 102 Beginning German II (4)  
GER 201 Intermediate German I (4)  
GER 202 Intermediate German II (4)  
ITA 101 Beginning Italian I (4)  
ITA 102 Beginning Italian II (4)  
ITA 201 Intermediate Italian I (4)  
ITA 202 Intermediate Italian II (4)  
LAT 101 Beginning Latin I (4)  
LAT 102 Beginning Latin II (4)  
MAT 160 Introduction to Statistics (3)  
NAV 101 C Beginning Navajo I (4)  
NAV 102 C Beginning Navajo II (4)  
NAV 201 Intermediate Navajo I (4)  
NAV 202 Intermediate Navajo II (4)  
SPA 101 Beginning Spanish I (4)  
SPA 102 Beginning Spanish II (4)  
SPA 201 Intermediate Spanish I (4)  
SPA 202 Intermediate Spanish II (4)  
SPC 100 Fundamentals of Speech Communication (3)  

Notes:  
1. Check your chosen degree program for specific General Education requirements.  
Arizona General Education Curriculum: AGEC  
2. Letter designations attached to courses in the above list define courses with AGEC Special Requirements of: E - Ethnic, Race, Gender Awareness, W - Intensive writing/ Critical Inquiry, C - Contemporary Global/International Awareness or Historical Awareness.  

The Arizona General Education Curriculum (AGEC) is a block of 35 semester credit hours of lower-division, General Education course work. There are three forms of AGEC:
1. AGEC-A is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of liberal arts majors (e.g. Fine Arts/Visual Arts, Psychology, Sociology)
2. AGEC-B is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of business majors (e.g. Business Administration, Computer Information Systems)
3. AGEC-S is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of majors with more stringent mathematics and mathematics-based science requirements (e.g. Biology, Chemistry)

AGEC-A, AGEC-B, and AGEC-S can be completed separately or as part of an Associate degree at CCC and must include the Special Requirements listed below. The College certifies completion of the AGEC on the official transcript.
A completed AGEC will transfer as a block to meet the lower-division General Education requirements at any of the Arizona public universities or other Arizona community colleges. Transfer students who wish to earn the associate degree must then meet additional CCC degree requirements. To earn the bachelor's degree, students transferring the AGEC must still meet course prerequisites, major requirements, and upper-division requirements at their chosen university.

Special Requirements
Students planning to transfer a completed AGEC must meet the additional Special Requirements listed below. These requirements may be met within the 35 hours of General Education Core Curriculum by choosing one course from each of the following lists.

Note: A minimum of two courses must be taken to fulfill AGEC Special Requirements.

Intensive Writing/Critical Inquiry
ANT 250 Peoples of the World (4)
BIO 105 Environmental Biology (4)
ECN 204 Macroeconomic Principles (3)
ENG 272 Creative Writing: Nonfiction (3)
HUM 205 Technology and Human Values (3)
HUM 241 Humanities I (3)
HUM 242 Humanities II (3)
POS 220 Arizona & National Constitution (3)
PSY 250 Social Psychology (4)
SOC 250 Contemporary Social Problems (4)

Note: ENG 102 is a pre- or co-requisite for these courses.

Ethnic/Race/Gender Awareness
ANT 102 Introduction to Cultural Anthropology (3)
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANT 230</td>
<td>Peoples of the Southwest</td>
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<td>ANT 250E,W</td>
<td>Peoples of the World</td>
<td>4</td>
</tr>
<tr>
<td>ART 221</td>
<td>Art of the Southwest</td>
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<tr>
<td>CPS 100</td>
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<tr>
<td>DAN 201</td>
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<tr>
<td>EDU 230</td>
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<tr>
<td>ENG 236</td>
<td>Introduction to the American Short Story</td>
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<td>ENG 238</td>
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<tr>
<td>HIS 131</td>
<td>United States History to 1877</td>
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</tr>
<tr>
<td>HIS 132</td>
<td>United States History from 1877</td>
<td>3</td>
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<tr>
<td>HIS 136</td>
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<td>MUS 145</td>
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<td>MUS 207</td>
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<td>PHI 105</td>
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<td>SOC 101</td>
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<td>SOC 140</td>
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<tr>
<td>SOC 215</td>
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<tr>
<td>SOC 250</td>
<td>Contemporary Social Problems</td>
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**Contemporary Global/International Awareness or Historical Awareness**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>ANT 102</td>
<td>Introduction to Cultural Anthropology</td>
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<td>ANT 103</td>
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<td>3</td>
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<td>ANT 230</td>
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<td>ANT 250</td>
<td>Peoples of the World</td>
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<td>ART 201</td>
<td>Art History I</td>
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<tr>
<td>ART 202</td>
<td>Art History II</td>
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<td>ART 220</td>
<td>Art of the United States</td>
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<td>ART 221</td>
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<tr>
<td>ASL 110</td>
<td>Introduction to Deaf Studies</td>
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<tr>
<td>BIO 105</td>
<td>Environmental Biology</td>
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<tr>
<td>CPS 100</td>
<td>Overview of the Colorado Plateau</td>
<td>3</td>
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<tr>
<td>DAN 201</td>
<td>Dance History</td>
<td>3</td>
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GEO 102 Human Geography (3)  
GEO 133 World/Regional Geography (3)  
HIS 131 United States History to 1877 (3)  
HIS 132 United States History from 1877 (3)  
HIS 136 Women in American History (3)  
HIS 201 Western Civilization to 1660 (3)  
HIS 202 Western Civilization from 1660 (3)  
HIS 211 World History to 1500 (3)  
HIS 212 World History form 1500 (3)  
HUM 205 Technology and Human Values (3)  
HUM 242 Humanities II (3)  
NAV 201 Intermediate Navajo I (4)  
NAV 202 Intermediate Navajo II (4)  
PHI 101 Introduction to Philosophy (3)  
REL 201 Comparative Religions (3)  
REL 241 Asian Religions (3)  
PHY 253 Archaeoastronomy (4)  
POS 120 Introduction to World Politics (3)  
POS 233 Global Environmental Politics (3)  
PSY 250 Social Psychology (4)  

<table>
<thead>
<tr>
<th>Summary of Minimum General Education Core Curriculum Requirements</th>
<th>Transfer Degrees</th>
<th>Not Intended for Transfer Degrees</th>
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<tr>
<td>General Education Core Curriculum</td>
<td>Associate of Arts</td>
<td>Associate of Business</td>
</tr>
<tr>
<td>English Composition</td>
<td>6</td>
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<tr>
<td>Mathematics</td>
<td>3-5</td>
<td>3-5</td>
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<tr>
<td>Arts and Humanities</td>
<td>6-9</td>
<td>6-9</td>
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<tr>
<td>Social and Behavioral Sciences</td>
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<tr>
<td>Physical and Biological Sciences</td>
<td>8-10</td>
<td>8-10</td>
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<tr>
<td>General Education Options</td>
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<td>0-6</td>
</tr>
<tr>
<td>Total minimum credit hours</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC  
* GECC categories with ranges allow for flexibility in AAS degree core requirement
**for AAS degrees with articulated BAS transfer degrees the recommended GEN ED core may be greater than the minimum listed**

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

**CCC Degree & Certificate General Information**

**Degrees and Certificate Programs**

**Associate of Arts Degree (AA)**
The Associate of Arts Degree is designed for students planning to transfer to a college or university and requires a minimum of 60 credit hours. All courses included in the degree must be completed with a grade of “C” or better. A minimum of 35 of these credit hours must be completed in the Arizona General Education Curriculum (AGEC-A, AGEC-B or AGEC-S). The remaining degree requirements are comprised of 25 credit hours or more in the student’s elected program of study. Courses numbered 100 or above which transfer as equivalent, departmental elective credit (DEC) or general elective credit (E) will be counted toward this degree. Special Topics courses (298) will not be counted toward this degree.

**Associate of Fine Arts (AFA)**
The Associate of Fine Arts degrees in Visual Arts or Dance Performing Arts/ Fitness are designed for transfer to the Fine Arts bachelor’s degrees at all Arizona public universities. The programs give students a strong foundation in visual composition and art history or Dance performing arts and fitness and prepare them to continue their fine arts education in dance, fitness, drawing, painting, photography, ceramics, or sculpture. Students completing these degrees will transfer 60-64 credits to all Arizona public universities. Courses numbered 100 or above which transfer as equivalent, departmental elective credit (DEC) or general elective credit (E) will be counted toward this degree. Special Topics courses (298) will not be counted toward this degree.

**Associate of Business Degree (ABus)**
The Associate of Business is designed for students planning to transfer to a college or university and requires a minimum of 62 credit hours. All courses included in the degree must be completed with a grade of “C” or better. A minimum of 35 of these credit hours must be completed in the Arizona General Education Curriculum (AGEC-B). The remaining degree requirements are comprised of 25 credit hours or more in the student’s elected program of study. Courses numbered 100 or above which transfer as equivalent, departmental elective credit (DEC) or general elective credit (E) will be counted toward this degree. Special Topics courses (298) will not be counted toward this degree.

**Associate of Science Degree (AS)**
The Associate of Science Degree is designed for students planning to transfer to a college or university and
requires a minimum of 60 credit hours. All courses included in the degree must be completed with a grade of "C" or better. A minimum of 35 of these credit hours must be completed in the Arizona General Education Curriculum (AGEC-S). The remaining degree requirements are comprised of 25 credit hours or more in the student’s elected program of study. Courses numbered 100 or above which transfer as equivalent, departmental elective credit (DEC) or general elective credit (E) will be counted toward this degree. Special Topics courses (198, 298) will not be counted toward this degree.

**Associate of Applied Science Degree (AAS)**

The Associate of Applied Science Degree prepares students for entry-level employment or upgrades skills of students already employed. This degree requires a minimum of 60 credit hours with a cumulative CCC grade point average of 2.00 or higher. A minimum of 25 of these credit hours must be completed in the General Education Core Curriculum with a grade of “C” or better. Courses numbered below 100 and courses taken for S/U credit will not be counted toward this degree. With the exception of AAS to BAS degrees, these degrees are not intended for transfer to a university, although some courses may be accepted for transfer by universities.

**Associate of General Studies Degree (AGS)**

The Associate of General Studies Degree is designed for students who wish to broaden their knowledge, but have no university major or vocational goal in mind. This degree requires a minimum of 60 credit hours with a cumulative CCC grade point average of 2.00 or higher. Students must complete a minimum of 24 credit hours of General Education courses but are otherwise free to explore other areas of interest. A maximum of 12 credit hours may be completed in courses numbered below 100. This degree is not recommended for students planning to transfer to a university. The A.G.S. Degree is intended as an alternative degree that recognizes the mission of the community college that education is a lifelong process.

**Colorado Plateau Studies Program**

The Associate of Arts in Colorado Plateau Studies degree is designed for transfer to all Arizona public universities. This is an inter-disciplinary degree that includes courses from the Arts, Humanities, and Sciences in its core. The degree is not only inter-disciplinary in its curriculum, but may also be adapted to give students an emphasis in academic areas of their choice. Students completing this degree will transfer 60-64 credits to all Arizona public universities.

**Certificate Programs**

Certificate programs are designed to provide specific knowledge to improve existing skills or to prepare students for entry-level employment. Certificates are awarded after successful completion of a series of specific courses. Certificates require a cumulative CCC grade point average of 2.00 or higher. Some certificate programs and/or credit hours may be applied toward other certificates and/or an Associate of Applied Science degree.

**Quick Reference to Degree and Certificate Programs**
The following summarizes the minimum General Education Core Curriculum required for each type of degree offered at CCC. When considering which type of a program is best for you, please note that if you intend to transfer to a university to complete a bachelor’s degree, the Associate of Arts, Associate of Business and Associate of Science are the CCC degrees designed for that purpose. The Associate of Applied Science and Associate of General Studies degrees will require additional General Education courses.

**Are you planning to transfer to a university?**

The Associate of Arts (AA), Associate of Business (ABus) and Associate of Science (AS) degrees are designed to make the transfer process as painless as possible. Be sure to check the particular degree requirements of the university you plan on attending; they may have special requirements. Your advisor will assist you in planning the best program for you. The following is a list of the AA, ABus and AS degrees currently offered at Coconino Community College:

**Associate of Arts Degree (AA)**
- Administration of Justice
- Anthropology
- Business
- Colorado Plateau Studies
- Construction Management
- Elementary Education
- Environmental Studies
- General Studies
- Hotel & Restaurant Management
- Psychology
- Sociology
- Vocational Technology Education

**Associate of Fine Arts (AFA)**
- Visual Arts
- Dance Performing Arts/Fitness

**Associate of Business (ABus)**
- Business Administration

**Associate of Science Degree (AS)**
- General Studies
Are you seeking to improve your work skills or options with an associate degree or transfer to a BAS four-year degree program? See your advisor to plan the program best suited to your needs and interests. The following Associate of Applied Science (AAS) degrees have been designed for you.

**Associate of Applied Science Degree (AAS)**

- Administration of Justice
- Alternative Energy Technology
- American Sign Language (ASL) Interpreting
- Architectural Design Technology
- Business
- Carpentry Apprenticeship
- Computer Software Technology
- Construction Technology
- Early Childhood Education
- Electricity
- Fire Science
- Hospitality Management
- Medical Assistant
- Network Engineering
- Nursing
- Paramedic Studies
- Pre Health Careers
- Sustainable Green Building

Are you seeking to broaden your knowledge but have no university major or vocational goal in mind? The Associate of General Studies (AGS) degree has been designed for you.

**Are you interested in improving your skills but may not want to get a degree?**

Many courses in certificate programs can be applied to degrees. See your advisor for further information. The following is a list of Certificates available through CCC:

**Certificate Programs**

- Accounting
- Alternative Energy
- American Sign Language (ASL) Interpreting
- Architectural CAD Technician
- AGEC-A
- AGEC-B
- AGEC-S
- Basic Detention Academy
• Basic Public Safety Emergency Communications Dispatcher Academy
• Carpentry Apprenticeship
• Computer Technician
• Construction Technology
• Early Childhood Education
• Electricity
• Fire Science
• Forensics Investigations
• Graphics and Web Design
• Industrial Maintenance Technician
• Medical Front Office Assistant
• Network Engineering
• Phlebotomy
• Pre Health Careers

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Degrees & Certificates

Associate of Arts: AA Degrees

Administration of Justice: AA Degree

The Associate of Arts in Administration of Justice is designed for transfer to the Criminal Justice bachelor’s degree at Northern Arizona University (NAU) and Arizona State University (ASU). The program teaches students skills which can be used to enter a wide variety of law enforcement and corrections positions. Students completing this degree will transfer 60-64 credits to NAU or ASU. Students planning to transfer to a university other than NAU or ASU should see an advisor. This degree results in an AGEC-A, which is transferable to all Arizona public universities. This is a Tech Prep articulated program. For more information about Tech Prep.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Prepare students for upper division course work and the attainment of a bachelor’s degree in related fields of study.
- Understand the structure of the criminal justice system and the functions of its main constituents: official agencies, citizens, and their elected representatives.
- Acquire the major communication skills required of most criminal justice practitioners including the development of effective written and oral communications consistent with the criminal justice field.
- Use knowledge of other cultures, politics, ethics, and human rights to positively impact the community, work place, and the physical environment around us.
- Provide students with the resources to investigate careers within the criminal justice system.
- Prepare students with skills necessary to enter the criminal justice workforce with specialized training in such areas as detention/corrections officer or emergency communications dispatcher.

Minimum credit hours required: 60

AGEC-A Requirements: 35 credit hours
See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Degree Core Requirements: 25-29 credit hours
Required: 15 credit hours
AJS 101 Introduction to Administration of Justice (3)
AJS 110 The Correction Function (3)
AJS 130 The Police Function (3)
AJS 260 Constitutional Law (3)
AJS 280 Criminology (3)
Mathematics (3-5)
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6-9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6-9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8-10)
Any two courses may be taken from the Physical/Biological Sciences category.

General Education Options (0-6)²
Courses may be selected from the above categories or from the Options category.

Electives: 10-14 credit hours
10-14 credits of transferable courses as stated in the Course Equivalency Guide (CEG). These courses must transfer to all Arizona public universities. See an advisor or check the college catalog web site (www.coconino.edu) for the CEG.

Recommended
One course at the 100 level or above in Spanish or Navajo (this course may be used to fulfill the AGEC Options requirement) (4)
SOC 215 Race & Ethnic Relations (3)
SOC 210 Sociology of Gender (3)

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

Anthropology: AA Degree

The Associate of Arts degree in Anthropology is designed as and offers the CCC student comprehensive preparation for transfer to the Anthropology bachelor's degree at all Arizona public universities. This degree provides a comprehensive introduction to the discipline and all its subfields. Students completing this degree will transfer 61-64 credits to all Arizona public universities. Requirements differ significantly among state universities. Students should see an advisor to plan their program of study to avoid possible transfer difficulties.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Recognize human diversity, specifically differences within and between peoples.
- Describe core research methods and theories employed within the discipline of anthropology.
- Examine the concept of holism as it relates to the discipline of anthropology.
- Define and apply key terms, concepts and theories of anthropology
- Demonstrate critical thinking skills through application and expression.
Describe the relationship between globalization and the discipline of anthropology

Minimum credit hours required: 61

AGEC-A Requirements: 35 credit hours
General Education Courses that can be used to satisfy
AGEC requirements are found on page 56.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 142¹ College Mathematics (3) or a higher course
selected from the approved AGEC courses in the
Mathematics category.

Arts/Humanities (6-9)
Courses from two or more disciplines must be selected
from the approved General Education courses in the
Arts/Humanities category.

Social/Behavioral Sciences (6-9)
Courses from two or more disciplines must be selected
from the approved General Education courses in the
Social/Behavioral Sciences category.

Strongly recommended:
SOC 101 Introduction to Sociology

Physical/Biological Sciences (8-10)
Any two courses may be taken from the General
Education courses in the Physical/Biological Sciences
category.

General Education Options (0-6)²
Courses may be selected from the above categories or
from the Options category.
Strongly recommended: Any natural human language,

Degree Core Requirements: 26
Required: 17 credit hours
ANT 101 Introduction to Physical Anthropology (4)
ANT 102 Introduction to Cultural Anthropology (3)
ANT 103 Culture & Language (3)
ANT 110 Exploring Archaeology (3)

ANT 250¹ Peoples of the World (4)

Electives: 9 credit hours
Select 3 courses from the following:
ANT 230 Peoples of the Southwest (3)
ANT 241 Anthropology of Religion (3)

PSY 230¹ Introduction to Statistics (3)

OR

MAT 160¹ Introduction to Statistics
(3)

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as
needed to complete the minimum 35 hours required
for the AGEC.
This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

**Business: AA Degree**

The Associate Arts in Business degree is designed for transfer to The Frankie College of Business bachelor’s degree at Northern Arizona University (NAU). Students interested in these programs or who are planning to transfer to a university other than NAU should see an advisor. Students completing this degree will transfer 63-64 credits to all Arizona public universities.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Understand and use current real-life guiding principles in the business world
- Ability to identify and use appropriate technology for business applications
• Ability to clearly and effectively communicate orally and written
• Use quantitative analysis skills appropriate for solving business problems
• Understand course concepts in solving real-world business challenges

Minimum credit hours required: 62-63

AGEC-A Requirements: 35-36 credit hours
See General Education Courses that can be used to satisfy AGEC requirements.
Note: Associate of Business degree core courses may not be used to satisfy AGEC-A requirements.

Degree Core Requirements: 27 credit hours
Required: 21 credit hours
ACC 255¹ Principles of Financial Accounting (3)
ACC 256¹ Principles of Managerial Accounting (3)
BUS 214¹ Legal, Ethical & Regulatory Issues in Business (3)
BUS 232¹ Business Statistics & Analysis (3)
ECN 204¹ Macroeconomic Principles (3)
ECN 205 Microeconomic Principles (3)
MAT 172¹ Finite Mathematics (3)

Business Electives: 6 credit hours
Check with an advisor or CEG to choose a course that transfers as elective or better to at least two state universities, and
BUS 204¹ Business Communications (3)
or
CIS 220¹ Applications Programming I (4)

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.
Courses may be selected from the above categories or from the Options category.

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**Colorado Plateau Studies: AA Degree**

The Associate of Arts in Colorado Plateau Studies degree is designed for transfer to all Arizona public universities. This is an inter-disciplinary degree that includes courses from the Arts, Humanities, and Sciences in its core.

The outcomes identified below define the knowledge and skill set that graduates will possess at the end of their program of study.

- Describe and evaluate contemporary issues pertaining to the Colorado Plateau region with an historical perspective.
- Demonstrate and explain the need for stewardship for the natural resources and human populace of the region.
- Analyze and discuss historical, geographical, and cultural aspects of the Colorado Plateau.
- Analyze and discuss the art and art history of the Colorado Plateau.
- Discuss and analyze literature of the Colorado Plateau and the influences on the writers.
- Describe the unique geology of the Colorado Plateau utilizing theories and concepts of historical and structural geology.
- Describe, discuss and summarize contemporary issues affecting the Colorado Plateau.
- Document their observations and responses to the land, cultures and future concerns of the Colorado Plateau region.

Minimum credit hours required: 60

**AGEC Requirements: 35 credit hours**

See General Education Courses on page 56 that can be used to satisfy AGEC requirements.

Composition (6)
- ENG 101 College Composition I (3)
- ENG 102 College Composition II (3)

Mathematics (3-5)
- MAT 142 College Mathematics (3) or a higher course selected from the approved AGEC courses in the

**Required 25 credit hours**

Emphasis Area Core Requirements: 16 credit hours
- CPS 100 Overview of Colorado Plateau (3)
- GLG 232 Geology of the Colorado Plateau (4)
- ENG 220 Writers on the Colorado Plateau (3)
- ANT 230 Peoples of the Southwest (3)
- CPS 290 Capstone Seminar (3)

Colorado Plateau Studies Recommended Electives Course list: 9 credit hours
Mathematics category.

Arts/Humanities (6-9)

ART 221¹ Art History of the Southwest (3)
ENG 238¹ Literature of the Southwest (3)

Additional course may be selected from the approved General Education course list.

Social/Behavioral Sciences (6)

ANT 110 Exploring Archaeology (3)
SOC 215 Race and Ethnic Relations (3)

Physical/Biological Sciences (8-10)

BIO 109¹ Natural History of the Southwest (4)

or a course selected from the approved General Education courses in Physical and Biological Sciences.

Options (0-6)

Any course from the approved General Education course list

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.
³ The Arizona General Education Curriculum courses are attached. Any credits over the 35 minimum must be in accordance with the degree core requirements in order to be counted towards graduation.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

Construction Management: AA Degree

The Construction Management degree is designed for transfer to the Construction Management bachelor's degree at Northern Arizona University. Students completing this degree will transfer 64 credits to NAU. This degree results in an AGEC-A, which is transferable to all Arizona public universities. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Gain fundamental knowledge of construction principles and methodology.
- Recognize jobsite hazards and apply the basic safety practices used in the construction trades.
- Demonstrate a fundamental knowledge in construction drafting, design, and layout.
Minimum Required credit hours: 65

This catalog was prepared on the basis of the best information available at the time of publication. All

AGEC-A Requirements: 37 credit hours
See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (5)
MAT 187¹ Pre-Calculus (5)

Arts/Humanities (6)
Courses from two disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
ECN 204¹ Macroeconomics Principles (3)
BUS 214¹ Legal, Ethical & Regulatory Issues in Business (3)

Physical/Biological Sciences (8)
PHY 111¹ College Physics I (4)
PHY 112¹ College Physics II (4)

General Education Options (6)
SPC 100 Fundamentals of Speech Communication (3)
CIS 120 Introduction to Computer Information Systems (3)

Degree Core requirements: 28 credit hours
Required: 28 credit hours
ACC 255¹ Principles of Financial Accounting (3)
DFT 125¹ Architectural Drafting I (3)
DFT 150¹ Auto CAD 2D (3)
GLG 101 Physical Geology (4)
or
CHM 151¹ General Chemistry I (4)
CTM 120 Building the Human Environment (3)
CTM 253 Plane Surveying & Building Layout (3)
CTM 123 Building Construction Methods I (3)
CTM 124 Building Construction Methods II (3)
CTM 221¹ Structural Design & Building Materials (3)

¹ Placement test and/or prerequisite required.

information is subject to change without notice, obligation, or liability.

Elementary Education: AA Degree

The Associate of Arts in Elementary Education is designed for students planning to transfer to an Elementary Education bachelor's degree program at all Arizona public universities and requires a minimum of 60 credits.
Students planning to transfer to a university other than an Arizona public university should see an advisor. This degree results in an AGEC-A, which is transferable to all Arizona public universities.

Requirements (Mathematics, Social/Behavioral Sciences, and Natural Language requirements) differ significantly among state universities. Students should see an advisor to plan their program of study to avoid transfer difficulties. This is a Tech Prep articulated program. \(\text{click here.}\)

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Ability to recognize, respect and adjust instructional planning to meet the needs of diverse cultures and learners.
- Ability to identify and discuss values educational methodology and legal and ethical teacher behaviors.
- Apply ongoing reflective activities involving student learning, teaching practices, and professional development.
- Ability to access and apply community, cultural and career resources in their teaching and professional development.

Minimum credit hours required: 60

**AGEC-A Requirements: 35 Credit Hours**
See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)
ENG 101 \(^1\) College Composition I (3)
ENG 102 \(^1\) College Composition II (3)

Mathematics (3-5)
MAT 142 \(^1\) College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Two courses in Art (ART), Music (MUS), or Theatre (THR) from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
HIS 131 U.S. History to 1877 (3)

**Degree Core Requirements: 25-32 credit hours**
Required: 24 credit hours

CIS 120 Introduction to Computer Information Systems (3)
EDU 200 Introduction to Education (3)
EDU 222 Introduction to Special Education (3)
EDU 230 Cultural Diversity in Education (3)
EDU 235 Relationships in Classroom Settings (3)
or
EDU 236 Structured English Immersion (3)
MAT 180 \(^1\) Math for Elementary Education Teachers I (3)
(MAT 180 \(^1\) Math for Elementary Education Teachers I (3) 
(Before enrolling in MAT 180 see an advisor.)
MAT 181 \(^1\) Math for Elementary Education Teachers II (3)
(MAT 181 \(^1\) Math for Elementary Education Teachers II (3) 
(Before enrolling in MAT 181 see an advisor.)
POS 220 Arizona and National Constitution (3)

Electives: 1-8 credit hours
1-8 credits of transferable courses as stated in the
Select one additional course from the approved General Education courses in the Social/Behavioral Sciences category.

Highly recommended: (one of the following)
GEO 133 World/Regional Geography (3)
PSY 101 Introduction to Psychology (3)
SOC 101 Introduction to Sociology (3)

Physical/Biological Sciences (8-10)
One course from two of the following areas:
A. Life Sciences: Biology
   Recommended:
   BIO 105¹ Environmental Biology (4)
B. Physical Sciences: Geography, Physics, Chemistry
C. Earth/Space Sciences: Astronomy, Anthropology, Geology

General Education Options (6)
Any two courses from the approved General Education courses in the General Education Options category. A first year of foreign language (101 and 102) is highly recommended.

¹ Placement test and/or prerequisite required.

Course Equivalency Guide (CEG). These courses must transfer to all Arizona public universities. Second year natural language proficiency required at some state institutions. See an advisor or check the college catalog web site (www.coconino.edu) for the current CEG.

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Environmental Studies: AA Degree

The Associate of Arts in Environmental Studies is designed to prepare students for entry level employment as environmental technicians and for continued academic work in an environmental field.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Demonstrate competence in assessing environmental parameters both in the field and in the lab.
- Write, edit and analyze environmental documents.
- Analyze environmental data sets through the construct of graphs, tables and mathematical modeling.
• Work in governmental and non-governmental agencies to evaluate proposed environmentally related projects and offer solutions to potential environmental problems;
• Communicate in a clear, articulate, unbiased manner with both professionals and non-professionals the essence of environmental controversies, hearings, speeches, documents or relevant media.
• Develop the managerial skills necessary to deal with both ecological impacts and the human built environment.
• Prepare students for advanced degrees in environmental studies, science, engineering or environmental justice.

Minimum credit hours required: 62

AGEC-A Requirements: 36 credit hours
See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-4)
MAT 142¹ College Mathematics (3-4) or higher

Arts/Humanities (6)
ENG 238 Literature of the Southwest (3)
HUM 205 Technology and Human Values (3)

Social/Behavioral Sciences (6)
POS 233 Global Environmental Politics (3)
ECN 204 Macroeconomic Principles (3)

Physical/Biological Sciences (8)
CHM 151¹ General Chemistry I (5)
BIO 105 Environmental Biology (4)

General Education Options (6)
CIS 120 Intro to Computer Info Systems (3)
CPS 100 Overview of the Colorado Plateau (3)

Degree Core requirements: 26 credit hours
Required: 26 credit hours
ANT 102 Intro to Cultural Anthropology (3) or ANT 110 Exploring Archaeology (3)
ANT 230 Peoples of the Southwest (3)
BIO 109¹ Natural History Southwest (4)
CTM 120 Building the Human Environment (3)
ENV 113 Global Environmental Issues (3)
GEO 133 World/ Regional Geography (3)
GLG 102 Historical Geology (4)
OR
GLG 232 Geology of Colorado Plateau (4)
BIO 289 Internship (3)

¹ Placement test and/or prerequisite required.

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General Studies: AA Degree

The General Studies degree is designed for students who either have undeclared majors or who are developing a general or liberal studies emphasis. Students completing this degree will transfer 60-64 credits to all Arizona public universities. Students planning to transfer to a university other than an Arizona public university should see an advisor.

Minimum credit hours required: 60

General Education Outcomes

There are two pathways in the General Studies degree:

1. General Requirements Pathway

This pathway requires AGEC-A and fourth semester natural human language proficiency, other than English, including American Sign Language.

2. Special Requirements Pathway

This pathway requires students to take AGEC-A and some Common Courses. Common Courses are courses that are accepted as a part of the major at all Arizona public universities. The list of Common Courses is determined statewide. See an advisor or check the college catalog web site (www.coconino.edu) for these Common Courses.

Depending on the area of interest, one pathway may be more suitable for a student's educational plan than the other. Students changing pathways may accumulate more credits than necessary for graduation from a university. See an advisor for more information.

AGEC-A Requirements: 35 credit hours

1. General Requirements and
2. Special Requirements Pathways

See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)

ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)

MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6-9)

Courses from two or more disciplines must be

Degree Core Requirements: 25 credit hours

1. General Requirements Pathway

Required: up to 16 credit hours

Fourth semester proficiency in any natural human language, other than English, including American Sign Language.³

Electives: 9 or more

Nine credits of transferable courses as stated in the Course Equivalency Guide. These courses must transfer to all Arizona public universities. See an advisor or check the college catalog web site (www.coconino.edu) for the Course Equivalency Guide.

2. Special Requirements Pathway

Depending on your area(s) of interest and/or the
selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6-9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8-10)
Any two courses may be taken from the Physical/Biological Sciences category.

General Education Options (0-6)²
Courses may be selected from the above categories or from the Options category.

university you intend to transfer to, you may need to decide on your transfer plan as early as possible. Please see an advisor to determine your educational plan.

Required
Common Courses in the area(s) of interest/emphasis. See an advisor or check the college catalog web site (www.coconino.edu) for these Common Courses.

Electives
Transferable courses as stated in the Course Equivalency Guide (CEG). These courses must transfer to all Arizona public universities. See an advisor or check the college catalog web site (www.coconino.edu) for the current CEG.

Hotel & Restaurant Management: AA Degree

The Associate of Arts in Hotel Restaurant Management is designed for transfer to the Hospitality bachelor's degree at Northern Arizona University (NAU). This program trains graduates for management careers in one of the fastest growing industries in the United States, the hospitality industry. Students completing this degree will transfer 62 credits to NAU. Students planning to transfer to a university other than NAU should see an advisor. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Identify and utilize management techniques and skills to foster a more productive and creative workplace.
- Identify and use the needed productivity software for the appropriate business sector.
- Ability to communicate clearly and effectively.
- Gain practical knowledge of accounting procedures to effectively manage an HRM business.
- Demonstrate good ethical behavior.

Minimum credit hours required: 62
AGEC-A Requirements: 35 credit hours
See page 56 for courses that will satisfy the General Education requirements below.

Composition (6)
ENG 101 ¹ College Composition I (3)
ENG 102 ¹ College Composition II (3)

Mathematics (3-5)
MAT 142 ¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
ECN 204 ¹ Macroeconomic Principles (3)
ECN 205 Microeconomic Principles (3)

Physical/Biological Sciences (8-10)
Any two courses may be taken from the approved General Education courses in the Physical/Biological Sciences category.

General Education Options (0-6)
Second semester proficiency (102 level) in any natural human language, other than English, including American Sign Language.

Degree Core Requirements: 27 credit hours
Required: 27 credit hours
ACC 255 ¹ Principles of Financial Accounting (3)
ACC 256 Principles of Managerial Accounting (3)
CIS 120 Intro to Computer Information Systems (3)
HRM 100 Introduction to Hospitality (3)
HRM 140 Food Production Concepts (3)
HRM 210 Guest Service Management (3)
HRM 220 Property Management (3)
HRM 240 Commercial Food Production (3)
HRM 270 Hospitality Information Technology II (3)

¹ Placement test and/or prerequisite required.

Psychology: AA Degree

The Associate of Arts degree in Psychology is designed for transfer to the three Arizona State universities. Requirements differ significantly among universities. Students should see an advisor to plan their program of study to help avoid transfer difficulties.
The outcomes identified below define the knowledge and skill sets that completers will possess at the end of their program of study.

- Define and apply key terms, concepts and theories of psychology
- Demonstrate an understanding of the research methods used in the field of psychology
- Apply critical thinking skills to evaluate the credibility of research, theories, and applications in the field
- Describe the major theoretical frameworks used in psychology.
- Explain how nature and nurture influence human behavior

Minimum credit hours required: 60

AGEC-A Requirements: 35 credit hours
See General Education Courses on page 56 that can be used to satisfy AGEC requirements.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3–5)
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6–9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6–9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8-10)
Any two courses may be taken from the General Education courses in the Physical/Biological Sciences category.

General Education Options (0-6)²

Total Core Requirements: 25 credit hours

Degree Core Courses: 10 credit hours

Required courses:
- PSY 101 Introduction to Psychology (3)
- PSY 230 Introduction to Statistics (3)
- PSY 250¹ Social Psychology (4)

Select 9-12 credit hours from the following:
- PSY 205 Introduction to Abnormal Psychology (3)
- PSY 236 Psychology of Women (3)
- PSY 227¹ Personality Development (3)
- PSY 240 Developmental Psychology (3)

Because degree requirements vary among universities, students should select the remaining 3-6 credit hours in consultation with an advisor.

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.
Courses may be selected from the above categories or from the Options category.

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**Sociology: AA Degree**

The Associate of Arts degree in Sociology is designed for transfer to the Sociology bachelor’s degree at all Arizona public universities. Students completing this degree will transfer 61-64 credits to all Arizona public universities. Requirements differ significantly among state universities. Students should see an advisor to plan their program of study to avoid transfer difficulties.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Define and apply key terms, concepts and theories of sociology
- Describe the sociological imagination as it relates to everyday life
- Apply critical thinking skills to understanding sociological research and theoretical inference building
- Explain the influence of race, gender, culture, and social stratification on social issues
- Demonstrate an understanding of research methods used in the field of sociology

Minimum credit hours required: 62

**AGEC-A Requirements: 35 credit hours**

<table>
<thead>
<tr>
<th>AGEC-A Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition (6)</td>
<td></td>
</tr>
<tr>
<td>ENG 101¹ College Composition I (3)</td>
<td></td>
</tr>
<tr>
<td>ENG 102¹ College Composition II (3)</td>
<td></td>
</tr>
<tr>
<td>Mathematics (3-5)</td>
<td></td>
</tr>
<tr>
<td>MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities (6-9)</td>
<td></td>
</tr>
</tbody>
</table>

**Degree Core Requirements: 27 Required: 10 credit hours**

<table>
<thead>
<tr>
<th>Degree Core Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 101 Introduction to Sociology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 215 Race &amp; Ethnic Relations (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 250¹ Contemporary Social Problems (4)</td>
<td></td>
</tr>
</tbody>
</table>

Required: 9 credit hours

Select three Elective courses from the following:

<table>
<thead>
<tr>
<th>Elective Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 130 Human Sexuality (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 140 Marriage &amp; the Family in Cont. Am (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 210 Sociology of Gender (3)</td>
<td></td>
</tr>
</tbody>
</table>
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6-9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8-10)
Any two courses may be taken from the General Education courses in the Physical/Biological Sciences category.

General Education Options (0-6)²
Courses may be selected from the above categories or from the Options category.

PSY 230¹ Introduction to Statistics (3)

Language: 8 credit hours
Two semesters of any natural human language other than English, including American Sign Language³.

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.
³ If the student has satisfied the language requirement through an approved proficiency exam, s/he can select up to 9 additional credit hours in psychology or 9 credit hours toward a minor area of study in psychology, political science, administration of justice, or education.

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Vocational Technology Education: AA Degree

The Vocational Technology Education program is designed for transfer to the Vocational Technology Education bachelor’s degree at Northern Arizona University (NAU). Students completing this degree will transfer 60-64 credits to NAU. Students planning to transfer to a university other than NAU should see an advisor. This degree results in an AGEC-A, which is transferable to all Arizona public universities. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Comprehend the scientific principles used in vocational technology.
- Comprehend the use and relationship of liberal arts within vocational technology.
- Demonstrate a fundamental knowledge in construction drafting, design, and layout.
- Possess the appropriate skills and knowledge to enter into and succeed in upper division courses leading to a bachelor’s degree in vocational education.

Minimum credit hours required: 60

AGEC-A Requirements: 35 credit hours
Degree Core Requirements: 25-27 credit hours
See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)
ENG 1011 College Composition I (3)
ENG1021 College Composition II (3)

Mathematics (5)
MAT 187¹ Pre-Calculus (5)

Arts/Humanities (6)
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
POS 220¹ Arizona & National Constitution (3)
One more course not in Political Science from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8–9)
Select one chemistry and one physics course from the following:
CHM 130¹ Fundamental Chemistry (4)
CHM 151¹ General Chemistry I (5)
PHY 111¹ College Physics I (4)
or
Complete 8 credits of physics below:
PHY 111¹ College Physics I (4)
PHY 112¹ College Physics II (4)

General Education Options (0-6)²
Courses may be selected from the above categories or from the Options category.

Required: 3 credit hours
EDU 200 Introduction to Education (3)

Electives: 22-24 credit hours
Choose any 22-24 elective credit hours of transferable courses as stated in the Course Equivalency Guide (available from an advisor or on the web at www.coconino.edu) that transfer to NAU as DEC(VTE) or equivalent from any of the following areas:
CRP Carpentry Apprenticeship
DFT Drafting
ELT Electronics
CTM Construction Technology Management
SMT Sheet Metal Technology
WLD Welding Technology

¹ Placement test and/or prerequisite required.
² 4-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.
Associate of Fine Arts

Dance: AFA Degree

The Associate of Fine Arts degree in Dance and Performing Arts or Dance Fitness is designed for transfer. The program gives students a strong foundation in dance and performing arts or dance fitness technique and general knowledge in the fields of dance, music, and theatre arts. The degree prepares students to continue their performing arts education in dance, music, and/or theatre arts. If the Dance Fitness Option is chosen, the degree prepares students to continue their education in fields emphasizing fitness. Students completing this degree can transfer 60-62 credits to four-year institutions.

Requirements differ significantly among state universities. Students should see an advisor to plan their program of study to avoid transfer difficulties.

The outcomes identified below define the knowledge and skill sets that completers will possess at the end of their program of study.

- Demonstrate proficiency in Jazz, Ballet and Modern Dance measured through class and/or performance evaluations.
- Demonstrate awareness of the historical backgrounds of dance and music, or theatre.
- Demonstrate introductory choreographic skills related to student’s area of interest.
- Demonstrate knowledge of the various careers in student’s area of interest, along with the skills required for those careers.
- Discuss and analyze contributions made by diverse cultures and their effect on the history and performance of dance and music or theatre around the world measured through written assignments and/or performance.

In addition to the above outcomes, students selecting the Dance Fitness Option will:

- Demonstrate proficiency in a variety of fitness techniques, including but not limited to: Pilates, Yoga, Tai chi, and Cardio-Fitness.

Minimum credit hours required: 60 credit hours

General Education AGEC-A Requirements: 35 credit hours

See General Education Courses that can be used to satisfy General Education requirements.

Emphasis Area Core Requirements: 15 credit hours

Required:

Select ONE from each of TWO DIFFERENT dance technique disciplines:

* DAN 1101-1104, DAN 2111-2114, DAN 2121-2124, DAN 2171-217-4 (Ballet I, II, III, or IV) (3)
Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6-9)
DAN 201 Dance History (3)
AND
(one of the following)
THR 101 Introduction to Theatre (3)
MUS 100 Music Appreciation (3)
MUS 145 Jazz History and Literature (3)
MUS 207 American Popular Music (3)

Any additional course may be chosen from an approved General Education course in the Arts/Humanities category.

Social/Behavioral Sciences (6-9)
Courses from two or more disciplines must be selected from approved General Education courses in the Social/Behavioral Sciences category. (6)

Physical/Biological Sciences (8-9)
BIO 160 Introduction to Human Anatomy and Physiology (4)
OR
BIO 201 Human Anatomy and Physiology I (4)
AND
CHM 130 Fundamental Chemistry (4)
OR
CHM 151 General Chemistry (5)

General Education Options (0-6)¹¹

°DAN 1201-1204, DAN 2211-2214, DAN 2221-2224 (Modern I, II, or III) (3)
°DAN 1501-1504, DAN 2501-2504, DAN 2511-2514 (Jazz I, II, or III) (3)
AND
DAN 200 Introduction to Choreography (3)
DAN 290 Performing Arts Practicum (3)
NTR 135 Human Nutrition (3)
* Classes for Dance Majors Only. May take each technique class up to four times for credit.

Degree Electives: 10-12 Credit Hours
Select 10-12 hours from electives suggested below or other performing arts or fitness courses that are transferrable as stated in the Course Equivalency Guide (CEG).

Dance & Performing Arts Option: 10-12 credit hours.
DAN 1101, 1102, 1103, 1104 Ballet I (3)
DAN 2111, 2112, 2113, 2114 Ballet II (3)
DAN 2121, 2122, 2123, 2124 Ballet III (3)
DAN 2171, 2172, 2173, 2174 Ballet IV (3)
DAN 1201, 1202, 1203, 1204 Modern I (3)
DAN 2211, 2212, 2213, 2214 Modern II (3)
DAN 2221, 2222, 2223, 2224 Modern III (3)
DAN 1501, 1502, 1503, 1504 Jazz I (3)
DAN 2501, 2502, 2503, 2504 Jazz II (3)
DAN 2511, 2512, 2513, 2514 Jazz III (3)
DAN 151 Turkish-Egyptian I (2)
DAN 152 Turkish-Egyptian II (2)
DAN 145 Tap (2)
DAN 130 company Class and Rehearsal (4)
THR 110 Acting I (3)
THR 210 Acting II (3)
MUP 105 Voice Class I (1)
DAN 289 Internship I (1-6)
Options may be selected from the above categories or from the Options category.

11 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

DAN 298 Special Topics in Dance (1-6)
THR 298 Special Topics in Theatre (1-6)
MUS 298 Special Topics in Music (1-6)

Dance Fitness Option: 10-12 Credit Hours

DAN 102 Pilates I (2)
DAN 103 Cardio-Fitness (1)
DAN 111 Beginning Yoga (2)
DAN 155 Tai Chi Chuan (3)
DAN 202 Pilates II (2) WITH Pilates Certification (1) Offered through CCL non-credit, take concurrently with DAN 202
DAN 210 Yoga II (2)
DAN 289 Internship (1-6)
DAN 298 Special Topics in Dance (1-6)

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Visual Arts: AFA Degree

The Associate of Fine Arts degree in Visual Arts is designed for transfer to the Fine Arts bachelor's degree at all Arizona public universities. The program gives students a strong foundation in visual composition and art history and prepares them to continue their fine arts education in drawing, painting, photography, ceramics, or sculpture. Students completing this degree will transfer 60-64 credits to all Arizona public universities. Requirements differ significantly among state universities. Students should see an advisor to plan their program of study to avoid transfer difficulties.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Possess drawing skills that include the ability to render forms in pictorial space using light and shade, describe variations in textures and surface qualities, and incorporate the Elements of Drawing in creating evocative images through the effective use of a variety of drawing media
- Possess composition skills in two and three-dimensional media that indicate their knowledge of, and ability to use effectively, basic design principles including, balance and tension, rhythm and repetition, contrast, emphasis and subordination, unity and variety
• Gain the ability to effectively use basic color schemes as well as the ability to use color as an expressive element.
• Be able to discuss historical works of art in the context of the social and cultural climate they were created in and, if applicable, their significance in relationship to subsequent styles or movements in western art.
• Gain the ability to analyze and critically evaluate the form and content of works of art

Minimum credit hours required: 62

**AGEC-A Requirements: 35 credit hours**

See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6-9)
ART 201¹ Art History I (3)
ART 202¹ Art History II (3)
One more course from another discipline must be selected from the approved General Education courses in the Arts/Humanities category (3)

Social/Behavioral Sciences (6-9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8-10)
Any two courses may be taken from the approved General Education courses in the Physical/Biological Sciences category.

**Emphasis Area Core Requirements: 27 credit hours**

Required: 15 credit hours
ART 110 Drawing I (3)
ART 160¹ Color & Design (3)
ART 165 Three-Dimensional Design (3)
ART 290 Visual Arts Practicum(3)

ART 111¹ Drawing II (3)
or
ART 210¹ Life Drawing (3)

Degree Electives: 12 credit hours
Select 12 hours from electives suggested below or other art courses. These courses must transfer to all Arizona public universities. See an advisor or check the college catalog web site ([www.coconino.edu](http://www.coconino.edu)) for the CEG.

Recommended:
ART 111¹ Drawing II (3)
Or
ART 210¹ Life Drawing (3)

Additional choices:
ART 120 Ceramics I (3)
ART 150 Photography I (3)
ART 180¹ Sculpture I (3)
ART 190 Painting I (3)
ART 191¹ Painting II (3)
General Education Options (3)²
Courses may be selected from the above categories or from the Options category.

¹ Placement test and/or prerequisite required.
² 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

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Associate of Business

ABus Degree

The Associate of Business Degree is designed for students planning to transfer to a college or university and requires a minimum of 62 credit hours. All courses included in the degree must be completed with a grade of “C” or better. A minimum of 35 of these credit hours must be completed in the Arizona General Education Curriculum (AGEC-B). The remaining degree requirements are comprised of 25 credit hours or more in the student’s elected program of study. Courses numbered 100 or above which transfer as equivalent, departmental elective credit (DEC) or general elective credit (E) will be counted toward this degree. Special Topics courses (298) will not be counted toward this degree. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Understand and use current real-life guiding principles in the business world
- Ability to identify and use appropriate technology for business applications
- Ability to clearly and effectively communicate orally and written
- Use quantitative analysis skills appropriate for solving business problems
- Understand course concepts in solving real-world business challenges

Minimum credit hours required: 63

**AGEC-B Requirements: 35 credit hours**

See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

*Note: Associate of Business degree core courses may not be used to satisfy AGEC-B requirements.*

- Composition (6)
  - ENG 101 ¹ College Composition I (3)
  - ENG 102 ¹ College Composition II (3)

- Mathematics (4–5)
  - MAT 211 ¹ Business Calculus (4) or a higher course selected from the approved AGEC courses in the Mathematics category.

- Arts/Humanities (6–9)
  - Courses from two or more disciplines must be selected from the approved General Education

**Degree Core Requirements: 27 credit hours**

Required: 24 credit hours

- ACC 255 ¹ Principles of Financial Accounting (3)
- ACC 256 ¹ Principles of Managerial Accounting (3)
- BUS 214 ¹ Legal, Ethical & Regulatory Issues in Business (3)
- BUS 232 ¹ Business Statistics & Analysis (3)
- ECN 204 ¹ Macroeconomic Principles (3)
- ECN 205 Microeconomic Principles (3)
- MAT 172 ¹ Finite Mathematics (3)
- MAT 173 ¹ Calculus I (4)
- MAT 211 ¹ Business Calculus (4)
- MAT 212 ¹ Business Calculus II (4)

**Business Electives: 6 credit hours**

Any ACC or BUS course that is transferable to all three state universities. Check with an advisor.

and

- BUS 204 ¹ Business Communications (3)
- CIS 220 ¹ Applications Programming I (4)
courses in the Arts/Humanities category.

Social/Behavioral Sciences (6–9)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (8–10)
Any two courses may be taken from the General Education courses in the Physical/Biological Sciences category.

General Education Options (3) \(^2\)
CIS 120 Introduction to Computer Information Systems (3)

\(^1\) Placement test and/or prerequisite required.
\(^2\) 0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.
Associate of Science: AS Degree

The Associate of Science Degree is designed for students planning to transfer to a college or university and requires a minimum of 60 credit hours. All courses included in the degree must be completed with a grade of "C" or better. A minimum of 35 of these credit hours must be completed in the Arizona General Education Curriculum (AGEC-S). The remaining degree requirements are comprised of 25 credit hours or more in the student’s elected program of study. Courses numbered 100 or above which transfer as equivalent, departmental elective credit (DEC) or general elective credit (E) will be counted toward this degree. Special Topics courses (298) will not be counted toward this degree.

AS General Studies

The General Studies degree is designed for students planning to transfer to an Arizona public university with a major requiring rigorous mathematics or mathematics-based science. Students are required to take AGEC-S and courses that will apply toward the major at the university after transfer. Students completing this degree will transfer 60-64 credits to all Arizona public universities and should meet with an advisor as early as possible. Students planning to transfer to a university other than Arizona public universities should see an advisor.

There are 2 pathways in the General Studies degree:

1. General Requirements Pathway
   This pathway requires AGEC-S and 4th semester natural human language proficiency, other than English, including American Sign Language.
2. Special Requirements Pathway
   This pathway requires students to take AGEC-S and some Common Courses. Common Courses are courses that are accepted as a part of the major at all Arizona public universities. The list of Common Courses is determined statewide. See an advisor or check the college catalog web site (www.coconino.edu) for these Common Courses.

Depending on the area of interest, one pathway may be more suitable for a student’s educational plan than the other. Students changing pathways may accumulate more credits than necessary for graduation from a university. See an advisor for more information.

Minimum Credit hours Required: 60

AGEC-S Requirements: 35-41 credit hours
1. General Requirements and
2. Special Requirements Pathways
See page 56 for General Education Courses that can be used to satisfy AGEC requirements.

Degree Core Requirements: 25 credit hours
1. General Requirements Pathway
   Required
   Up to 16 credit hours 4th semester of any natural human language proficiency, other than English, including American Sign Language.
Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 220¹ Calculus I (5)

Arts/Humanities (6)
Courses from 2 or more disciplines must be selected from the approved AGEC courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Courses from 2 or more disciplines must be selected from the approved AGEC courses in the Social/Behavioral category.

Physical/Biological Sciences (8-10)
BIO 181 Unity of Life I: Life of the Cell (4)
and
BIO 182 Unity of Life II: Multicellular Organisms (4)
or
CHM 151 General Chemistry I (5)
and
CHM 152 General Chemistry II (5)
or
PHY 161 University Physics I (4)
and
PHY 262 University Physics II (4)

General Education Options (6-8)
Subject based on Major - Using a transfer guide, select two courses in Mathematics above calculus and/or Science from the following content areas: Astronomy, Biology, Botany, Environmental Science, Chemistry, Geology, Physics, Physical Geography, or Zoology¹

Electives²
9 credits of transferable courses as stated in the Course Equivalency Guide. These courses must transfer to all 3 Arizona public universities. See an advisor or check www.aztransfer.com for the Course Equivalency Guide.

2. Special Requirements Pathway
Depending on your area(s) of interest and/or the university you intend to transfer to, you may need to decide on your transfer plan as early as possible. Please see an advisor to determine your educational plan.

Required
Common Courses from the area(s) of interest/emphasis. See an advisor or check www.aztransfer.com for these Common Courses.

Electives
Transferable courses as stated in the Course Equivalency Guide (CEG). These courses must transfer to all Arizona public universities. See an advisor or check www.aztransfer.com for the current CEG.

Some university degrees may require 4th semester language proficiency in addition to the Common Courses. See an advisor for more information.

² Students who can complete the 4th semester language proficiency in less than 16 credit hours may choose more elective transferable credits

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Associate of Applied Science: AAS Degrees

Administration of Justice: AAS Degree

The Administration of Justice AAS program is designed to prepare students to enter the workforce in the criminal justice arena. This program teaches students specific knowledge and skills, which will assist in securing employment in a wide variety of law enforcement and corrections/juvenile detention positions. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Prepare students for upper division course work and the attainment of a bachelor’s degree in related fields of study or.
- Understand the structure of the criminal justice system and the functions of its’ main constituents: official agencies, citizens, and their elected representatives.
- Acquire the major communication skills required of most criminal justice practitioners including the development of effective written and oral communications consistent with the criminal justice field.
- Use knowledge of other cultures, politics, ethics, and human rights to positively impact the community, work place, and the physical environment around us.
- Provide students with the resources to investigate careers within the criminal justice system.
- Prepare students with skills necessary to enter the criminal justice workforce with specialized training in such areas as detention/corrections officer or emergency communications dispatcher.

Minimum credit hours required: 62

General Education Requirements: 29 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics (3–5)
MAT 142 College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Any approved General Education courses in the

Degree Core Requirements: 33 credit hours
Required: 33 credit hours
AJS 101 Introduction to Administration of Justice (3)
AJS 105 Juvenile Detention Studies (3)
AJS 110 The Correction Function (3)
AJS 120 Substantive Criminal Law (3)
AJS 150 Rules of Criminal Procedure (3)
AJS 160 Police Administration (3)
AJS 200 Community Relations (3)
AJS 220 Rules of Evidence (3)
AJS 230 Crime & Deviant Behavior (3)
AJS 240 Juvenile Justice Procedure (3)
AJS 280 Criminology (3)

¹ Placement test and/or prerequisite required.
Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Recommended
SOC 215 Race & Ethnic Relations (3)
or
SOC 210 Sociology of Gender (3)

Physical/Biological Sciences (8-10)
Any approved General Education courses in the Physical/Biological Sciences category.

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Alternative Energy Technology: AAS Degree

The Associate of Applied Science in Alternative Energy Technology will provide students with the skills to pursue a career in the Alternative Energy field. The student will be instructed through mastery learning components and field study workshops arranged with local contractors. Students may apply credit hours earned in the Construction Technology Certificate toward completion of the AAS degree.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Possess the appropriate skills in drafting, design and layout used in contemporary alternative energy applications.
- Possess the appropriate knowledge of energy and solar principles used in alternative energy applications.
- Acquire the computer operation skills and competencies applied to drafting using Computer Aided Design (CAD) software.
- Understand and apply knowledge of alternative energy systems including solar heating, Photovoltaic energy, wind power, energy and heat transfer, and energy efficiencies.
- Demonstrate competent application of methods used in the construction trades including carpentry, masonry, electricity, and plumbing.
- Employ critical thinking and evaluation skills to ensure compliance with building construction codes in the design and construction of alternative energy systems.
Minimum hours required: 64

**General Education Requirements: 25-27 credit hours**
See page 56 for courses that will satisfy General Education Requirements below.

- **Composition (6)**
  - ENG 101 College Composition I (3)
  - ENG 102 College Composition II (3)

- **Mathematics (3-5)**
  - MAT 121 Intermediate Algebra with Review (4) or a higher course selected from the approved AGEC courses in the Mathematics category.

- **Arts/Humanities (3)**
  - Any approved General Education courses in the Arts/Humanities category.

- **Social/Behavioral Sciences (6)**
  - Any approved General Education courses in the Social/Behavioral Sciences category.

**Required:**
- CIS 120 Intro to Computer Info Systems (3)

**Degree Core Requirements: 39 credit hours**

- CTM 111 Plumbing (3)
- CTM 115 Introduction to Wood Working (3)
- CTM 120 Building the Human Environment (3)
- CTM 123 Building Construction Methods I (3)
- CTM 124 Construction Methods II (3)
- CTM 130 Blueprint Reading (3)
- CTM 132 Solar Water Heating (2)
- CTM 138 Introduction to Solar Design Applications (1)
- CTM 150 Basic Electrical Theory (3)
- CTM 151 House Wiring I (3)
- CTM 211 International Building Code (3)
- CTM 235 Solar Home Design (3)
- CTM 236 Photovoltaics & Wind Power (3)
- DFT 125 Architectural Drafting I (3)

1 Placement test and/or prerequisite required.
2 May substitute CTM 298 with consent of Department Chair.
3 May substitute MAT 187.

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**American Sign Language (ASL) Interpreting - AAS Degree**

The Associate of Applied Science degree in American Sign Language Interpreting is designed to prepare students for licensure as interpreters for the deaf. This program is also designed to prepare students to sit for national exams of certification.
The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.
(used by permission from E. McCaffrey, American River College, CA 2007)

• Discuss and apply knowledge of linguistic, cross-cultural and interpretation theories.
• Demonstrate communicative competency in English and in ASL through effective communication in a variety of settings with speakers of varying age, gender, and ethnicity.
• Analyze, identify and apply personal, professional and ethical decisions in a manner consistent with theoretical models and standard professional practice.
• Demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, consumers and employers in an interpreting context.
• Formulate effective interpretations both consecutively and simultaneously.
• Develop an on-going professional action plan integrating interactions with D/deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

Minimum credit hours required: 62

General Education Requirements: 25 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics (3-5)
MAT 142 College Mathematics(3)
or higher

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
PSY 101 Introduction to Psychology (3)

Any approved General Education courses in the Social/Behavioral Sciences category. (3)

Students must demonstrate 4th semester proficiency in ASL. They must complete or be enrolled in ASL 203, ASL 110, and ITP 210 and declare intent to complete the program of study in order to apply for admission to the program. A questionnaire and preliminary assessment of sign language skills may be required.

Degree Core Requirements: 37 credit hours

Required Foundation Courses (for admission to program: 10 credit hours
ASL 110 Intro to Deaf Studies (3)
ASL 203 American Sign Language V (4)
ITP 210 Intro to Prof. Interpreting & Ethics (3)

Core Courses: 27 credit hours
ASL 211 Fingerspelling & Numbers (3)
ASL 212 Linguistics & Grammar of ASL (4)
ITP 213 Consecutive Interpreting (4)
ITP 214 Simultaneous Interpreting (4)
ITP 215 Transliterating (3)
ITP 216 Educational Interpreting (3)
Physical/Biological Sciences (4–5)
Any approved General Education course in the Physical/Biological Sciences category.

ITP 217 ¹ Interpreting Seminar (3)
ITP 289 ¹ Internship/clinical field experience (3)

¹ Prerequisite or consent of instructor required.

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Architectural Design Technology: AAS Degree

The Architectural Design Technology program trains students for architectural drafting careers in one of the fastest growing technologies in the United States. As an architectural design technician, the draftsperson will interpret engineering data, develop sketches, designs, and working drawings for construction. Many technicians are valuable members of architectural/engineering teams in industry. Using the technology of Computer Aided Drafting, students will develop drafting skills in both 2D and 3D. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Possess the appropriate skills in drafting, design and layout used in contemporary architectural design.
- Demonstrate competent understanding of methods used in building construction.
- Acquire the computer operation skills and competencies in using AutoCAD® software for architectural applications.

Minimum credit hours required: 66

General Education Requirements: 27 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101 ¹ College Composition I (3)
ENG 102 ¹ College Composition II (3)

Mathematics (3–5)
MAT 187 ¹ Pre-calculus (5)

Arts/Humanities (6)

Degree Core Requirements: 39 credit hours
Required: 33 credit hours
DFT 110 Technical Drafting & CAD Fundamentals (3)
DFT 125 ¹ Architectural Drafting I (3)
DFT 150 ¹ AutoCAD 2D (3)
DFT 200 ¹ AutoCAD 3D (3)
DFT 225 ¹ Architectural Drafting I - CAD (3)
DFT 260 ¹ Architectural Drafting II - CAD (3)
CTM 120 Building the Human Environment (3)
CTM 130 Blueprint Reading & Estimating (3)
CTM 123 Building Construction Methods I (3)
CTM 211 International Residential Code (3)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4–5)
Any approved General Education course in the Physical/Biological Sciences category.

CTM 221¹ Structural Design & Building Materials (3)

Electives: 6 credit hours
Select 6 credit hours from the following courses:
CTM 253 Plane Surveying & Building Layout (3)
CTM 175 Mechanical Systems (3)
CTM 124 Building Construction Methods II (3)

¹ Placement test and/or prerequisite required.

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Business: AAS Degree

The AAS Business Degree program is designed to prepare students to enter the business profession, at an entry level position, with tracks in General Business, Accounting, and Leadership by providing them with general knowledge and skills specializing in their area of interest. The program allows students the option of selecting support courses to strengthen their overall education and courses in their area of special interest or job opportunity. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Understand current real-life guiding principles in the business world
- Ability to use technology appropriately in a business application
- Ability to clearly and effectively communicate orally and written
- Quantitative analysis skills appropriate for solving business problems
- Integration / Critical Thinking: Course concepts in solving real-world business challenges

Minimum credit hours required: 61

General Education Requirements: 25-28 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Degree Core Requirements: 33-36 credit hours
Required: 33 credit hours
ACC 255¹ Principles of Financial Accounting (3)
ACC 256¹ Principles of Managerial Accounting (3)
BUS 100¹ Mathematics of Business (3)
BUS 204¹ Business Communications (3)
BUS 206 Principles of Management (3)
Mathematics (3-5)
MAT 142 College Mathematics or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4-5)
Any approved General Education course in the Physical/Biological Sciences category.

BUS 214 Legal, Ethical, & Regulatory Issues in Business (3)
CIS 120 Introduction to Computer Information Systems (3)
ECN 204 Macroeconomic Principles (3)
ECN 205 Microeconomic Principles (3)

Specialization Business Tracks: 6-9 credit hours
Note: Three (3) credits of Internship may be applied to any specialization option in consultation with a Business advisor.

General Business
BUS 211 Human Resource Management (3)
BUS 213 Small Business Management (3)
LDR 201 Leadership Basics (2)
Business Electives (0-1)

Accounting
ACC 206 Accounting and EDP Systems (3)
ACC 110 Payroll Accounting (3)
Business Electives (0-3)

Leadership
LDR 201 Leadership Basics (2)
LDR 202 Leadership and Decision Making (2)
LDR 203 Leadership and Communication (2)
LDR 204 Leadership and Power (2)
Business Electives (0-1)

¹ Placement test and/or prerequisite required.

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Carpentry Apprenticeship: AAS Degree

The Associate of Applied Science Degree in Apprenticeship Carpentry will prepare the student with the trade skills related to a career in carpentry. Completion of this degree involves completion of all Carpenter Union-related qualification requirements of “step” trade work experience as well as all union-related classroom training required
to achieve “Journeyman” status. This degree is only available to International Brotherhood of Carpenters Union members. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Fully meet the requirements to gain carpentry journeyman status.
- Possess an appropriate understanding and skills applied in:
  - the general mathematic principles used in the carpentry industry,
  - blue print reading and interpretation of construction drawings,
  - selection and construction of concrete frameworks,
  - rough framing post and beam, timber, stair, and roof construction,
  - building layout, engineering, rigging and scaffolding set up,
  - commercial and industrial building interior systems, and
  - finish carpentry and stair construction trim details.
- Understand hazard recognition and apply the basic safety practices used in the construction trades.

Minimum hours required: 66

General Education Requirements: 29-30 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics (3-5)
MAT 121 Intermediate Algebra (4) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4-5)

Degree Core Requirements: 37 credit hours

CRP 105 Interior Finish I (2)
CRP 106 Interior Finish II (2)
CRP 110 Introduction to Carpentry I (2)
CRP 111 Introduction to Carpentry II (2)
CRP 112 Technical Calculations for Carpenters I (2)
CRP 113 Technical Calculations for Carpenters II (2)
CRP 114 Blueprint Reading I (2)
CRP 115 Blueprint Reading II (2)
CRP 116 Concrete Formwork I (2)
CRP 117 Concrete Formwork II (2)
CRP 210 Basic Framing I (2)
CRP 211 Basic Framing II (2)
CRP 212 Carpentry Industry Technology I (2)
CRP 213 Carpentry Industry Technology II (2)
CRP 214 Interior Systems I (2)
CRP 215 Interior Systems II (2)
CTM 211 International Building Code (3)
WLD 100 Basic Welding (2)

¹ Placement test and/or prerequisite required.
Any approved General Education course in the Physical/Biological Sciences category.

and

CIS 120 Introduction to Computers (3)

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Computer Software Technology: AAS Degree

The Computer Software Technology program is designed to prepare students for entry-level positions requiring computer application software skills. The program offers emphases in PC Technician, Graphic and Web Design, General Technology and Application Software Specialist. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Apply the principles of effectively using computer related terminology.
- Understand and apply the principles of microcomputer operating systems, professional office suite applications, desktop publishing, software, web browsers and electronic mail.
- Understand the principles of legal and ethical issues related to the workplace.
- Understand the principles of programming and the ability to apply them using a programming language.

Minimum credit hours required: 64

General Education Requirements: 25-26 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3)
MAT 142 College Mathematics (3)

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Degree Elective Tracks: 11 credit hours
Select at least 11 credit hours from one of the following tracks:

PC Technician Track (11):
CIS 130 Computer Repair and A+ Prep (4)
CIS 230¹ Implementing and Supporting Windows (4)
CIS 240 Installing, Configuring, and Administering Microsoft Windows Server (4)
CIS 161 UNIX Administration I (4)
CIS 289 Internship I (1-6)
CIS 298 Special Topics (1-6)

Graphics and Web Design Track (11):
ART 130 Computer Graphics (3)
CIS 117 Introduction to Web Page Design (3)
Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4-5)
Any approved General Education course in the Physical/Biological Sciences category.

**Degree Core Requirements: 39 credit hours**
Required: 28 credit hours
LDR 115 Workplace Ethics (1)
BUS 204¹ Business Communications (3)
CIS 110 Windows, the Internet and Online learning (3)
CIS 120 Introduction to Computer Information Systems (3)
CIS 122 Introduction to MS Word (3)
CIS 123 Introduction to Spreadsheets (3)
CIS 125 Introduction to Databases (3)
CIS 128 Introduction to Presentation Graphics (3)
CIS 220¹ Computer Programming I (4)
CIS 222¹ Advanced MS Word (2)
CIS 217¹ Web Publishing I (3)
ART 135¹ Photoshop (3)
ART 136 Digital Photography (3)
CIS 289 Internship I (1-6)
CIS 298 Special Topics (1-6)

Application Software Specialist Track (11):
CIS 117 Introduction to Web Page Design (2)
CIS 165 Basic Game Design Creation (3)
CIS 167 Game Design Fundamentals (3)
CIS 217 Web Publishing I (3)
CIS 289 Internship I (1-6)
CIS 298 Special Topics (1-6)

General Technology Track (11):
ART 130 Computer Graphics (3)
CIS 117 Introduction to Web Page Design (2)
CIS 130 Computer Repair and A + Prep (4)
CIS 230 Implementing and Supporting Windows (4)
CIS 240 Installing, Configuring, and Administering Microsoft Windows Server (4)
CIS 289 Internship I (1-6)
CIS 298 Special Topics (1-6)

¹ Placement test and/or prerequisite required.

**Construction Technology: AAS Degree**

The Associate of Applied Science degree in Construction Technology provides students with the skills to pursue a career in the construction trades or in construction management. Students will be instructed through mastery learning components and field study workshops arranged with local contractors. Students may apply credit hours
earned in the Construction Technology Certificate toward completion of the AAS degree. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Possess the appropriate skills in drafting, design and layout used in contemporary construction management.
- Understand and apply knowledge of construction methods.
- Demonstrate competent application of methods used in the construction trades including carpentry, concrete, masonry, plumbing, sanitation and electrical.
- Understand and apply the basic safety practices used in the construction trades.
- Acquire the computer operation skills and competencies in using AutoCAD® software for construction methods purposes.
- Employ critical thinking and evaluation skills to ensure high quality and cost effectiveness management of design, implementation of construction methods and trades, and satisfactory completion of the construction project.

Minimum credit hours required: 63

General Education Requirements: 27 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 187¹ Pre-calculus (5)

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4)

Degree Electives: 9 credit hours
DFT 200¹ AutoCAD 3D (3)
DFT 225¹ Architectural Drafting I - CAD (3)
CTM 221¹ Structural Design & Building Materials (3)
or
Any nine credits from Accounting or Business in consultation with an advisor.
A business ethics course is recommended.

¹ Placement test and/or prerequisite required.
Any approved General Education courses in the Physical/Biological Sciences category.

**Degree Core Requirements: 36 credit hours**

Required: 27 credit hours
- DFT 125⁷ Architectural Drafting I (3)
- DFT 150⁷ AutoCAD 2D (3)
- CTM 211 International Residential Code (3)
- CTM 120 Building the Human Environment (3)
- CTM 130 Blueprint Reading & Estimating (3)
- CTM 226 Mechanical Systems (3)
- CTM 123 Building Construction Methods I (3)
- CTM 124 Building Construction Methods II (3)
- CTM 288 Construction Supervision, Scheduling & Project Management (3)

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**Early Childhood Education: AAS Degree**

The Associate of Applied Science degree in Early Childhood Education is designed to prepare students for positions within the field of Early Childhood Education. Students may apply credit hours earned in the Certificate in Early Childhood Education toward this degree. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Professionally articulate ideas verbally and in writing, using technology when appropriate.
- Recognize, respect and adjust instructional planning to meet the needs of diverse cultures of children 0 to 8 and their families.
- Increase ability to identify and discuss values, educational methodology, and legal and ethical specific to prenatal through age 8 care givers.
- Increase ability to apply ongoing reflective activities involving children 0 to 8 in learning, teaching practices, and professional development.
- Increase ability to access and apply community, cultural and career resources for age appropriate children and families.

Minimum credit hours required: 61
General Education Core Requirements: 25 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category

Social/Behavioral Sciences (6)
Required:
PSY 101 Introduction to Psychology (3)
Any approved General Education course in the Social/Behavioral Science category. (3)

Physical/Biological Sciences (4-5)
Any approved General Education course in the Physical/Laboratory Science category. (4)

Degree Core Requirements: 36 credit hours
Required: 30 credit hours
ECE 100 Introductions to Early Childhood Education (3)
ECE 110 Early Childhood Curriculum (3)
ECE 120 Health, Safety, & Nutrition for the Young Child (3)
ECE 200 Child Guidance (3)
ECE 210 Creative Arts for the Young Child (3)
ECE 220 Language Arts for the Young Child (3)
ECE 230 Exploration & Discovery for the Young Child (3)
ECE 234 Child Growth and Development (3)
ECE 240¹ School, Family, & Community Relations (3)
ECE 250¹ Children with Special Needs (3)

Degree electives: 6 credit hours:
Select six credit hours from the following courses:
MAT 130¹ Math for Elementary School Teachers I (3)
MAT 131 Math for Elementary School Teachers II (3)
EDU 200 Introduction to Education (3)
SPC 100 Fundamentals of Speech Communication (3)
POS 220 Arizona & National Constitution (3)

¹ Placement test and/or prerequisite required.

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Electricity: AAS Degree

The Associate of Applied Science in Electricity is a 4 year apprenticeship program run in partnership with Northern Arizona Electrical Contractors Association (NAECA). Students wishing to enroll in this program must become an apprentice with NAECA. The apprenticeship program provides students with training in the electrical field and enables students to work as electricians.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.
• Read blueprints
• Plan construction jobs
• Select materials
• Select and safely and competently use correct tools
• Install electrical systems and equipment
• Solve electrical construction related problems on the job site
• Understand and apply the National Electric Code
• Sit for the state electrical licensing examinations
• Gain certification by the National Center for Construction, Education and Research (NCCER)

Minimum hours required: 60

General Education Requirements: 25-26 credit hours
See courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 142¹ College Arithmetic (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4-5)
Any approved General Education course in the Physical/Biological Sciences category.

Degree Core Requirements: 35 credit hours

ETC 107 Mathematics for Electricians (3)
ETC 110 Commercial & Indus. Elec. I (4)
ETC 120 Commercial & Indus. Elec. II (4)
ETC 130 Commercial & Indus. Elec. III (4)
ETC 140 Commercial & Indus. Elec. IV (4)
ETC 250 Commercial & Indus. Elec. V (4)
ETC 260 Commercial & Indus. Elec. VI (4)
ETC 270 Commercial & Indus. Elec. VII (4)
ETC 280 Commercial & Indus. Elec. VIII (4)

¹ Placement test and/or prerequisite required.
² May substitute CTM 298 with consent of Department Chair.

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Fire Science: AAS Degree
The Fire Science program is designed to prepare students to enter the Fire Science profession by providing them with knowledge and skills which can be used to enter a wide variety of positions. The program allows students the option of selecting courses emphasizing emergency medical, fire suppression, or fire prevention.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Fully meet the requirements to gain state approved certification as outlined by current Arizona State Fire Marshal.
- Fully meet the requirements to gain the red card certification system used by the U.S. Forest Service.
- Develop effective written communication skills consistent with the fire service and related professional environments.
- Develop the ability to retrieve, evaluate, and use information appropriately by using library resources, information technology, analytical tools, and the scientific method to predict and control fire problems and advance knowledge of fire science.
- Use knowledge of other cultures, politics, ethics, and human rights to positively impact the community, work place, and the physical environment around us.

Minimum credit hours required: 70

General Education Requirements: 26-27 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (4)
MAT 151¹ College Algebra(4)

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4-5)
Choose one of the following:

Degree Core Requirements: 44 credit hours
Required: 35 credit hours
EMS 131 Emergency Medical Technician (8)
FSC 135 Fundamentals of Fire Prevention (3)
FSC 136 Fire Apparatus & Hydraulics (4)
FSC 138 Hazardous Materials/First Responder (3)
FSC 180 Fire Fighter I & II (8)
FSC 236 Firefighter Occupational Safety (3)
FSC 238¹ Emergency Scene Management (3)
FSC 239¹ Fire Department Company Officer (3)
EMS 211¹ Emergency Medical Technician Refresher (2)
EMS 262¹ Certified Emergency Paramedic (47)
FSC 233 Wildland Fire Suppression (4)
FSC 234 Fire Investigation (3)
FSC 235¹ Fire Protection Systems (3)

Degree Electives: 9 credit hours
Select at least nine credit hours from the following:
BUS 209 Principles of Supervision (3)
BUS 211 Human Resources/Personnel Management (3)
EMS 211¹ Emergency Medical Technician Refresher (2)
EMS 262¹ Certified Emergency Paramedic (47)
FSC 233 Wildland Fire Suppression (4)
FSC 234 Fire Investigation (3)
FSC 235¹ Fire Protection Systems (3)
BIO 100 Placement test and/or prerequisite required.
BIO 105 Environmental Biology (4)
BIO 181 Unity of Life: Life of the Cell (4)
CHM 130 Fundamental Chemistry (4)
CHM 151 General Chemistry I (5)
PHY 111 College Physics I (4)
FSC 241 Firefighter Safety & Building Construction (3)

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Hospitality Management: AAS Degree

The Hospitality Management program prepares students for entry-level management careers in the hospitality industry. Students completing this degree will develop knowledge and skills necessary to compete in one of Arizona’s fastest growing businesses. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Understand current real-life guiding principles in the business world
- Ability to use technology appropriately in a business application
- Ability to clearly and effectively communicate orally and written
- Quantitative analysis skills appropriate for solving business problems
- Integration / Critical Thinking: Course concepts in solving real-world business challenges

Minimum credit hours required: 62

**General Education Requirements: 25-28 credit hours**
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics (3-5)
BUS 100 Mathematics of Business (3)
or
MAT 121 Intermediate Algebra with Review (4) or a higher course selected from the approved AGEC

**Degree Core Requirements: 37 credit hours**
Required: 28 credit hours
BUS 206 Principles of Management (3)
BUS 214 Legal, Ethical & Regulatory Issues in Business (3)
BUS 218 Customer Service (3)
CIS 120 Introduction to Computer Information Systems (3)
HRM 100 Introduction to Hospitality (3)
LDR 201 Leadership Basics (2)
LDR 202 Leadership & Decision Making (2)
or
LDR 203 Leadership & Communication (2)
courses in the Mathematics category.  

Arts/Humanities (6)  
Any approved General Education courses in the Arts/Humanities category.  

Social/Behavioral Sciences (6)  
Any approved General Education courses in the Social/Behavioral Sciences category.  

Physical/Biological Sciences (4–5)  
Any approved General Education course in the Physical/Biological Sciences category.  

SPC 100 Fundamentals of Speech Communication (3)  

Hotel Emphasis:  
HRM 210 Guest Service Management (3)  
HRM 220 Property Management (3)  

Restaurant Emphasis:  
HRM 140 Food Production Concepts (3)  
HRM 240 Commercial Food Production (3)  

Specialization Options: 9 credit hours  
Select nine credit hours from the following:  
ACC 255 Principles of Financial Accounting (3)  
ACC 256 Principles of Managerial Accounting (3)  
BUS 204 Principles of Management (3)  
BUS 211 Human Resources/Personnel Management (3)  
ECN 204 Principles of Macroeconomic (3)  
ECN 205 Principles of Microeconomic (3)  

¹ Placement test and/or prerequisite required.  

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Medical Assistant: AAS Degree  

The Medical Assistant degree program prepares students for the varied and expanded responsibilities involved in working within medical offices today. Students will receive training in numerous areas, which will give them a complete understanding of the intricate workings within today’s medical businesses. Graduates will have the skills necessary to obtain a position as a medical office assistant. Students completing the program are eligible to sit for the American Medical Technologists (AMT) certification exam to become Registered Medical Assistants (RMA). This is a Tech Prep articulated program.  

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.  

- Use critical thinking skills in decision making concerning patient care and well being.  
- Fully meet the requirements to gain phlebotomy certification.
• Possess the ability to apply proper oral and written communication skills in the workplace
• Possess the ability to fully function as an allied health technician in the health care industry
• Possess the ability to understand cultural diversity and apply this understanding to health care situations.
• Effectively operate computer hardware and software as applicable to the health care industry.
• Master phlebotomy skills including: the collection of specimens, infection control and safety, the operation of the clinical laboratory, health care delivery and terminology.
• Possess the ability to recognize and address problems concerning patient care and well being.
• Possess the ability to analyze, synthesize and evaluate data.

Minimum credit hours required: 66

**General Education Core Requirements: 19 -22 credit hours. See page 56 for general education courses.**

Composition (6)
ENG 101 ¹ College Composition I (3)
ENG 102 ¹ College Composition II (3)

Mathematics (3-5)
MAT 142 ¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category. (3-5)

Arts/Humanities (3)
Any approved courses from the approved General Education courses in the Arts/Humanities category

Social/Behavioral (3)
Any approved General Education courses in the Social and Behavioral Sciences category.

Physical /Biological Sciences (4-5)
Any approved General Education course in the Physical/Biological Sciences category.

**Degree Core Requirements: 47 credit hours**

Required: 44 credit hours

AHS 100 Introduction to Health Services (3)
AHS 105 Communication & Behavior in the Health Care Setting (3)
AHS 110 Health Care Ethics & Law (3)
AHS 131 Medical Terminology (3)
AHS 135 ¹ Medical Coding, Insurance, & Billing (3)
AHS 138 Back Office Procedures I (3)
AHS 139 Back Office Procedures II (3)
AHS 160 Phlebotomy Procedures (3)
AHS 161 Phlebotomy Practicum (4)
BUS 204 ¹ Business Communications (3)

CIS 120 Intro to Computer Information Systems (3)
CIS 122 Introduction to MS Word (2)
CIS 125 Introduction to Databases (3)
AHS 289 Internship - Administrative (2)
AHS 289 Internship - Clinical (3)

Degree Electives: 3 credit hours
Spanish highly recommended.
Network Engineering: AAS Degree

The Associate of Applied Science Degree in Network Engineering is designed to prepare students for Information Technology positions requiring hands-on technical networking skills that support home and small to medium size businesses. The program provides students with knowledge and skills appropriate for network engineering occupations and the opportunity to select elective courses to strengthen their overall education. Network engineers will support an Information Technology infrastructure by installing, maintaining, and monitoring advanced technologies such as routers and switches which provide connectivity to Microsoft and UNIX based computers. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Apply the principles of effectively using computer related terminology.
- Understand the principles of legal and ethical issues related to network engineering in the workplace.
- Apply the principles of professional knowledge and skills in at least one of the following areas: Web design and graphics, operating system(s), application knowledge and/or support, microcomputer repair, networking.

Minimum credit hours required: 63

<table>
<thead>
<tr>
<th>General Education Requirements: 25-27 credit hours</th>
<th>Required: 38 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>See page 56 for courses that will satisfy General Education Requirements below.</td>
<td>Degree Core Requirements:(29) credit hours</td>
</tr>
<tr>
<td>Composition (6)</td>
<td>CIS 130 Computer Repair and A+ Prep (4)</td>
</tr>
<tr>
<td>ENG 101¹ College Composition I (3)</td>
<td>CIS 140 Cisco Networking Academy Semester 1 (4)</td>
</tr>
<tr>
<td>ENG 102¹ College Composition II (3)</td>
<td>CIS 150¹ Cisco Networking Academy Semester 2 (4)</td>
</tr>
<tr>
<td>Mathematics (3)</td>
<td>CIS 160¹ Cisco Networking Academy Semester 3 (4)</td>
</tr>
</tbody>
</table>

¹ Placement test and/or prerequisite required.
MAT 142 College Mathematics (3)  LDR 115 Workplace Ethics (1)

Arts/Humanities (6)
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4–5)
Any approved General Education course in the Physical/Biological Sciences category.

Choose any (9) credit hours from courses listed below in consultation with an appropriate advisor.

CIS 125 Introduction to Databases (3)
CIS 171¹ Unix Semester 2 (4)
CIS 220 Computer Programming I (4)
CIS 240 Installing, Configuring, and Administering Microsoft Windows Server (4)
CIS 289 Internship I (1-3)
CIS 298 Special Topics (1-3)

¹ Placement test and/or prerequisite required.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

Nursing: AAS Degree

The Associate of Applied Science degree in Nursing prepares the student for licensure as a Registered Nurse (RN). This program is designed to prepare graduates for entry level nursing positions in a variety of health care settings. The AAS degree in Nursing provides the graduate with an educational foundation for articulation into a university setting. This program has additional and specific admission requirements. Please contact the college Director of Nursing for further information. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Demonstrate safe performance of nursing skills within regulatory frameworks of the registered nurse.
- Exhibit professional behaviors for the role of the registered nurse including adhering to legal and ethical standards of practice.
- Manage client care by utilizing the nursing process across the lifespan, family and community.
- Demonstrate therapeutic relationships and communication skills with clients, family and the health care team.
- Incorporates teaching and learning to promote, attain and maintain optimal client health.
- Displays accepted best practices in nursing including lifelong learning to maintain best practices as supported by current evidence.
- Utilize critical thinking skills to practice nursing within an ethical and legal framework.
- The nursing program will prepare students to meet or exceed the national average HESI (Higher Education Systems, Inc.) and NCLEX-RN® (National Council Licensure Examination-Registered Nurse) pass rates.

Minimum credit hours required: 76

**Program Prerequisites: 15 credit hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 142</td>
<td>College Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 138</td>
<td>Allied Health Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>and CNA Certificate, may include NUR 110 (4) and NUR 111 (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Education Core Requirements: 21 credit hours. See p. 56 for general education course choices.**

| Composition (6) |
| ENG 101 † | College Composition I (fulfilled by prerequisite, see above) |
| ENG 102 † | College Composition II |

| Mathematics (3) |
| MAT 142 † | College Mathematics (fulfilled by prerequisite, see above) |

| Arts/Humanities (3) |
| Any approved general education courses in the Arts/Humanities Category. |

| Social/Behavioral (3) |
| PSY 240 † | Developmental Psychology |

| Lab Science (12) |
| BIO 202 † | Anatomy & Physiology II |
| BIO 205 † | Microbiology |
| BIO 218 † | Human Pathophysiology |

**Degree Core Requirements: 40 credit hours**

Required: 40 credit hours

| NUR 114 † | Nursing Pharmacology |
| NUR 116 † | Nursing Concepts I |
| NUR 120 † | Mental Health Nursing |
| NUR 124 † | Nursing Concepts II |
| NUR 215 † | Nursing Concepts III |
| NUR 220 † | Nursing Concepts IV |
| NUR 222 † | Mngt & Leadership in Nursing |
| NTR 135 † | Human Nutrition |

† Placement and/or prerequisite required.
This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

**Paramedic Studies: AAS Degree**

The Paramedic Science program is designed to prepare students to enter the paramedic profession by providing them with the knowledge and skills which can be used to enter the paramedic field.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Fully meet the requirements to gain state approved certification as outlined by the current National Registry Emergency Medical Technician Standards Exam.
- Fully meet the requirements to gain the basic life support requirement for firefighter I & II state certification.
- Fully meet the requirements to gain the advanced life support requirements for the Arizona Department of Health Services.
- Develop effective written communication skills consistent with Emergency Medical Services and related professional environments.
- Develop the ability to retrieve, evaluate, and use information appropriately by using library resources, information technology, analytical tools, and the scientific method to predict and control fire problems and advance knowledge of emergency medical services.
- Use knowledge of other cultures, politics, ethics, and human rights to positively impact the community, work place, and the physical environment around us.

Minimum credit hours required: 66

**General Education Requirements: 19 credit hours**

See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)

ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (4)

MAT 151¹ College Algebra (4)

Arts/Humanities (3)

One course must be selected from the approved General Education courses in the Arts/Humanities

**Degree Core requirements: 47 credit hours**

Required: 47 credit hours

EMS 262¹ Certified Emergency Paramedic (47)

¹ Placement test and/or prerequisite required.
Social/Behavioral Sciences (6)
Courses from two disciplines must be selected from the approved General Education course list in the Social/Behavioral Sciences category.

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Pre Health Careers: AAS Degree

The Pre Health Careers program is designed to prepare students for application to the CCC nursing program and/or to seek employment in a variety of health professions. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of these programs of study.

- Complete all Nursing program prerequisites
- Be qualified to sit for Certified Nursing exam (CNA)
- Possess knowledge and skills to work in various medical areas depending on electives chosen

Minimum credit hours required: 60

See General Education courses on page 56 that will satisfy General Education Requirements below.

**General Education Core Requirements: 25 credit hours**

**Composition (6)**
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

**Mathematics (3–5)**
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category. (3–5)

**Arts/Humanities (3)**
Any approved courses from the approved General

**Degree Core Requirements: 35 credit hours**

Required: 25 credit hours
BIO 201 Anatomy & Physiology I (4)
BIO 202 Anatomy & Physiology II (4)
BIO 205 Microbiology (4)
CHM 138 Allied Health Chemistry (5)
NTR 135 Human Nutrition (3)
NUR 110 Nursing Assistant I (4)
NUR 111 Nursing Assistant clinical (1)

Degree Electives: 10 credit hours
Any ten credits from courses numbered 100 or higher.
Recommended courses:

AHS 110 Health Care Ethics & Law (3)
Education courses in the Arts/Humanities category

- AHS 131 Medical Terminology I (3)
- AHS 135 Medical Coding, Insurance, and Billing(3)
- AHS 160 Phlebotomy Procedures (3)
- AHS 161 Phlebotomy Practicum (4)
- Note: AHS 161 is corequisite to AHS 160
- EMS 131 Emergency Medical Technician (7)

Social/Behavioral (6)

- PSY 101 Introduction to Psychology (3)
- PSY 240¹ Developmental Psychology (3)

Physical /Biological Sciences (4)

- BIO 181¹ Unity of Life I: Life of the Cell (4)
- BIO 218 Human Pathophysiology (4)
- SPA 101 Beginning Spanish I (4)
- SPA 102 Beginning Spanish II (4)
- SPA 125 Spanish for Health Professionals (2)
- ASL 101 American Sign Language I (4)
- ASL 102 American Sign Language II (4)

¹ Placement test and/or prerequisite required.

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Sustainable Green Building: AAS Degree

The Associate of Applied Science in Sustainable Green building is designed to educate students comprehensively on the many subjects related to Green Building Categories and related Environmental and occupant issues, Energy Efficiencies and Sustainable Building design considerations. This is a Tech Prep articulated program.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Gain core concepts & Categories of Sustainability and Green Building.
- Gain fundamental knowledge of Environmental Issues, especially related to the construction industry.
- Gain introductory knowledge of soils for local food production
- Acquire skills related to green construction.
- Attain a basic knowledge in construction methodology.
- Understand and apply basic construction safety for trades.
- Gain fundamental knowledge in building drafting, design, layout and auto CAD
- Explore and develop critical skills for a variety of alternative construction techniques.
- Develop critical skills for energy analysis of buildings & related performance measures.
- Develop competencies for sustainable materials & resource use efficiencies.
- Design competencies developed for various solar systems; passive & active.
- Develop electrical trade fundamentals for renewable energy generation.
- Attain fundamentals solar design knowledge.
• Attain & apply fundamental knowledge of sustainable projects and industry related checklist certifications.

Minimum hours required: 68

General Education Requirements: 19 -22 credit hours
See page 56 for courses that will satisfy General Education Requirements below.

Composition (6)
ENG 101¹ College Composition I (3)
ENG 102¹ College Composition II (3)

Mathematics (3–5)
MAT 142¹ College Mathematics (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (3)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (3)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4–5)
Any approved General Education course in the Physical/Biological Sciences category.

Degree Core Requirements: 49 credit hours
AGR 111 A Living Soil I (1)
CTM 120 Building the Human Environment (3)
CTM 123 Building Methods I (3)
CTM 124¹ Building Methods II (3)
CTM 130 Blueprint Reading (3)
CTM 131 Green Building Introduction (1)
CTM 132 Solar Water Heating Workshop (2)
CTM 133 Solar Greenhouse Design (1)
CTM 134 Rain Water Harvest Systems (1)
CTM 135 Intro to Solar Design Applications (1)
CTM 150 Basic Electrical Theory (3)
CTM 211 International Building Code (3)
CTM 235 Solar Home Design (3)
CTM 236 Photovoltaics & Wind Power (3)
CTM 250¹ Innovative & Alternative Building Tech (3)
CTM 260 Green Building I (3)
CTM 289 Internship (3)
ENV 111 Local Environmental Issues (3)
DFT 110 Tech Drafting & Cad Fund (3)
DFT 125¹ Architectural Drafting I (3)
DFT 150¹ Auto CAD 2DI (3)

¹ Placement test and/or prerequisite required.

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Associate of General Studies

AGS Degree

The Associate of General Studies Degree is designed for students who wish to broaden their knowledge, but have no university major or vocational goal in mind. This degree requires a minimum of 60 credit hours with a cumulative CCC grade point average of 2.00 or higher. Students must complete a minimum of 25 credit hours of General Education courses but are otherwise free to explore new areas of interest. A maximum of 12 credit hours

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may be completed in courses numbered below 100. This degree is not recommended for students planning to transfer to a university. The Associate of General Studies Degree is intended as an alternative degree which recognizes the mission of the community college that education is a lifelong process.

Minimum credit hours required: 60

General Education Requirements: 25-27 Credit Hours
See page 56 for courses that will satisfy General Education Requirements below.

General Education Outcomes
Composition (6)
ENG 101¹ College Composition I (3) &
ENG 102¹ College Composition II (3)

Mathematics (3-5)
MAT 121¹ Intermediate Algebra with Review (4) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities (6)
Any approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences (6)
Any approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences (4-5)
Any approved General Education course from the Physical/Biological Sciences category.

General Education Options (0-6)
Any approved General Education course from the Options category.

Electives: 33-35 Credit Hours
Select 33-5 credit hours either in a variety of disciplines or in an area of concentration.

¹ Placement test and/or prerequisite required.

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CCC Certificates

Accounting Certificate

The Accounting Certificate program is designed to prepare students for employment as entry-level bookkeeper/accounting position. Students may apply earned credit hours of this program toward the Associate of Applied Science in Business degree with an Accounting track. This is a Tech Prep articulated program.

Minimum credit hours required: 26

Certificate Requirements: 26 credit hours
ACC 100 Practical Accounting Procedures (5)
ACC 110¹ Payroll Accounting (3)
ACC 206 Computerized Accounting (3)
ACC 255¹ Principles of Financial Accounting (3)
BUS 100¹ Mathematics of Business (3)
BUS 204¹ Business Communications (3)
CIS 120 Introduction to Computer Information Systems (3)
ENG 101¹ College Composition I (3)
Or
BUS 111¹ Business English (3)
¹ Placement test and/or prerequisite required

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Ability to process and communicate basic accounting information clearly and effectively.
- Ability to setup and maintain an automated accounting. Ability to complete the Federal Payroll Certification

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Alternative Energy Technician Certificate

Intermediate Certificate
The Intermediate Certificate in Alternative Energy is designed to introduce the student to the construction and electrical industries and, provide the foundations for hazard recognition and safety. Students are introduced to
design issues associated with home construction, community development and passive solar design. This is a Tech Prep articulated program.

Minimum credit hours required: 28
Certificate Requirements: 28-29 credit hours

CTM 111 Plumbing (3)
CTM 115 Introduction to Wood Working (3)
CTM 123 Construction Methods I (3)
CTM 124 Construction Methods II (3)
CTM 130 Blueprint Reading (3)
CTM 138 Intro to Solar Applications (3)
CTM 150 Basic Electricity (3)
DFT 110 Technical Drafting and CAD Fundamentals (3)
DFT 125 Architectural Drafting (3)
MAT 121 Intermediate Algebra (4)
or
MAT 122 Intermediate Mathematics (3)

Advanced Certificate
The Advanced Certificate in Alternative Energy improves the student’s expertise and knowledge in construction from an economic perspective. This certificate advances electrical skills with particular applications in photovoltaic and wind power electrical generation.

Minimum credit hours required: 52
Certificate Requirements: 52-57 credit hours

Completion of the Intermediate Certificate (28-29)
CTM 120 Building the Human Environment (3)
CTM 132 Solar Water Heating (3)
CTM 133 Solar Greenhouse Design (1)
CTM 151 House Wiring I (3)
CTM 235 Solar Home Design (3)
CTM 236 Photovoltaics & Wind Power (3)
CTM 250 Innovative & Alternative Building Techniques (3)
CTM 289 Service Learning Internship (1-4)
MAT 142¹ College Mathematics (4)
or
MAT 187¹ Pre Calculus (5)
Placement test and/or prerequisite required.
May substitute CTM 298 with consent of department chair.

American Sign Language (ASL) Interpreting - Certificate

The Certificate in American Sign Language Interpreting is designed to prepare students for licensure as interpreters for the deaf. This program is also designed to prepare students to sit for national exams of certification.

Minimum credit hours required: 37

Students must demonstrate 4th semester proficiency in ASL. They must complete or be enrolled in ASL 203, ASL 110, and ITP 210 and declare intent to complete the program of study in order to apply for admission to the program. A questionnaire and preliminary assessment of sign language skills may be required.

Certificate Core Requirements: 37 credit hours

Required Foundation Courses (for admission to program): 10 credit hours
ASL 110 Intro to Deaf Studies (3)
ASL 203 ¹ American Sign Language V (4)
ITP 210 Intro to Prof. Interpreting & Ethics (3)

Core Courses: 27 credit hours
ASL 211 ¹ Fingerspelling & Numbers (3)
ASL 212 ¹ Linguistics & Grammar of ASL (4)
ITP 213 ¹ Consecutive Interpreting (4)
ITP 214 ¹ Simultaneous Interpreting (4)
ITP 215 ¹ Transliterating (3)
ITP 216 ¹ Educational Interpreting (3)
ITP 217 ¹ Interpreting Seminar (3)
ITP 289 ¹ Internship/clinical field experience (3)

¹ Prerequisite or consent of instructor required.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.
(used by permission from E. McCaffrey, American River College, CA 2007)

- Discuss and apply knowledge of linguistic, cross-cultural and interpretation theories.
- Demonstrate communicative competency in English and in ASL through effective communication in a variety of settings with speakers of varying age, gender, and ethnicity.
- Analyze, identify and apply personal, professional and ethical decisions in a manner consistent with theoretical models and standard professional practice.
- Demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, consumers and employers in an interpreting context.
- Formulate effective interpretations both consecutively and simultaneously.
- Develop an on-going professional action plan integrating interactions with D/deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

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Architectural CAD Technician Certificate

The Architectural CAD Technician Certificate will provide students with a solid foundation in the field of architectural construction drafting. This certificate can lead to an AAS degree in Architectural Design Technology. The fundamentals of drafting are performed through mastery learning and hands-on application. This is a Tech Prep articulated program.

Minimum credit hours required: 24

Certificate Requirements: 24 credit hours
DFT 110 Technical Drafting & CAD Fundamentals (3)
DFT 125¹ Architectural Drafting I (3)
DFT 150¹ AutoCAD 2D (3)
DFT 200¹ AutoCAD 3D (3)
DFT 225¹ Architectural Drafting I: CAD (3)
DFT 260¹ Architectural Drafting II: CAD (3)
CTM 120 Building the Human Environment (3)
CTM 130 Blueprint Reading & Estimating (3)

¹ Placement test and/or prerequisite required.

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AGEC-A Certificate

AGEC-A is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of liberal arts majors at all three Arizona State Universities. (e.g., Anthropology, Social Science, Fine Arts, and Humanities).
Minimum credit hours required: 35
General Education Requirements: 35 Credit Hours

Composition 6
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics 3-5
MAT 142 College Mathematics (3) or a higher course
selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities 6-9
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences 6-9
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral Sciences category.

Physical/Biological Sciences 8-10
Any two courses may be taken from the Physical/Biological Sciences category.

Options* 0-6
General Education Options may be selected from the above categories or from the Options category.

*0-6 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

Special Requirements
Each Special Requirement must be met within the General Education Requirements:
• Intensive Writing/Critical Inquiry
• Ethnic/Race/Gender Awareness
• Contemporary Global/International Awareness or Historical Awareness

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AGEC-B Certificate
AGEC-B is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of business majors at all three Arizona State Universities. (e.g. Business Administration, Computer Information Systems) Note: Associate in Business degree core courses may not be used to satisfy AGEC-B requirements.

Minimum credit hours required: 35
General Education Requirements: 35 Credit Hours

Composition 6
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics 3-5
MAT 212 Business Calculus (3) or a higher course selected from the approved AGEC courses in the Mathematics category.

Arts/Humanities 6-9
Courses from two or more disciplines must be selected from the approved General Education courses in the Arts/Humanities category.

Social/Behavioral Sciences 6-9
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral category.

Physical/Biological Sciences 8-10
Any two courses may be taken from the Physical/Biological Sciences category.

Computer Science 3
CIS 120 Introduction to Computer Information Systems

Options* 3
Course may be selected from the above categories or from the Options category.

*3 hours may be taken in the Options category as needed to complete the minimum 35 hours required for the AGEC.

Special Requirements
Each Special Requirement must be met within the General Education Requirements:
- Intensive Writing/Critical Inquiry
- Ethnic/Race/Gender Awareness
- Contemporary Global/International Awareness or Historical Awareness
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AGEC-S Certificate

AGEC-S is a 35-credit lower-division General Education curriculum block that fulfills the lower-division General Education requirements of majors with more stringent mathematics and mathematics-based science requirements at all three Arizona State Universities. (e.g. Biology or Chemistry).

Minimum credit hours required: 35
General Education Requirements: 35-41 Credit Hours

Composition 6
ENG 101 College Composition I (3)
ENG 102 College Composition II (3)

Mathematics 3-5
MAT 220 Calculus & Analytic Geometry I (5)

Arts/Humanities 6
Courses from two or more disciplines must be selected from the approved general education courses in the Arts/Humanities category.

Social/Behavioral Sciences 6
Courses from two or more disciplines must be selected from the approved General Education courses in the Social/Behavioral category.

Physical/Biological Sciences 8-10
BIO 181 - Unity of Life I: Life of the Cell (4) &
BIO 182 - Unity of Life II: Multi-cellular Organisms(4)

or
CHM 151 - General Chemistry I (5) &
CHM 152 - General Chemistry II (5)

or
PHY 161 - University Physics I (4) &
PHY 262 - University Physics II (4)

Options 6-8
Subject based on Major - Using a transfer guide, select two courses in Mathematics above calculus and/or Science from the following content areas: Astronomy, Biology, Botany, Environmental Science,
Chemistry, Geology, Physics, Physical Geography, or Zoology

Special Requirements
Each Special Requirement must be met within the General Education Requirements:
• Intensive Writing/Critical Inquiry
• Ethnic/Race/Gender Awareness
• Contemporary Global/International Awareness or Historical Awareness

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Basic Detention Academy Certificate

The Coconino Community College Basic Detention Academy is designed to provide entry level training to detention/corrections officer staff, meeting Arizona Detention Association standards.

Minimum credit hours required: 13

Certificate Requirements: 13 credit hours

AJS 216 Basic Detention Academy (13)

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Basic Emergency Communications Dispatcher Academy Certificate

The Coconino Community College Basic Public Safety Emergency Communications Dispatcher Academy is designed to provide entry level training to emergency communications dispatch employees, meeting Arizona Department of Public Safety and/or APCO training standards.

Minimum credit hours required: 13

Certificate Requirements: 13 credit hours

AJS 203 Basic Emergency Communications Dispatcher Academy (13)

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Carpentry Apprenticeship Certificates
**Basic Certificate**

The Basic Certificate is designed to introduce the student to the Carpentry industry. It provides the foundational classes in the Carpentry and Construction trades as well as introduces field techniques and applications in a progressively complicated sequence. This certificate is only available to International Brotherhood of Carpenters Union members.

Minimum credit hours required: 10

**Certificate Requirements: 10 credit hours**

CRP 110 Introduction to Carpentry I (2)  
CRP 111 Introduction to Carpentry II (2)  
CRP 112 Technical Calculations for Carpenters I (2)  
CRP 113 Technical Calculations for Carpenters II (2)  
CRP 114 Blueprint Reading I (2)

**Intermediate Certificate**

The Intermediate Certificate is designed to further develop the student for the Carpentry industry. It provides a sequence of classes, field techniques and applications in the Carpentry and Construction trades in a progressively complicated sequence. This certificate is only available to International Brotherhood of Carpenters Union members.

Minimum credit hours required: 20

**Certificate Requirements: 20 credit hours**

Completion of all Basic Certificate courses required (10)  
CRP 115 Blueprint Reading II (2)  
CRP 116 Concrete Formwork I (2)  
CRP 117 Concrete Formwork II (2)  
CRP 210 Basic Framing I (2)  
CRP 211 Basic Framing II (2)

**Advanced Certificate**

The Advanced Certificate is designed to continue to improve the student’s expertise in the Construction industry. It provides more advanced classes in the Carpentry and Construction trades as well as field techniques & applications in a progressively complicated sequence. This certificate is only available to International Brotherhood of Carpenters Union members.

Minimum credit hours required: 34
Certificate Requirements: 34 credit hours
Completion of the Intermediate Certificate (20)
CRP 105 Interior Finish I (2)
CRP 106 Interior Finish II (2)
CRP 212 Carpentry Industry Technology I (2)
CRP 213 Carpentry Industry Technology II (2)
CRP 214 Interior Systems I (2)
CRP 215 Interior Systems II (2)
WLD 100 Basic Welding (2)

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Computer Technician Certificate

The Computer Technician Certificate is designed to develop professional skills related to computer hardware and software support and maintenance. Students in this program are encouraged to test for Microsoft Certified Professional in Windows and A+ Certification. Students may also apply credit hours earned in this program toward the Associate of Applied Science degree in Computer Software Technology. This is a Tech Prep articulated program.

Minimum credit hours required: 19

Computer Technician Certificate: 19 credit hours

CIS 120     Intro to Computer Information Systems (3)
CIS 130     Computer Repair and A+ Prep (4)
CIS 161¹   Unix/Linux Administration I (4)
CIS 230¹   Implementing and Supporting Windows (4)
CIS 240¹   Installing, Configuring, and Administering Microsoft Windows Server (4)

¹ Placement test and/or prerequisite required.

The goals identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

• Define computer hardware
• Define computer software
• Enhance support and maintenance of computer software and hardware
• Prepared for Microsoft Certified Professional in Windows and A+ Certification
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**Construction Technology Certificate**

The Construction Technology Certificate provides students with a technical foundation required to compete in today’s construction field. Students will be instructed through mastery learning components and field study workshops arranged with local contractors. Students may apply credit hours earned in this program toward the Associate of Applied Science degree in Construction Technology. This is a Tech Prep articulated program.

Minimum credit hours required: 21

**Certificate Requirements: 23 credit hours**

DFT 125¹ Architectural Drafting I (3)
ENG 100¹ Fundamentals of Composition (3)
CTM 120 Building the Human Environment (3)
CTM 123 Building Construction Methods I (3)
CTM 124 Building Construction Methods II (3)
CTM 130 Blueprint Reading & Estimating (3)
MAT 187¹ Pre-calculus (5)

¹ Placement test and/or prerequisite required.

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**Early Childhood Education Certificate**

The Certificate in Early Childhood Education is designed to prepare students for positions within the field of early childhood education. Students may apply credit hours earned in the certificate toward the Associate of Applied Science degree in Early Childhood Education. This is a Tech Prep articulated program.

Minimum credit hours required: 33

**Certificate Requirements: 33 credit hours**

ECE 100 Introductions to Early Childhood Education (3)
ECE 110 Early Childhood Curriculum (3)
ECE 120 Health, Safety & Nutrition for the Young Child (3)
ECE 200 Child Guidance (3)
ECE 210 Creative Arts for the Young Child (3)
ECE 220 Language Arts for the Young Child (3)
ECE 230 Exploration & Discovery for the Young Child (3)
ECE 240¹ School, Family & Community Relations (3)
ECE 234 Child Growth & Development (3)
ECE 250¹ Children with Special Needs (3)
PSY 101 Introduction to Psychology (3)
¹ Placement test and/or prerequisite required.

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Electricity Certificate

The Certificate in Electricity is a 4 year apprenticeship program run in partnership with Northern Arizona Electrical Contractors Association (NAECA). Students wishing to enroll in this program must become an apprentice with NAECA. The apprenticeship program provides students with training in the electrical field and enables students to work as electricians.

Minimum hours required: 35

Certificate Requirements:
ETC 107 Mathematics for Electricians (3)
ETC 110 Commercial & Indus. Elec. I (4)
ETC 120 Commercial & Indus. Elec. II (4)
ETC 130 Commercial & Indus. Elec. III (4)
ETC 140 Commercial & Indus. Elec. IV (4)
ETC 250 Commercial & Indus. Elec. V (4)
ETC 260 Commercial & Indus. Elec. VI (4)
ETC 270 Commercial & Indus. Elec. VII (4)
ETC 280 Commercial & Indus. Elec. VIII (4)

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Read blueprints
- Plan construction jobs
- Select materials
- Select and safely and competently use correct tools
- Install electrical systems and equipment
- Solve electrical construction related problems on the job site
- Understand and apply the National Electric Code
- Sit for the state electrical licensing examinations
- Gain certification by the National Center for Construction, Education and Research (NCCER)
Fire Science Certificate

Intermediate Certificate
The Fire Science Intermediate Certificate program is designed to introduce basic skills and to assist those who desire to enhance their abilities on the job. Included in the curriculum are practical applications and knowledge. Students may apply credit hours earned in this program toward the Associate of Applied Science degree in Fire Science.

Minimum credit hours required: 17

Certificate Requirements: 17 credit hours
FSC 180 Firefighter I & II (8)
FSC 138 Hazardous Materials/First Responder (3)
FSC 236 Firefighter Occupational Safety (3)
FSC 238 Emergency Scene Management (3)

Advanced Certificate
The Fire Science Advanced Certificate program is designed to introduce basic skills and to assist those who desire to enhance their abilities on the job. Included in the curriculum are practical applications and knowledge. Students may apply the hours of this program toward the Associate of Applied Science degree in Fire Science.

Minimum credit hours required: 41

Certificate Requirements: 41 credit hours
Completion of the Fire Science Intermediate Certificate (17)
EMS 131¹ Emergency Medical Technician (8)
FSC 135 Fundamentals of Fire Prevention (3)
FSC 136 Fire Apparatus & Hydraulics (4)
FSC 234 Fire Investigation (3)
FSC 239¹ Fire Department Company Officer (3)
FSC 241 Firefighter Safety & Building Construction (3)

¹ Placement test and/or prerequisite required.

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Forensics Investigations Certificate

The Forensic Investigations Certificate is designed for individuals seeking an introduction to the field of forensic investigations. This certificate provides training to new students and is designed to enhance skills of those currently involved in criminal justice and medical professions.

Minimum credit hours required: 28

Certificate Requirements: 28 credit hours

AJS 250     Criminal Investigations   (3)
AJS 220     Rules of Evidence   (3)
AJS 101     Introduction to Administration of Justice (3)
ENG 101¹   College Composition I   (3)
BIO160¹   Introduction to Human Anatomy & Physiology (4)
FOR 101     Introduction to Forensics  (3)
FOR 150     Death Investigations  (3)
FOR 170     Forensic Interviewing  (3)
FOR 289     Forensic Investigation Internship (3)

¹ Placement test and/or prerequisite required.

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Green Construction Technology YouthBuild Certificate

The green building certificate contains the coursework necessary to fulfill the Youth Build grant goals as well as provide students with the necessary basic training for employment in the “Green Collar” construction field. This is a Tech Prep articulated program.

Minimum credit hours required: 28

CTM 122         Construction Safety (3)
CTM 123         Construction Methods I (4)
CTM 130         Blue Print Reading (3)
CTM 124         Construction Methods II (4)
CTM 189         Internship (1)
CTM 110         Plumbing (3)
CTM 131         Introduction to Solar Applications (1)
CTM 151         House Wiring I (3)
CTM 289         Internship (1-3)
The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Provide students with basic construction trade skills and green building training
- Provide students with on-the-job experience through internships
- Fulfill CCC’s responsibilities to successfully accomplish the grant goals
- Track the training and employment of the YouthBuild students to determine community needs for continued and/or advanced training in the green building areas.
- Provide curriculum necessary to fulfill the objectives of the YouthBuild grant
- This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

Graphics and Web Design Certificate

The Graphics and Web Design Certificate is designed to develop professional skills in computer graphics and web page design. Students may apply some of the credit hours earned in this program toward the Associate of Applied Science degree in Computer Software Technology. This is a Tech Prep articulated program.

Minimum credit hours required: 28

Graphics and Web Design: 28 credit hours

CIS 120  Intro to Computer Info Systems (3)
CIS 110  Windows, The Internet, and Online Learning (3)
ART 130入库 Computer Graphics (2)
CIS 117  Introduction to Web Page Design (3)
CIS 122  Introduction to MS Word (2)
CIS 127入库 Introduction to Desktop Publishing (3)
CIS 128  Introduction to Presentation Graphics (3)
CIS 217入库 Web Publishing (3)
ART 135入库 Photoshop (3)
ART 136  Digital Photography (3)

入库 Placement test and/or prerequisite required.

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Industrial Maintenance Technician Certificate

The Industrial Maintenance Technician Certificate is designed for students who are completing the maintenance apprenticeship program at the Navajo Generating Station.

Certificate Requirements: 14-20 credit hours

Core Requirements: 5 credit hours
PPO 110 Maintenance Fundamentals (5)

Specialization Options: 9-15 credit hours

Plant Electrician
PPO 150 Electrician/Instrument Tech II (4)
PPO 200 Plant Electrician III (3)
PPO 250 Plant Electrician IV (3)

Plant Mechanic
PPO 151 Plant Mechanic II (5)
PPO 201 Plant Mechanic III (3)
PPO 251 Plant Mechanic IV (2)

Machinist
PPO 152 Machinist II 4
PPO 202 Machinist III 3
PPO 252 Machinist IV 2

Metal Fabricator
PPO 153 Metal Fabricator II (4)
PPO 203 Metal Fabricator III (4)
PPO 253 Metal Fabricator IV (5)

Instrument Technician
PPO 150 Electrician/Instrument Tech II (4)
PPO 204 Instrument Technician III (4)
PPO 254 Instrument Technician IV (5)

Construction and Maintenance
PPO 155 Construction & Maintenance II (5)
PPO 205 Construction & Maintenance III (5)
PPO 255 Construction & Maintenance IV (5)

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**Medical Front Office Assistant Certificate**

The Medical Office Assistant Certificate program prepares students for the varied and expanded responsibilities involved in working within medical offices today. Students will receive training in numerous areas, which will give them a complete understanding of the intricate workings within today's medical businesses. Graduates will have the skills necessary to obtain a position as a medical office assistant that will be able to perform numerous duties in the front office. Students may apply credit hours earned in this program toward the Associate of Applied Science degree in Medical Assistant. This is a Tech Prep articulated program.

**Basic Certificate**

Minimum credit hours required: 28

Certificate Requirements: 28 credit hours

Core courses (28)
- AHS 100 Introduction to Health Services (3)
- AHS 105 Communication & Behavior in the Health Care Setting (3)
- AHS 110 Health Care Ethics & Law (3)
- AHS 131 Medical Terminology (3)
- AHS 135 Medical Coding, Insurance & Billing (3)
- AHS 289¹ Internship I (2)

- BUS 204¹ Business Communications (3)
- CIS 120 Introduction to Computer Information Systems (3)

- CIS 122 Introduction to MS Word (2)
- CIS 125 Introduction to Database (3)

¹ Placement test and/or prerequisite required.
² AHS 161 must be taken in conjunction with AHS 160.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.
• Apply proper oral and written communication skills in the work place.
• Understand cultural diversity and apply this understanding to health care situations.
• Operate computer hardware and software as applicable to the health care industry.
• Use critical thinking skills in decision making concerning patient care.
• Understand and use medical terminology and healthcare delivery.
• Understand and work within the rules of ethics and law in health care.
• Understand procedures and operate professionally within the medical office environment.
• Understand and use proper Health Information Management and Privacy Rules in the Medical office.
• Use billing and coding procedures and carry out the basics of health insurance claim forms.
• Analyze, synthesize and evaluate data.
• Use critical thinking skills in decision making concerning patient care in administrative situations.

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**Medical Insurance, Coding, & Billing (Sunset)**

This certificate is designed for students seeking an introduction to medical insurance, coding, and billing in the office, clinic, or hospital. Completion of the program will enhance the knowledge and skills base of those already in the workplace. This is a Tech Prep articulated program.

Minimum credit hours required: 33

**Certificate Requirements: 33 credit hours**

AHS 100 Introduction to Health Services (3)
AHS 105 Communication & Behavior in the Health Care Setting (3)
AHS 110 Health Care Ethics & Law (3)
AHS 131 Medical Terminology (3)
AHS 135 Medical Coding, Insurance & Billing (3)
BIO 160¹ Introduction to Human Physiology & Anatomy (4)
ENG 100¹ Fundamentals of Composition (3)

or

ENG 101¹ English Composition I (3)

CIS 102 Computer Literacy (2)

or

CIS 120 Introduction to Computer Information Systems (3)
MAT 121 Intermediate Algebra with Review (4)

or

MAT 151 College Algebra (*strongly recommended* if considering any type of academic transfer) (4)
The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

- Possess the ability to apply proper oral and written communication skills in the workplace
- Effectively operate computer hardware and software as applicable to the health care industry.
- Possess the ability to analyze, synthesize and evaluate data.

Network Engineering Certificate

Network Engineering Certificate

Basic Certificate
The Network Engineering Certificate Level I is designed to develop skills related to network engineering and to enhance written communications skills and professional readiness. The Level I Certificate is designed to prepare students for entry level Information Technology positions requiring hands-on technical networking skills that support home/small to medium size businesses. This level I certificate provides students with knowledge and skills appropriate for entry level network engineer occupations. Emphasis is on basic skills such as installing, maintaining, and monitoring advanced technology such as routers and switches. Students may apply credit hours earned in this program toward Level II certificate or the Associate of Applied Science degree in Network Engineering. This is a Tech Prep articulated program.

Minimum credit hours required: 16

Basic Certificate Requirements: 16 credit hours
BUS 111 Business English (3)
LDR 115 Workplace Ethics (1)
CIS 130 Computer Repair and A+ Prep (4)
CIS 140 Cisco Networking Academy Semester 1 (4)
CIS 150† Cisco Networking Academy Semester 2 (4)

† Placement test and/or prerequisite required.

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

- Define terms related to networks
- Emphasize using hands-on approach
- Emphasizing the knowledge and relationships to server operating software programs
Enhancing communications skills
Emphasizing professional readiness

Phlebotomy Certificate

This certificate is designed to prepare students for entry-level positions as phlebotomists in acute care, clinic, or community-based agencies and settings. Addressing such skills as collection of specimens, infection control and safety, the operation of the clinical laboratory, health care delivery and terminology, and communication and professional behavior, this program meets the standards of the national accrediting organizations for phlebotomists. This is a Tech Prep articulated program.

Minimum credit hours required: 32

Certificate Requirements: 32 credit hours
AHS 100 Introduction to Health Services (3)
AHS 105 Communication & Behavior in the Health Care Setting (3)
AHS 110 Health Care Ethics & Law (3)
AHS 131 Medical Terminology (3)
AHS 160² Phlebotomy Procedures (3)
AHS 161² Phlebotomy Practicum (4)
BIO 160 Introduction to Human Physiology & Anatomy (4)
BUS 111 Business English (3)
CIS 102 Computer Literacy (2)
or
CIS 120 Introduction to Computer Information Systems (3)
MAT 121 Intermediate Algebra with Review (4)
or
MAT 151 College Algebra (strongly recommended if considering any type of academic transfer) (4)

¹ Placement test and/or prerequisite required.
² AHS 161 must be taken in conjunction with AHS 160.

The outcomes identified below define the knowledge and skill sets that graduates will possess at the end of their program of study.

• Use critical thinking skills in decision making concerning patient care and well being.
• Possess the ability to apply proper oral and written communication skills in the workplace
• Possess the ability to understand cultural diversity and apply this understanding to health care situations.
• Effectively operate computer hardware and software as applicable to the health care industry.
• Master phlebotomy skills including: the collection of specimens, infection control and safety, the operation of the clinical laboratory, health care delivery and terminology.
• Possess the ability to analyze, synthesize and evaluate data.

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Pre Health Careers Certificate

The Pre-Health Careers Certificate is designed to provide students a foundation in pre-health careers and a certificate as they progress towards completing: AAS Pre-Health Careers, AAS Nursing, preparation for students seeking entry into the CCC nursing program, and/or seek training and employment in a variety of health professions. This is a Tech Prep articulated program.

Minimum credit hours required: 29

Certificate Requirements: 29-30 credit hours

AHS 131 Medical Terminology I (3)
BIO 181 Unity of Life I: Life of the Cell (4)
BIO 201 Anatomy & Physiology (4)
CHM 130 General Chemistry (4)
OR
CHM 138 Allied Health Chemistry (5)
ENG 101 English Composition I (3)
MAT 142 College Mathematics (3)
NTR 135 Human Nutrition (3)
NUR 110 Nursing Assistant I (4)
NUR 111 Nursing Assistant Clinical (1)

¹ Placement test and/or prerequisite required.

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Sheet Metal Apprenticeship Certificate

Intermediate Certificate

The Intermediate Certificate in Sheet Metal is designed to introduce the student to the sheet metal industry. It provides the foundational classes in the layout and assembly of many sheet metal trades field applications in a progressively complicated sequence.
Certificate Requirements: 35 credit hours
SMT 101 Sheet Metal I (5)
SMT 102¹ Sheet Metal II (5)
SMT 103¹ Sheet Metal III (5)
SMT 104¹ Sheet Metal IV (5)
SMT 105¹ Sheet Metal V (5)
SMT 106¹ Sheet Metal VI (5)
SMT 107¹ Sheet Metal VII (5)

Advanced Certificate
The Advanced Certificate in Sheet Metal is designed to continue to improve the student’s expertise in the sheet metal industry. It provides more advanced classes in the layout and assembly of many sheet metal trades field applications in a progressively complicated sequence.

Certificate Requirements: 50 credit hours
Completion of the Intermediate Certificate (35)
SMT 108¹ Sheet Metal VIII (5)
SMT 109¹ Sheet Metal IX (5)
SMT 110¹ Sheet Metal X (5)

¹ Placement test and/or prerequisite required.

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Course Descriptions

Accounting

*Course has additional pre or co requisite(s)

ACC 100 (5)
**Practical Accounting Procedures**
Practical accounting offers a step by step approach to the study of accounting. This includes accounting for service, merchandising, and small business operations. The course includes the financial statements, basic accounting cycle, special journals, procedures for controlling cash and payroll accounting. Computerized accounting systems and procedures for small businesses are stressed. Five lecture.

ACC 105 (3)
**Income Tax I**
Internal Revenue Service Code and Regulations as they pertain to the individual. Tax principles are applied to problems and the preparation of the individual income tax return. Three lecture.

ACC 110 (3)
**Payroll Accounting**
A course that provides comprehensive and practical instruction in manual and computerized preparation and calculation of a business’s payroll records and tax returns. Prerequisite: ACC 100, *ACC 255 or instructor’s consent. Three lecture.

ACC 206 (3)
**Computerized Accounting**
Electronic data processing systems as they apply to accounting systems. Provides hands-on experience with microcomputer hardware and software packages. Includes accounting cycle transaction and management decision-making applications. Three lecture.

ACC 255 (3)       ACC 2201
**Principles of Financial Accounting**
Financial accounting theory as applied to corporate form of business involving service and merchandising activities. Includes analysis and recording of business transactions and preparation of financial statements. Prerequisite: *MAT 142 or ACC 100 or placement. Three lecture.

ACC 256 (3)       ACC 2202
**Principles of Managerial Accounting**
Accounting theory and practice as it applies to the uses of accounting information in the management decision
making process of an organization. Introduces manufacturing accounting (job order, process cost, and standard cost systems) and budgeting. Prerequisite: *ACC 255. Three lecture.

ACC 289 (1-6)
Accounting Internship
Designed for students who are looking for paid or voluntary, practical application of applied accounting principles. Agreed upon internship will have a direct link to responsibilities regarding the business aspects of transaction analysis, journalizing, adjusting, posting, creating financial statements, and doing fundamental evaluation of the statements. Credit hours will be negotiated based on the successful completion of a course contract. Each credit hour requires the completion of a minimum of 45 hours of related work as indicated by the course contract. Prior experience or course work in the area of interest is required. One to six variable credit hours. May be taken for S/U credit.

Air Force Studies

*Course has additional pre or co requisite(s)

AES 101 (1)
Foundations of the U.S. Air Force I
U.S. military defense structure, its mission and role in contemporary American society; organization and mission of the Air Force; examines the concepts of professionalism and officership as they apply to the military; basic communication skills. Co-requisite: AES 111. One lecture.

AES 102 (1)
Foundations of the U.S. Air Force II
Role and mission of U.S. strategic offensive and defensive forces, aerospace support forces, and general purpose forces; examines selected geopolitical determinants and constraints relating to the use of national power; basic theory and principles of flight; basic communication skills. Co-requisite: AES 112. One lecture.

AES 111 (1)
Aerospace Studies Leadership Lab

AES 112 (1)
Aerospace Studies Leadership Lab
AES 201 (1)
Air Power History I
Historical survey of events, trends, and policies leading to the emergence of air power through World War II. Nature of war, advent of the air age, and development of various concepts of employment and technological improvements in air power; effective communication skills. Prerequisites: AES 101. Co-requisite *AES 211. One lecture.

AES 202 (1)
Air Power History II
Establishment of Air Force as a separate service, the Cold War, development of various concepts of employment and technological improvements of air power from Korean conflict to present; effective communication skills. Prerequisites: *AES 102. Co-requisite: *AES 212. One lecture.

AES 211 (1)
Aerospace Studies Leadership Lab
Application of elements of personal leadership. Demonstration of command, effective communications, individual leadership instruction, physical fitness training, and knowledge of Air Force requirements. Prerequisite *AES 111. Co-requisite: *AES 201. Two Lab. May be taken for S/U credit only.

AES 212 (1)
Aerospace Studies Leadership Lab
Continuation of AES 211. Application of elements of personal leadership. Demonstration of command, effective communications, individual leadership instruction, physical fitness training, and knowledge of Air Force requirements. Co-requisite *AES 202. Two lab. May be taken for S/U credit only.

AES 250(1)
Air Force Physical Training Course
Opportunity for all CCC students to get into better shape, without any commitment to Air Force ROTC. The classes are held Monday, Wednesday, and Friday mornings and last for one hour. The syllabus will cover both cardiovascular and anaerobic activity, aimed at helping every participant to get in better shape regardless of fitness level. This is an S/U class graded solely upon attendance and counts toward elective credit. May be repeated for a maximum of 10 units. Three lab. May be taken for S/U credit only.

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Agriculture

AGR 111 (1)
A Living Soil I
Creating lush gardens in the high desert starting the first year. "An Introduction, Unique Garden Designs". Topics
include: Importance of humus, soil structure, micro-macro fauna/flora, what harms/nurtures life in the soil, soil challenges, evaluating your soil. Unique garden designs, explores French intensive, no-till, lasagna, small plot gardening, and bio-dynamic gardening. One lecture.

AGR 112 (1)
A Living Soil II
Nurturing the life in the soil: “Compost Happens, Mulching your Garden, Raising Earthworms.” Learn techniques to nurture the life in the soil. Topics include: Diverse methods of making compost, using finished compost; benefits and uses of mulching for vegetables and landscaping, etc.; classifications, anatomy and lifestyles, methods of raising earthworms, value and uses of worm castings. One lecture.

AGR 113 (1)
A Living Soil III
Creating a balanced Eco-system in the garden: cover crops, crop rotation, and companion planting.” Topics include; benefits and uses of cover crops, planning/selecting and managing cover crops; importance of crop rotation, evaluating needs and drawing up a rotation plan; efficient small spaces, protection and compatible combination; companion planting as a tool to create micro climates, beauty/landscaping; efficient small spaces, protection and compatible combinations. One lecture.

AGR 114 (1)
A Living Soil
Feeding your garden naturally: “Soil Amendments”, “Garden Tea Party,” and Homemade Remedies/Inoculants.” Topics include: Importance of a balanced soil system, Macro/micro nutrients, a look at rock minerals, seaweed derivatives, Humates, natural soil amendments and fertilizers, various liquid nutrients and foliar feeding, home remedies for garden solution, use of Inoculants, and beneficial insects in the garden. One lecture. May be taken for S/U credit with instructor approval.

AGR 116 (1)
Greenhouse Organic Growing
Learn various options for how to plan and set up a solar Greenhouse and maintain a balanced ecosystem within it. Topics include: Functions of a greenhouse, effects of relative shade, heat levels and seasonal changes, container and plant selection, soils, water, ventilation, light, sanitation, and organic fertilization. Lecture one. May be taken for S/U credit with instructor approval.

AGR 117 (1)
Raising Your Own Starts
Learn how to raise your own vegetable and flower seedlings for the garden. Topics include: Preparation, making potting soil, seed, germination, transplanting, quality light, watering, organic fertilizing, hardening off. Included is a hands-on opportunity to experience working with seeds, seedlings, transplanting and a sample to take home. One lecture. May be taken for S/U credit with instructor approval.
AGR 118 (1)
Extending the Season
Learn techniques to extend the High Desert Gardening Season, and harvest year round. Topics include: various styles and methods of using cold frames, tunnels, frost and shade covers, wall-o-water, and greenhouses. Also discussed are choosing specific seed varieties, succession planting and raising sprouts. One lecture.

AGR 119 (1)
Seed to Seed
Explore and learn about the beauty and magic of seeds. The importance of bio-diversity, heirloom/open pollinated seed and sources. Included are techniques for raising your own seed, pollination, flower structure; maintaining purity, seed cleaning, and storage. A review of some examples from easy to more difficult seed to save and hands on opportunity to work with seeds to take home. One lecture.

AGR 122 (.5)
The World of Chili Peppers
Explore “The World of Chile Peppers” from seed to garden, preserving and then to the dinner table. Topics include: Various pepper varieties from sweet to hot, soil preparations, starting seeds indoors, transplanting outdoors, seasonal care, harvesting tips, and saving seed. Learn methods of freezing, drying and preserving peppers. Hands on preparing and tasting salsas, chili sauces, and roasted chilies. .5 lecture.

AGR 123 (.5)
The World of Garlic
Explore “The World of Garlic” from garden to pantry to garlic cuisine. Topics include: Garlic varieties, soil preparation, when and how to plant garlic. Seasonal care, harvesting tips, saving seed, storing and preserving methods, and garlic braids. Taste and experience some quick and easy gourmet uses of garlic. .5 lecture.

AGR 124 (.5)
The World of Onions
Explore “The World of Onions" and learn how to grow, harvest, store and preserve them. Topics including: Various members of the onion family; bulbing onions, chives, shallots, etc., soil preparation, starting seeds indoors or out, seasonal care, harvesting and curing for storage, seed savings, cuisine tips for roasting and other methods of using onions. .5 lecture.

AGR 127 (.5)
The World of Gourmet Greens
Explore “The World of Gourmet Greens” and learn how to grow and prepare a variety of lettuces, Asian & wild edible greens. May be taken for S/U credit with instructor approval. .5 Lecture.

AGR 128 (.5)
The World of Sprouts
Explore “The World of Sprouts” and learn to grow and prepare a diversity of seeds, grains and beans as sprouts. May be taken for S/U credit with instructor approval. .5 Lecture.

**Allied Health Science**

*Course has additional pre or co requisite(s)*

AHS 100 (3)
Introduction to Health Services
Overview of the inner workings of the health care industry and the political, cultural, and socio-economic forces that shape the delivery of health services. Predominant health care systems in the U.S. including Medicare and Medicaid will be examined along with the availability and utilization of various resources, health ethics and law, and quality of care. Three lecture.

AHS 101 (3)
Careers in Health Care
Presents an introduction to the breadth of health care provider and supportive roles in today’s rapidly diversifying health care industry. Three lecture.

AHS 105 (3)
Communication & Behavior in the Health Care Setting
Introduces the student of health occupations to essential workplace communication and behavioral skills that fosters the provision of quality patient care, teamwork, and employee job satisfaction. Three lecture.

AHS 110 (3)
Health Care Ethics & Law
Study of the central legal and ethical issues facing health care providers in today’s complex health care delivery system; examine managed care, bioethics, telemedicine, death and dying, workplace and practice employment issues, and liability and malpractice through the use of case studies and scenarios. Three lecture.

AHS 131 (3)
Medical Terminology I
Medical vocabulary for beginning students in allied health and science fields. Includes word roots, prefixes, suffixes, and abbreviations. Emphasizes spelling, pronunciation, and definition. Three lecture.

AHS 135 (3)
Medical Coding, Insurance & Billing
Students learn to submit, trace, appeal, and transmit health care claims; includes step-by-step instruction for all major forms of claims using real-life cases and classroom instruction with current software that provides immediate feedback, self-tests, and additional self-paced exercises. Prerequisites: CIS 102 or 120, and AHS 100. Co-requisites: AHS 131, *ENG 100 or *ENG 101; or consent of instructor. Three lecture.
AHS 137 (3)
Back Office Procedures
Theory of basic medical assistant clinical duties. Focus is placed on basic information about common medical conditions, procedures and patient interaction and care within the medical office. Prerequisite: AHS 131. Three lecture.

AHS 138 (3)
Back Office Procedures I
Theory of basic medical assistant clinical duties. Focus is placed on basic information about common medical conditions, procedures and patient interaction, and care within the medical office. Prerequisite: AHS 131. Two lecture. Two lab.

AHS 139 (3)
Back Office Procedures II
Theory of basic medical assistant clinical duties. Focus is placed on basic information about common medical conditions, procedures and patient interaction, and care within the medical office. Prerequisite: *AHS 138. Two lecture. Two lab.

AHS 141 (14)
Medical Assistant I
The Medical Assistant I course prepares students for the varied and expanded responsibilities involved in working within medical offices today. Students will receive training in numerous areas, giving them a complete understanding of the intricate workings within today’s medical businesses. Students who complete both AHS 141 and AHS 142 will have the skills necessary to obtain a position as a medical assistant. Students completing AHS 141 and AHS 142 are eligible to sit for the American Medical Technologist (AMT) certification exam to become a Registered Medical Assistant (RMA). Prerequisites: *Math 091, *RDG 099 or consent of instructor. Twelve lecture; three lab.

AHS 142 (14)
Medical Assistant II
The Medical Assistant II course further prepares students for the varied and expanded responsibilities involved in working within medical offices today. Students will receive training in numerous areas, giving them a complete understanding of the intricate workings within today’s medical businesses. Students who complete both AHS 141 and AHS 142 will have the skills necessary to obtain a position as a medical assistant. Students completing AHS 141 and AHS 142 are eligible to sit for the American Medical Technologist (AMT) certification exam to become a Registered Medical Assistant (RMA). Prerequisites: *AHS 141. Twelve lecture; three lab.

AHS 157 (3)
Phlebotomy for Law Enforcement
This one-week, fast-track program is a very intense course of study. The course includes 45 hours of onsite
phlebotomy coursework, and includes the practicum. Homework is necessary, and students will be required to perform venipunctures on each other during classes on campus. Additional venipunctures will be required outside the classroom setting for completion of the course. NO REFUNDS can be given once the officer begins the course. Prerequisites: Proof of (MMR) vaccination, must have had a negative TB skin test within the last 6 months, must be recommended by a law enforcement agency. One and one half lecture, one and one half lab.

AHS 160 (3)
Phlebotomy Procedures
Theory and practice of basic phlebotomy and specimen processing including laboratory test codes, equipment, procedures, role development and the health care team, ethics and safety, and legal issues and quality assurance. Prerequisite: AHS 131. Co-requisite: AHS 161; this course must be taken in conjunction with AHS 161. Three lecture.

AHS 161 (4)
Phlebotomy Practicum
Theory and practice of basic phlebotomy and specimen processing; clinical experiences in acute care, clinic, and community agency settings. Co-requisite: AHS 160. One lecture; nine lab. Fall. This course must be taken in conjunction with AHS 160.

AHS 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

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Administration of Justice

AJS 101 (3)
Introduction to Administration of Justice

AJS 105 (3)
Juvenile Detention Studies
Introduction to the field of juvenile detention, including responsibilities and job duties of the detention employee. The course will include both legal and procedural issues in the subject area. Three lecture. Fall.

AJS 110 (3)
The Correction Function
History and development of correctional theories and institutions. Three lecture.

AJS 120 (3)
Substantive Criminal Law
Philosophy and legal sanctions and historical development from the common law to modern American criminal law. Classifications of crimes, elements of and parties to crimes, general definitions of crime, common defenses utilized, and review of offenses and the essential elements of each defense. Three lecture.

AJS 130 (3)
The Police Function
Theories of procedures and methods of operations with emphasis on the discretionary powers available to the working police officer. Career opportunities and current trends in law enforcement will be presented. General Education: Social and Behavioral Sciences. Three lecture.

AJS 141 (3)
Gang Behavior & Street Violence
Development of gangs, how society promotes them, and how they are self-sustaining through street violence. Includes a detailed look at victims’ rights and the history of vigilantes in America. Three lecture.

AJS 150 (3)
Rules of Criminal Procedures
Procedural criminal law including the judiciary role in the criminal justice systems, the right to council, pretrial release, grand juries, adjudication process, types and rules of evidence, and sentencing. Three lecture.

AJS 160 (3)
Justice System Management
Principles of administration and organization of management functions and services within criminal justice systems. Three lecture.

AJS 170 (3)
Security Issues in Private Industry
A historical overview of the development and evolution of law enforcement and its developing relationship and dependence on the need for private asset protection. Students will assess current prevention technology, its development and history, and future direction and application. The class will further examine the roles of law enforcement and private security officers as well as the inherent differences. Legal limitations and provisions, public/private security agency(s) and liability issues in the industry will be analyzed. Three lecture.
AJS 200 (3)
Community Relations
Examination, recognition, and understanding of community problems; community action programs; methods of coping with human behavior, conflict and communications; ethnic and minority cultures and environments; the community and the relationships with the criminal justice system. Three lecture.

AJS 203 (13)
Basic Public Safety/Emergency Communications Dispatcher
The Coconino Community College Basic Public Safety Emergency Communications Dispatcher Academy is designed to provide entry level training to emergency communications dispatch employees, meeting Arizona Department of Public Safety and/or APCO training standards. Prerequisites: Hired and/or recommended by approved law enforcement or public safety agency. Thirteen Lecture.

AJS 209 (3)
Criminal Jurisdiction on Federal and Indian Land
Jurisdiction of local, state, and tribal law enforcement AES agencies over crimes committed on federal military reservation, national parks, national forests, federal buildings, as well as Indian lands. Agreements with tribal governments, including courts, and police agencies of tribes, counties, states, and the federal government will also be examined. Three lecture.

AJS 215 (3)
Crime, Justice, and the Media
Examines the perceptions of the realities of crime and justice, and how these perceptions influence the media. Also studied are the effects of how the media influences the public’s perception of crime and the criminal justice system. Three lecture.

AJS 216 (13)
Basic Detention Academy
The Coconino Community College Basic Detention Academy is designed to provide entry level training to detention officer staff, meeting Arizona Detention Association standards. Prerequisites: Hired and/or recommended by approved law enforcement or correctional agency. Thirteen Lecture.

AJS 220 (3)
Rules of Evidence
Understanding of the rules of evidence which most often affect personnel concerned with the administration of the criminal law. Three lecture.

AJS 230 (3)
Deviant Behavior
Basic concepts of deviant behavior; evaluates current literature and studies the application of current

**AJS 240 (3)**  
**Juvenile Justice Procedure**  
History and development of juvenile procedures and institutions. Three lecture.

**AJS 250 (3)**  
**Criminal Investigations**  

**AJS 260 (3)**  
**Constitutional Law**  
Constitutional law as it relates to the operation of the criminal justice system. Three lecture.

**AJS 265 (3)**  
**Probation & Parole**  
The selection process for the release of both adults and juveniles under the supervision of probation and parole guidelines and the community values consistent with those under supervision. Three lecture. Spring.

**AJS 273 (3)**  
**Public Safety Leadership I**  
The Coconino Community College Public Safety Leadership course is designed to provide line supervisors, middle managers, and executive level managers in public safety occupations, with current leadership training and materials, adopting Arizona Peace Officer Standards and Training, (APOST) guidelines and curriculum. Students must also enroll in AJS 274 to complete this program of study. Prerequisites: Hired and/or recommended by approved public safety agency, or approval from Coconino Community College Department Chair. Three Lecture.

**AJS 274 (3)**  
**Public Safety Leadership II**  
The Coconino Community College Public Safety Leadership course is designed to provide line supervisors, middle managers, and executive level managers in public safety occupations, with current leadership training and materials, adopting Arizona Peace Officer Standards and Training, (APOST) guidelines and curriculum. Prerequisites: AJS 273. Hired and/or recommended by approved public safety agency, or approval from Coconino Community College Department Chair. Three Lecture.

**AJS 280 (3)**  
**Criminology**  
Deviance and society’s role in defining behavior; theories of criminality and the economic, social, and

AJS 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

AJS 291 (3)
Terrorism & Counter-Terrorism
Nature of terrorism, terrorist threat, and countermeasures to combat terrorism. Three lecture. Summer.

AJS 292 (3)
Hostage Negotiations
Essentials of hostage negotiations for all personnel and may serve as a refresher for trained personnel. Three lecture.

AJS 295 (3)
White Collar & Corporate Crime
A close look at the theories, laws and issues surrounding white collar crime in contemporary society. Three lecture.

AJS 298 (1-6)
Special Topics
Designed to meet the needs of an individual(s) with interest in pursuing an original topic in an instructional area under faculty supervision. One to six variable credit hours.

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Anthropology

*Course has additional pre or co requisite(s)

ANT 101 (4)
Introduction to Physical Anthropology
An introductory survey of the basic principles, concepts, assumptions, theories, and vocabulary of human evolution and world archaeology. General Education: Physical and Biological Sciences Three lecture; two lab.
ANT 102 (3)
Introduction to Cultural Anthropology
Principles of cultural and social anthropology, with illustrative materials from a variety of cultures. The nature of culture; social, political, and economic systems; religion, aesthetics and language. General Education: Social and Behavioral Sciences, Arts & Humanities. Special Requirements: Contemporary Global/International Awareness or Historical Awareness; Ethnic/Race/Gender Awareness. Three lecture.

ANT 103 (3)
Culture and Language
An introductory survey of the basic history, concepts, assumptions, theories, and vocabulary of linguistic anthropology and their application within the discipline. Prerequisite: ANT 102. General Education: Social and Behavioral Science and Global/International Awareness or Historical Awareness. Three lecture.

ANT 110 (3)
Exploring Archaeology

ANT 230 (3)
Peoples of the Southwest
Ethnohistorical survey of the American Southwest culture area, focusing on selected Pueblo and non-Pueblo peoples. This course is designed to expose the student to the richness of traditional Southwestern cultures in order to stimulate an appreciation for the Native history and ethnic diversity of the region. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness, Contemporary Global/International Awareness or Historical Awareness. Three lecture.

ANT 241 (3)
Anthropology of Religion
Anthropology of religious practices employed by both western and non-western people in dealing with adversity, misfortune, illness, life cycle rituals, and similar phenomena beyond human control. Three lecture.

ANT 250 (4)
Peoples of the World
This capstone course in anthropology provides the opportunity for students to apply anthropological theoretical perspectives and methodologies to topics of interest including both historic and contemporary subject matter. Prerequisites: *ENG 101, Anthropology 102. Co-requisite: *ENG 102. Recommended: ANT 101. General Education: Social and Behavioral Sciences. Special requirements: Intensive Writing/Critical Thinking, Ethnic/Race/Gender Awareness; Global and International Awareness; Historical Awareness. Four lecture.
ANT 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum of 45 hours on the job participation. Prior experience or course work in the field of interest is required. Credit hours: one to six. May be taken for S/U credit.

Art

*Course has additional pre or co requisite(s)

ART 100 (3)
Art Appreciation
Historical overview and appreciation of painting, sculpture, architecture, film, and crafts. Examines individual works of art with regard to both their formal qualities and the way they reflect the shifting patterns of culture. Field trips. General Education: Arts and Humanities. Three lecture.

ART 105 (3)
Beginning Art
Introductory course in drawing and painting techniques and materials for students who would like to explore their creativity. One lecture; five lab. May be taken for S/U credit.

ART 110 (3)   ART 1111
Drawing I
Perspective and visual perception as related to developing artistic visual growth in perceiving our environment. Emphasizes analysis of objects and their compositional placement within the pictorial construction. One lecture; five lab. May be taken for S/U credit.

ART 111 (3)
Drawing II
Further development of technical and perceptual drawing skills. Emphasis on composition and pictorial content. Prerequisite: ART 110 or consent of instructor. One lecture; five lab. May be taken for S/U credit.

ART 114 (3)
Stained Glass I
Copper foil and lead techniques of stained glass, including precision glass cutting and creative application of these techniques in producing interior and architectural pieces. One lecture; five lab. May be taken for S/U credit.

ART 120 (3)
Ceramics I
Introduction to hand building techniques, wheel throwing, glazing and other decorative techniques, kiln firing and ceramics history. One lecture; five lab. May be taken for S/U credit.

**ART 121 (3)**

**Ceramics II**

Emphasis on developing intermediate skill with the potter’s wheel and handbuilding methods, glazing and decoration techniques, and kiln operations. Prerequisite: ART 120. One lecture; five lab. May be taken for S/U credit.

**ART 130 (3)**

**Computer Graphics I**

An introductory course in computer graphics. Introduction to design principles and visual problem solving with software suitable for two-dimensional design and illustration. Prerequisite: CIS 102 or CIS 120 or consent of instructor. Recommended: ART 110 and *ART 160. Two lecture; two lab. May be taken for S/U credit.

**ART 133 (2)**

**Calligraphy I**

Basic calligraphic skills including letter form, spacing, and page design. One lecture; two lab. May be taken for S/U credit.

**ART 134 (2)**

**Calligraphy II**

Expands calligraphic skills including letterform, spacing, and page design. One lecture; two lab. May be taken for S/U credit.

**ART 135 (3)**

**Adobe Photoshop**

Introduction to Adobe Photoshop software, its variety of tools and basic techniques for working with them. Includes practice with basic scanning and printing devices and techniques. Three lecture. Prerequisites: CIS 120 or consent of instructor. Three lecture. May be taken for SU credit.

**ART 136 (3)**

**Digital Photography I**

Introduction to digital photography, image editing and printing techniques. Course requirement: Students must have their own digital camera and basic computer skills. Three lecture. May be taken for S/U credit.

**ART 140 (3)**

**Jewelry I**

Jewelry and the hand working of nonferrous craft metals and associated materials. One lecture; five lab. May be taken for S/U credit.
ART 145 (3)
Introduction to Silk-screen
An introduction to the fundamentals of silk-screen (serigraphy) printmaking processes using traditional methods including reduction printing and photo stencil. Prerequisite: ART110 or consent of instructor. One lecture. Five lab. May be taken for S/U credit.

ART 150 (3)
Photography I
Photography as an art form. Includes camera operation with emphasis on its use as a creative tool. Basic darkroom techniques, including film development, printing, and composition. Two lecture; four lab. May be taken for S/U credit. Spring, Fall.

ART 151 (2)
Photography Techniques & Materials
More advanced techniques and materials than the basic course. Emphasis on developing an alternative vision. Prerequisite: ART 150 or consent of instructor. One lecture; two lab.

ART 160 (3)
Color & Design
Fundamentals of two-dimensional design emphasizing study and utilization of the principles of design, development of a visual vocabulary, and study of color theory. Prerequisite: ART 110 or consent of instructor. One lecture; five lab. May be taken for S/U credit.

ART 165 (3)
Three-dimensional Design
Introduction to the fundamental concepts and design principles involved in organizing three-dimensional space and materials used in three-dimensional art forms. Prerequisite: *ART 160. One lecture. Five lab.

ART 180 (3)
Sculpture I
Introduction to sculptural processes, techniques and materials in clay, metal, wood, and stone. Includes sculptural history and criticism. Prerequisite: *ART 165 or consent of instructor. One lecture; five lab. May be taken for S/U credit.

ART 190 (3)
Oil/Acrylic Painting I
Introduction to techniques and materials traditionally used in oil and/or acrylic painting. Prerequisite: *ART 160 or consent of instructor. One lecture; five lab. May be taken for S/U credit.
ART 191 (3)  
Oil/Acrylic Painting II  
Intermediate course in developing expressive and descriptive skills using oil and/or acrylic paint. Prerequisite: *ART 190 and *ART 160 or consent of instructor. One lecture; five lab. May be taken for S/U credit.

ART 194 (3)  
Watercolor I  
Transparent qualities of watercolor medium. Techniques and materials will be used to stimulate personal creativity and uniqueness of expression. One lecture; five lab. May be taken for S/U credit.

ART 195 (3)  
Watercolor II  
Increased opportunity for independent development. Implements study of techniques to fit individual needs. Prerequisite: ART 194 or consent of instructor. One lecture; five lab. May be taken for S/U credit.

ART 199 (0.5–6)  
Workshop  
Designed to provide workshop courses based on student and faculty interest in pursuing or presenting an original topic. Workshops may be developed to enhance existing curriculum or to give students experience that is not covered by existing curriculum. One-half to six variable credit hours. May be taken for S/U credit.

ART 201 (3)  
Art History: Prehistoric to 1400  
Study of the historical development of significant periods and styles in painting, sculpture, and architecture from the prehistoric through the Gothic periods. Emphasis is placed upon the cultural context within which the works of art are created. Pre-requisite: *ENG 101. General Education: Arts and Humanities, Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

ART 202 (3)  
Art History: 1400 - 2000  
Historical development of significant periods and styles in painting, sculpture, and architecture from the Renaissance to the twentieth century with an emphasis on the cultural context within which the works of art were created. Prerequisite: *ENG 101. General Education: Arts and Humanities, Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

ART 210 (3)  
Life Drawing I  
Application of the elements of drawing in the description of the human figure, drawing from the model. Topics include: light and shade, composition, and anatomy. Prerequisite: ART 110 or consent of instructor. One lecture; five lab. May be taken for S/U credit.
ART 211 (3)
Portrait Drawing
Introduction to portrait drawing techniques and materials. Prerequisite: ART 110 or consent of instructor. One lecture, five lab.

ART 214 (3)
Stained Glass II
Design and construction of stained glass pieces using copper foil and/or lead processes, manipulation of the surface of glass using an etching process, basic glass design vocabulary, developing proficiency with glass working hand tools. Prerequisite: ART 114. One lecture; five lab. May be taken for S/U credit.

ART 220 (3)
Art of the United States
Study of the historical development of the arts and architecture in America from the Colonial period to the present. Prerequisite: *ENG 101. General Education/ AGEC Special Requirements: Global/ International Awareness or Historical Awareness. Three lecture. May be taken for S/U credit.

ART 221 (3)
Art of the Southwest
A historical survey of painting, sculpture, and architecture in the southwestern region of the United States from pre-historic time to the present. Prerequisite: *ENG 101. General Education: Arts and Humanities. Special Requirements: Contemporary Global/International Awareness or Historical Awareness, Ethnic/Race/Gender Awareness. Three lecture.

ART 235 (3)
Adobe Photoshop II
Advanced techniques in Adobe Photoshop. Prerequisites: *ART 135 or consent of instructor. Three lecture.

ART 236 (3)
Digital Photography II

ART 252 (3)
Documentary Photography
An introductory course in the field of documentary photography, to include camera use, documentary history and techniques. Field Trips. Prerequisite: ART 150, *ENG 101, or consent of the instructor. Two lecture; two lab.
ART 279 (2)
Painting Workshop
A course for students interested in further developing artistic expression and skills in order to pursue personal artistic goals. Prerequisite: *ART 190, or ART 194 or consent of instructor. May be taken for S/U credit with instructor approval. Two lecture.

ART 280 (3)
Advanced Studio Workshop
A course for students interested in further developing artistic expression and skills in order to pursue personal artistic goals. Prerequisite: *ART 111, or *ART 190, or *ART 195, or *ART 210 or consent of instructor. One lecture; five lab.

ART 281 (3)
Advanced Ceramics Workshop
A course for students interested in further developing artistic expression and skills in order to pursue personal artistic goals in ceramics. Prerequisite: *ART 220, or ART 121 or consent of instructor. One lecture, Five lab.

ART 285 (3)
Ceramic Sculpture
Ceramic Sculpture is a course for students who want to further develop their hand building skills, glazing and firing techniques and individual artistic expression. Prerequisite: *ART 120, or consent of instructor. One lecture. Five lab.

ART 290 (3)
Visual Arts Practicum
Portfolio development and community based service learning experience for visual arts majors. Prerequisite: *ART 165. One lecture; three lab.

ART 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. Credit hours: one to six. May be taken for S/U credit.

ART 294 (3)
Watercolor III
An advanced course in watercolor painting with increased opportunity for development of individual style through traditional and experimental techniques. Prerequisite: *ART 195 or consent of instructor. One lecture; five lab. May be taken for S/U credit. Spring.
American Sign Language

*Course has additional pre or co requisite(s)

ASL 101 (4)
American Sign Language I
Principles, methods, and techniques for acquiring basic skills using American sign language, with emphasis on developing visual and receptive skills and basic communication. General Education: Options. Four lecture. Spring, Fall, Summer. May be taken for S/U credit with instructor approval.

ASL 102 (4)
American Sign Language II
Further emphasis on American Sign Language vocabulary, grammar, receptive, and expressive technique development. Prerequisite: ASL 101 or consent of instructor. General Education: Options. Four lecture. Spring, Fall, Summer. May be taken for S/U credit with instructor approval.

ASL 110 (3)
Intro to Deaf Studies
Overview of deaf cultural issues and historical perspectives, education for deaf and hard-of-hearing children, laws pertaining to educational choices and rights of the deaf (no previous ASL required). General Education: Social and Behavioral Sciences. Special Requirement: Contemporary Global/ International Awareness or Historical Awareness. Three lecture. May be taken for S/U credit with instructor approval if not desired for program or transfer credit.

ASL 201 (4)
American Sign Language III
Enhanced focus on expressive and receptive American Sign Language sign skills. Application of syntactical and grammatical structure, idioms, body language, and cultural aspects of deafness. Prerequisite: *ASL 102 or consent of instructor. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.

ASL 202 (4)
American Sign Language IV
Further development of American Sign Language communication skills with emphasis on spontaneous conversation, discussions, narratives, and register. Prerequisite: *ASL 201 or consent of instructor. Four lecture. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

ASL 203 (4)
American Sign Language V
Advanced study of American Sign Language through intensive application of communication skills, with an emphasis on spontaneous conversation, creativity, discussions, narratives, and register. Prerequisite: *ASL 202 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

ASL 211 (3)
Fingerspelling & Numbers
Overview of basic fingerspelling techniques. Concentration on receptive and expressive skills including manual alphabet production and numbers. Focus and continue methods, theory, and skill development including speed, dexterity, clarity, and loan signs. Also includes advanced use of numbers, prefixes, suffixes, and polysyllabic words. Prerequisite: ASL 101 or instructor approval. Three lecture. May be taken for S/U credit.

ASL 212 (4)
Linguistics & Grammar of ASL
Advanced grammar and linguistic systems of American Sign Language; this course will focus on proper usage and syntax of ASL within Deaf culture. Prerequisite: *ASL 202, Co-requisite: *ASL 203. Four lecture. Maybe be taken for S/U credit with instructor approval.

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Automotive

*Course has additional pre or co requisite(s)

AUT 100 (3)
Automotive Basics
Basic automotive knowledge as it relates to owner and operator of an automobile or light truck. It will give the student an understanding of systems and maintenance. Two lecture; two lab.

AUT 106 (3)
Automotive Engines
An overview of the design, operation, diagnosis and service procedures of modern automotive engines. Students participate in the disassembly, inspection and reassembly. Service and technical data are presented to prepare the students for practical experience in engine servicing. Prerequisites: AUT 100 or consent of instructor. Two lecture. Two lab. May be Taken for S/U credit.

AUT 107 (3)
Automotive Engine Short Block Service Lab
Laboratory experiences in engine service and rebuilding; specializing in valve train, cooling, lubricating, exhaust and intake systems. Pre or Co-requisite: *AUT 106. Two lecture. Two lab. May be taken for S/U credit.
AUT 108 (3)
Automotive Engine Long Block Service Lab
Continuing laboratory experience in engine service and rebuild; emphasizing the “long block” assembly. Students will disassemble, inspect and service the engine block for warpage, alignment and bore, service crankshaft, service camshafts and timing, service pistons and rods and service plugs, seals, covers, damper and flywheel. Prerequisites: *AUT 107. One lecture. Three lab. May be taken for S/U credit.

AUT 110 (3)
Automotive Electrical and Electronic Systems
A study of automotive electrical and electronic systems used on light and medium duty vehicles. Topics include Principles of Electrical/Electronic Systems, General Electrical System Diagnosis and Battery Diagnosis and Service. Pre or Co-requisite: AUT 100. Two lecture. Two lab. May be taken for S/U credit.

AUT 111 (3)
Automotive Electrical and Electronic Systems
Emphasizes service of automotive and light truck starting and charging systems. Topics will include: Starting System Diagnosis and Repair, Charging System Diagnosis and Repair. Prerequisites: *AUT 110. One lecture. Three lab. May be taken for S/U credit.

AUT 112 (3)
Automotive Electrical and Electronic Systems-Lighting and Accessories Systems Lab
Emphasizes hands-on service of automotive and light truck lighting, gauge, horn, and other accessories systems. Prerequisites: *AUT 111. One lecture. Three lab. May be taken for S/U credit.

AUT 120 (3)
Automotive Brake Systems
A study of braking systems used on light and medium duty vehicles with an overview of heavy duty brakes (air) which will include theory, operation, construction, maintenance, testing, diagnosis and repair of drum and disc brakes. Pre or Co-requisite: AUT 100. One lecture. Three lab. May be taken for S/U credit.

AUT 121 (3)
Automotive Brake Systems Service Lab
Emphasizes service of automotive and light truck brakes systems. Topics will include: Power Assist Units Diagnosis and Repair, Brakes Related (Wheel Bearings, Parking Brakes, Electrical, Etc.), and Antilock Brake and Traction Control Systems. Pre or Co-requisites: *AUT 120. One lecture. Four Lab. May be taken for S/U credit.

AUT 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic
and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

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Aviation

AVT 131 (3)
Private Ground School
Aviation fundamentals including aerodynamics, aircraft performance and operations, earth’s atmosphere and weather systems, radio communications and navigation, aeronautical chart reading and course plotting, use of the plotter and slide graphic physiology. Three lecture. May be taken for S/U credit.

AVT 132 (3)
Instrument Pilot Ground School
Non-flying aspects of instrument pilot aviation needed to prepare for the FAA written examination and to become an instrument-rated pilot. Topics include instrument flight environment, operational confederations, advanced meteorology, instrument flight planning, and regulations. Three lecture.

AVT 289 (1–6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

Arizona Government University

AZG 298 (.25-3)
Special Topics
Designed to meet the needs of an individual(s) with interest in pursuing an original topic in an instructional area under faculty supervision. .25 to three variable credit hours

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Biology
*Course has additional pre or co requisite(s)

BIO 100 (4)
Biology Concepts
Basic principles and concepts of biology. Explores methods of scientific inquiry and behavior of organisms and energy in biological systems. Prerequisites: *MAT 091 and *ENG 100 or placement. General Education: Physical and Biological Sciences. Three lecture; three lab.

BIO 105 (4)
Environmental Biology
Basic concepts of ecology and the importance of human interaction with the natural ecosystem. Field trips. Pre- or co-requisites: *MAT 091, or placement; *ENG 102; or consent of instructor. General Education: Physical and Biological Sciences; Special Requirements: Contemporary Global/International Awareness or Historical Awareness; Intensive Writing/Critical Inquiry. Three lecture; three lab.

BIO 109 (4)
Natural History of the Southwest
Based on the life zone concept, an examination of the geologic history and ecological history of the Southwest. Emphasis is on the identification and adaptations of biotic populations. Involves field trips. General Education: Physical and Biological Sciences. Prerequisite: *MAT 091 and *ENG 100 or placement. Three lecture; three lab.

BIO 112 (2)
Wildflowers of Northern Arizona
An exploration of common wildflower species native to Northern Arizona with special emphasis on identification, collection, and distribution. Field Trips. One lecture. Three lab.

BIO 160 (4)
Introduction to Human Anatomy & Physiology
Biology 160 is the study of the structure and function of the human body. It is designed for students who want a one semester course in anatomy and physiology and those pursuing certificates in the allied health sciences; students majoring in the sciences or preparing for professional health science careers should enroll in the BIO 201/202 sequence. Prerequisite: *MAT 091 and *ENG 100 or placement. General Education: Lab Sciences. Three lecture; three lab.

BIO 181 (4)  BIO 1181
Unity of Life I: Life of the Cell
An introductory course for Biology MAJORS emphasizing central principles related to cellular and molecular processes in the cell. Course will include molecular structure, cell structure, reproduction, metabolism molecular genetics and evolution. CHM 130 or higher recommended. Prerequisite: *ENG 100 and *MAT 121 or *MAT 122, or placement. General Education: Physical and Biological Sciences. Three lecture; three lab.
BIO 182 (4)  BIO 1182
Unity of Life II: Multicellular Organisms
The second semester of introductory biology majors course. Builds on principles from BIO 181 to emphasize organism principles of life. Covers all multicellular organisms. Prerequisite: *BIO 181. General Education: Physical and Biological Sciences. Three lecture, three lab.

BIO 201 (4)  BIO 2201
Human Anatomy & Physiology I
Design and function of the human body. Topics include cells, tissues, integumentary, muscular, skeletal, nervous, and sensory systems. Prerequisite: *BIO 181 or consent of instructor. General Education: Physical and Biological Sciences. Three lecture; three lab.

BIO 202 (4)  BIO 2202
Human Anatomy & Physiology II
Design and function of the human body. Topics include body fluids, immune, cardiovascular, respiratory, digestive, urinary, and reproductive systems. Prerequisite: *BIO 201 or consent of instructor. General Education: Physical and Biological Sciences. Three lecture; three lab.

BIO 205 (4)  BIO 2205
Microbiology
Microorganisms and their relationships to health, ecology, and related areas. Prerequisite: *BIO 181 or consent of instructor. General Education: Physical and Biological Sciences. Three lecture; three lab.

BIO 208 (4)
Human Pathophysiology
This course surveys disease processes that affect the body systems, focusing on the mechanisms and modalities of infection or onset. Prerequisites: *BIO 201 and *BIO 202 are pre-requisites and *BIO 205 is recommended. Four lecture.

BIO 253 (4)
Biotechnology & Current Issues
Examinations of the natural and human-manipulated processes involved in genetics and gene expression. Concentrations on current genetic manipulations and potential consequences in biological, ecological, and social systems along with potential ethical, and legal concerns. Curriculum may vary depending on current concerns Field trips may be involved. Intended for those interested in the influence of science on society. Prerequisite: *BIO 100 or consent of instructor. General Education: Physical and Biological Sciences. Three lecture; three lab.

BIO 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic
and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

**BIO 299 (.5–3)**
**Biology Workshop**
Designed for community members to take courses in Biology that are of local, regional, or national interest. Prerequisite: *ENG 101 or consent of instructor. Co-requisite: *MAT 091 or consent of instructor. .5 to three variable credit hours.

**Business**

*Course has additional pre or co requisite(s)*

**BUS 100 (3)**
**Mathematics of Business**
Mathematical concepts and procedures involved in financial transactions. Includes percentages, liabilities, insurance, investments, assets, amortization, proration, taxes, and banking as it pertains to business. Prerequisites: *MAT 091 or placement. Three lecture.
Spring, Fall.

**BUS 101 (1)**
**Personal Money Management**
Introduction to spending money wisely, saving money, personal budgeting, applying for financial aid, understanding your credit score, how to interpret your paycheck, basic investing, and protecting yourself from identify theft. This class is a lecture format with interaction in a computer lab. One lecture. May be taken for S/U credit with instructor approval

**BUS 103 (3)**
**Personal Finance**
Problem solving for the financial needs of individuals. Includes budgeting, banking, home ownership and real estate, saving, investing, borrowing, insurance, and planning for wills and trusts. Three lecture.

**BUS 105 (3)**
**Basic Investments**
Study of inflation, taxation, government securities, stocks and bonds, real estate, and retirement plans. Three lecture.

**BUS 111 (3)**
**Business English**
Effective listening, responding, reading, and writing with emphasis on using these skills in the work place, from job application and interview to on-the-job oral and written communications. Prerequisite: *ENG 100 or placement. Three lecture.

BUS 204 (3)
Business Communications
Solving business problems through effective oral and written communications. Letter forms and methods of writing business letters. Creating functional letters related to inquiry, response, good will, sales, credit, and adjustment and collection. Prerequisite: *ENG 101 or *BUS 111 or placement on the Business English Proficiency Test. Three lecture.

BUS 206 (3)
Principles of Management
Fundamentals of management including the management principles and techniques used for business objectives, structure, operational procedures, and control procedures. Principles and techniques discussed may be applied to any area of business and industry. Three lecture.

BUS 207 (3)
Principles of Marketing
Environment of marketing including analysis of various marketing activities and discussion of the economic, psychological and sociological factors which influence marketing activities. Three lecture.

BUS 211 (3)
Human Resources/Personnel Management
Human resources planning and its application to the organization’s goals and objectives. Human resources policies, job analysis, employee selection, training, performance evaluation, benefits, compensation, labor relations, morale, safety, and termination. Three lecture.

BUS 213 (3)
Small Business Management
Students will learn the fundamentals of starting and operating a successful business. Studies will include business objectives, operational procedures, financing, legal organizations, feasibility studies, and marketing. Three lecture.

BUS 214 (3)
Legal, Ethical & Regulatory Issues in Business
Legal theories, ethical issues, and regulatory climate affecting business policies and decision. Prerequisite: *ENG 101 or consent of instructor. General Education: Social and Behavioral Sciences Three lecture.

BUS 216 (3)
Principles of Business Finance
Principles of financial management as applied to the operations of non-financial business and industry firms. Application of financial analysis tools and techniques needed for the process of business and industry financial administration and decision making, goals and functions of financial management, analysis and planning, working capital management, capital budgeting, and the cost of capital risk. Three lecture.

BUS 232 (3)
Business Statistics & Analysis
Business statistics, including the collection, tabulation, and analysis of business and economic data. Averages, dispersion, statistical inference, correlation and regression, and statistical decision making and problem solving. Prerequisite: *MAT 142 or higher. Three lecture.

BUS 289 (1-6)
Business Internship
Designed for students who are looking for paid or voluntary, practical application of applied business principles. Agreed upon internship will have a direct link to responsibilities regarding the business aspects of management, finance, customer service, or marketing. Credit hours will be negotiated based on the successful completion of a course contract. Each credit hour requires the completion of a minimum of 45 hours of related work as indicated by the course contract. Prior experience or course work in the area of interest is required. One to six variable credit hours. May be taken for S/U credit.

Chemistry

*Course has additional pre or co requisite(s)

CHM 130 (4)  CHM 1130
Fundamental Chemistry
General inorganic chemistry, scientific method, and general laboratory procedures. Prerequisite: *ENG 100 and *MAT 121, or *MAT 122, or placement. General Education: Lab Sciences. Three lecture. Three lab.

CHM 138 (5)
Allied Health Chemistry
This course is designed for students planning to enroll in Nursing or other Allied Health programs. This course includes general laboratory procedures, and discussion of the scientific method and the chemical properties of both inorganic and organic matter, including biochemical systems. Prerequisite: *MAT 121, *MAT 122, or placement. *CHM 130 recommended. Four Lecture. Three Lab.

CHM 151 (5)  CHM 1151
General Chemistry I
Fundamental concepts in chemistry. Stoichiometry, gas laws, atomic and molecular theory, and states of matter. Prerequisite: *MAT 121, or *MAT 122, or placement and *CHM 130 or higher or consent of instructor. General Education: Lab Sciences. Four lecture. Three lab.
CHM 152 (5)       CHM 1152

General Chemistry II
Continuation of Chemistry 151 with an emphasis on kinetics and equilibrium, nuclear, aqueous solution, and electrochemistry. Prerequisite: *CHM 151. General Education: Physical and Biological Sciences. Four lecture. Three lab.

*Course has additional pre or co requisite(s)

Computer Information Systems

CIS 100 (1)
Keyboarding-The Survival Skill
Touch-method skills while keyboarding on a calculator or computer keyboard. Keyboarding is a valuable and necessary skill in this technological world. It is an expected tool for effective communication throughout one's life. Students who can key by touch are much more relaxed because they can keep their eyes on the screen and concentrate on text editing and composing. One lecture. May be taken for S/U credit with instructor approval.

CIS 102 (2)
Computer Literacy
Introduces students to general computer concepts including computer-related terminology, computer system components, and computer operations. Students will have an opportunity to become familiar with personal computers for personal or business applications and create documents using word processing, spreadsheet, charting, and database software. No prior computer experience is necessary. Two lecture. May be taken for S/U credit with instructor approval.

CIS 105 (2)
Keyboarding Application- Word Processing Document Design
Practice in basic word processing functions and major business document formats: interoffice memos, e-mail, business letters (block and modified block styles with envelopes), simple reports, tables, and simple newsletters. Technique drills for speed and accuracy are included in one, two, three, and five minute timings. Two lecture. May be taken for S/U credit with instructor approval. Two lecture. May be taken for S/U credit with instructor approval.

CIS 110 (3)
Windows, the Internet, and Online Learning
Introduces students to the Windows Operating System, the Internet, and online instruction with an emphasis on hands-on learning. Students will gain the skills necessary to work comfortably in the Windows and WebCT environments, manage files efficiently, use e-mail effectively, and conduct research on the World Wide Web. Students will become familiar with the skills and mind set necessary to succeed in online courses. Three lecture.
CIS 112 (2)
**Introduction to Windows**
Basic operations and components of Windows environment through hands-on experience use many of the Windows tools and accessory applications. Two lecture. May be taken for S/U credit with instructor approval.

CIS 117 (3)
**Intro to Web Page Design**
An introduction to creating and editing documents for the World Wide Web (WWW). Students will learn basic editing and design skills and develop a multi-page document including graphical elements. Prerequisites: CIS 110, CIS 120, or consent of instructor Three lecture. May be taken for S/U credit with instructor approval.

CIS 120 (3)
**Introduction to Computer Information Systems**
Concepts and theories regarding computer hardware, software, and information processing systems. Includes an intensive lecture component covering the most current technological and computer information available and a hands-on component using word processing, spreadsheet, database, and presentation, e-mail and web browsing application software packages. No prior experience necessary. General Education: Options. Three lecture.

CIS 122 (3)
**Introduction to MS Word**
Concepts and capabilities of word processing software Microsoft Word in the Windows environment through extensive hands-on experience with business applications creating, editing, and enhancing documents appropriate to the work environment and personal use. No prior computer experience required. Three lecture. May be taken for S/U credit with instructor approval.

CIS 123 (3)
**Introduction to Spreadsheets**
Concepts and capabilities of electronic spreadsheet software using Microsoft Excel through extensive hands-on experience. Students will gain the necessary knowledge and skills to: create, edit, and format worksheets and charts. Students will gain experience with sensitivity analysis using formulas, functions, lists, integration, macros, and VBA. No prerequisites, basic file management skills are helpful. Three lecture. May be taken for S/U credit with instructor approval.

CIS 125 (3)
**Introduction to Databases**
Database design using the relational model and entity-relation diagrams. Concepts and capabilities of database management system (DBMS) software through extensive hands-on experience. No prior experience necessary. Three lecture. May be taken for S/U credit with instructor approval.
CIS 128 (3)
Introduction to Presentation Graphics
This course is designed as an introduction to graphic print and publication skills using graphic presentation and desktop publishing software for business applications. Students will learn the principles of basic visual design. They will create, modify, enhance, and present a graphic slide presentation that includes special effects and animation. Using desktop publishing software students will create professional publications including promotional documents, newsletters, brochures, booklets, and flyers. Prerequisite: CIS 102, 120 or consent of instructor. Three lecture. May be taken for S/U credit with instructor approval.

CIS 130 (4)
Computer Repair and A+ Prep
This course will prepare students for the A+ CompTIA Core and OS exams. Focus will be on installations, configuration, and upgrading, diagnosing and troubleshooting, preventive maintenance, motherboards, processors, memory, printers, basic networking, system and bus architecture, expansion boards and slots, floppy/hard drive components and controllers, input and output devices, power supplies, operating system’s functions, file concepts and procedures, Windows installations, configuration and upgrading, boot system sequences, diagnosing and troubleshooting error messages, basic system network procedure and connections. Four lecture. May be taken for S/U credit with instructor approval.

CIS 140 (4)
CISCO Network Academy Semester 1
This is the first of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer networking field. A task analysis of current industry standards and occupational analysis was used to develop the content. Instruction includes, safety, networking, network terminology and protocols, network standards, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and social-studies concepts to solve networking problems. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations. Prior computer knowledge strongly recommended. Four lecture. May be taken for S/U credit with instructor approval.

CIS 150 (4)
CISCO Network Academy Semester 2
This is the second of four semesters in the Cisco Networking Academy Program. The program is designed to teach students the skills they will need to design, build, and maintain small to medium size networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer-networking field. Prerequisite: CIS 140. Four lecture.
CIS 160 (4)
CISCO Network Academy Semester 3
This is the third of four semesters in the Cisco Networking Academy Program. The program is designed to teach students the skills they will need to design, build, and maintain small to medium size networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer-networking field. Prerequisite: *CIS 150. Four lecture.

CIS 161 (4)
UNIX Administration I
This is the first of two semester courses designed to provide students with classroom and laboratory experience in current and emerging UNIX Administration that will empower them to enter employment or further education and training in the computer administration/networking field. A task analysis of current industry standards and occupational analysis was used to develop the content. Instruction includes, but is not limited to, safety, UNIX Administration, UNIX networking, UNIX terminology and related protocols, network operation system standards, local-area networks (LANs), Network Management tools, Open System Interconnection (OSI) models, Ethernet, Internet Protocol (IP) addressing, User Administration, Files and Directories, Backup and recovery. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and social-studies concepts to solve UNIX Administration/Networking problems. In addition, instruction and training are provided in the proper care, maintenance, and use of UNIX software, tools, and equipment. Co-requisite: CIS 120. Four Lecture.

CIS 165 (3)
Basic Game Design and Creation
This course provides students with an introduction to game design and development. Topics include creating objects, events, and multiple levels of game interaction. Three lecture.

CIS 167 (3)
Game Design Fundamentals
This course provides students with an introduction to game design and industry history, terminology, and theory. This will include discussions of theory and practical applications of Elements and Genres of Game. Three lecture. May be taken for S/U credit with instructor approval.

CIS 168 (3)
History of Video Games
This course provides a historical and critical approach to the evolution of computer and video game design from its beginnings to the present. It brings together cultural, business, political, and technical perspectives. Students should come away from the course with an understanding of the history of this medium, as well as insights into design, production, marketing, and socio-cultural impacts of interactive entertainment and communication. Three lecture.
CIS 170 (4)
CISCO Network Academy Semester 4
This is the last of four semesters in the Cisco Networking Academy Program. The program is designed to teach
students the skills they will need to design, build, and maintain small to medium size networks. This provides them
with the opportunity to enter the workforce and/or further their education and training in the computer-
 networking field. Prerequisite: *CIS 160. Four lecture.

CIS 171 (4)
UNIX Administration II
This is the second of two semester courses designed to provide students with classroom and laboratory experience
in current and emerging UNIX/Linux Administration that will empower them to enter employment or further
education and training in the computer administration/networking field. A task analysis of current industry
standards and occupational analysis was used to develop the content. Instruction includes, but is not limited to,
safety, UNIX/Linux Administration, UNIX/Linux networking, UNIX/Linux terminology and related protocols, network
operation system standards, local-area networks (LANs), Network Management tools, User Administration, Files
and Directories, Backup and recovery, and Internet Protocol (IP) addressing. Particular emphasis is given to the use
of decision-making and problem-solving techniques in applying science, mathematics, communication, and social
studies concepts to solve UNIX Administration/Networking problems. In addition, instruction and training are
provided in the proper care, maintenance, and use of UNIX/Linux software, tools, and equipment. Prerequisite:
*CIS 161. Four Lecture. May be taken for S/U credit with instructor approval.

CIS 217 (3)
Web Publishing I
Design and creation of presentations for publishing on the World Wide Web. Through extensive hands-on
experience, students will gain the necessary authoring skills to design, prepare, edit, publish and maintain Web
sites that incorporate tables, forms, image maps, Common Gateway Interface (CGI) scripts, animation,
multimedia, and HTML programming. Covers emerging issues in Web publishing. Prior understanding of the
fundamentals of Web page design and experience creating Web pages is required. Prerequisites: *CIS 117 or
consent of instructor. Three lecture. May be taken for S/U credit with instructor approval.

CIS 220 (4)
Computer Programming I
This course will provide students with a good foundation in object-oriented programming concepts and practices.
Emphasis is placed on the development of small business systems applications. Prerequisite: CIS 120 or consent of
instructor. Four lecture.

CIS 230 (4)
Implementing & Supporting Windows
Installing, configuring, customizing, optimizing and troubleshooting Windows Client operating system. This course
includes integrating Windows Client with various networks. This course helps to prepare students to take the Microsoft Certified Professional exam for Windows Client. Prerequisite: CIS 130. Four lecture. Fall.

CIS 240 (4)
Installing, Configuring, and Administering Microsoft Windows Server
Installing, configuring, managing and supporting Microsoft Windows environment. This course helps to prepare students to take the Microsoft Certified Professional exam for implementing a Microsoft Windows Server Environment. Prerequisite: CIS 130 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

CIS 250 (4)
Implementing a Microsoft Windows Network Infrastructure
Installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows Server products. This course helps to prepare students to take the Microsoft Certified Professional exam for implementing a Microsoft Windows Network Infrastructure. Prerequisite: CIS 130 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

CIS 260 (4)
Implementing and Administering Microsoft Windows Directory
Installing and configuring Microsoft Windows Active Directory. Implementing Group Policy and performing the Group Policy-related tasks that are required to centrally manage users and computers. This course helps to prepare students to take the Microsoft Certified Professional exam for Windows. Prerequisite: CIS 130 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

CIS 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit with instructor approval.

Colorado Plateau Studies

*Course has additional pre or co requisite(s)

CPS 100 (3)
Overview of the Colorado Plateau
Introduction to the history, art, literature, physical and cultural geography of the Colorado Plateau, and contemporary issues of the region. General Education: Arts and Humanities, Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness, Contemporary Global/International Awareness
or Historical Awareness. Three lecture.

CPS 290 (3)
Colorado Plateau Studies Seminar
Colorado Plateau Studies Seminar is the capstone course for the Colorado Plateau Studies program. Topics will include historical and contemporary issues pertaining to the Colorado Plateau region with the intention of establishing a sense of stewardship in students. Prerequisites: ANT 230, CPS 100, *ENG 220, and GLG 232, or consent of instructor. Three lecture.

CPS 289 Internship I (1-6)
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. Credit hours: one to six. May be taken for S/U credit.

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Carpentry Apprenticeship (CRP)

CRP 105(2)
Interior Finish I
Installation of door hardware including knob, latch, strike plate, hinge butts, and door closer. Prerequisites: Registered Apprentice status with Northern Arizona Carpenters Joint Apprenticeship Committee or permission of the Apprenticeship Coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 106(2)
Interior Finish II
Installation of door hardware including knob, latch, strike plate, hinge butts, and door closer. Prerequisites: Registered apprentice status with Northern Arizona Joint Apprenticeship Training Committee or permission of the apprenticeship coordinator. One Lecture. Two Lab. May be taken for S/U credit.

CRP 110(2)
Introduction to Carpentry I: History & Tools
History, significance, and benefits of labor unions. Successful and efficient labor relations. Carpentry in relation to other construction trades. Building trades organizations. Components of lumber. Hand and power tools used in carpentry. Prerequisites: Registered apprentice status with the Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.
CRP 111(2)
Introduction to Carpentry II: OSHA Safety
Safe and proper use of hand and power tools. Safe work habits, first aid, and cardiopulmonary resuscitation (CPR) according to Occupational Safety and Health Administration (OSHA) regulations. Prerequisites: CRP 110 and registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 112(2)
Technical Calculations for Carpenters I
Integers and whole number processes: addition, subtraction, multiplication, division. Number types, factoring and cancellation. Mathematical functions using fractions, decimals, percentages. Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 113(2)
Technical Calculations for Carpenters II
Ratios and proportions. Use of plane and solid figure formula for the carpentry trade. Use of English and Metric systems of measurement for the carpentry trade. Graphs used for specific applications. Prerequisites: CRP 112 and registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator or instructor. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 114(2)
Blueprint Reading I
Types of blueprints and basic print reading. Symbols for materials. Construction details, standards, and specifications for brick veneer. Steel supports of plans for stores and apartments. Prerequisites: CRP 113 and Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator or instructor. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 115(2)
Blueprint Reading II
Light frame construction. Specifications and standards used in plans for frame residence. Masonry and steel support roof components of plans for banks. Comprehensive study plans and construction specifications for restaurants. Prerequisites: Registered apprentice status with the Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. Prerequisites: Registered Apprentice status with the Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator or instructor. One lecture. Two lab. May be taken for S/U credit with instructor approval.
CRP 116(2)
Concrete Formwork I
Construction and installation techniques. Building site and layout factors. Parts of forms and related hardware. Function of concrete form work in walls, columns, beams, decks and retaining walls. Wall forms and prefabricated walls and residential foundations. Prerequisites: Registered apprentice status with Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 117(2)
Concrete Formwork II
Construction and installation techniques. Elements of flatwork construction. Prerequisites: CRP116 and registered apprentice status with Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of the apprenticeship coordinator or instructor. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 210(2)
Basic Framing I
Construction and installation techniques. Floor framing and layout plate for posts and girders, joists, blocking, subfloor panels, underlayment, trusses, and hardware. Interior, exterior, prefabricated stairs. Wood framed wall: layout, bracing, fire block, corners, door and window openings. Flat roof and sloped ceilings: layout, framing, rafters, ceiling and stud joists. Prerequisites: Registered apprentice status with Northern Arizona Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 211(2)
Basic Framing II

CRP 212(2)
Carpentry Industry Technology I
Terminology, types, parts, handling, set up, care, storage, transport, and use of leveling instruments. Leveling rods, leveling operations, vernier scales, linear and angular measurement. Conventional system of measurement. Builder’s level and transit level. Prerequisites: Registered apprentice status with Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.
CRP 213(2)
Carpentry Industry Technology II
Terminology, types, parts, handling, set up, care, storage, transport, and use of leveling instruments. Leveling rods, leveling operations, vernier scales, linear and angular measurement. Conventional system of measurement. Builder's level and transit level. Simulated fieldwork exercises. Prerequisites: Registered Apprentice status with the Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 214(2)
Interior Systems I
History, advantages, and applications of metal framing and drywall. Drywall products and metal framing components for interior partition work. Safe tool use and jobsite safety. Blueprints, specifications and layout. Standard and special metal framing for partitions. Drywall installation on metal framework. Suspended ceiling systems. Prerequisites: Registered apprentice status or permission of apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit with instructor approval.

CRP 215(2)
Interior Systems II
Fundamentals, terms, tools, safety. Types of wood and glue. Case construction: joints, layout, cutting, assembly. Hardware, plastic laminates, completed cabinets, completed tops. Installation procedures. Prerequisites: CRP 114 and Registered apprenticeship status or permission of apprenticeship coordinator or instructor. One lecture. Two lab. May be taken for S/U credit with instructor approval.

Construction Technology Management

*Course has additional pre or co requisite(s)

CTM 111 (3)
Plumbing
This course will define the plumber's responsibility and introduce the student to the plumbing trade. Topics include: plumbing plans, safety, plumbing materials and fittings, pipes joining techniques, drain-waste and vent systems, water supply systems, fixture installations and leak testing. Emphasis will be placed on safe operation of all trade tools and equipment and job site safety. Three lecture. May be taken for S/U credit with instructor approval.

CTM 115 (3)
Introduction to Wood Working
Procedures, wood preparation, joinery & jointing techniques. Emphasis on safe and proper use of Wood working hand tools, portable power and stationary power tools. Three lab three, Three lecture. May be taken for S/U credit with instructor approval.

CTM 120 (3)
Building the Human Environment
Addresses architectural design and construction building practices, relating some of their psychological and environmental impacts. Historical, current and projected solutions to the human need for shelter and infrastructure is explored. Three lecture.

CTM 122 (3)
Construction Material & Equipment Safety
This course will introduce the student to safety in the Construction Industry. Emphasis will be placed on safe operation of trade tools and equipment, job site safety and early hazard recognition. Topics covered include: early hazard recognition, safety plans, safe transport and handling of construction materials and equipment, scaffolding set-up techniques, trench shoring and safety, fall prevention planning and associated hazards. Three lecture.

CTM 123 (3)
Building Construction Methods I
Floor foundations and interior and exterior framing, including various types and methods of building foundations and framing systems. Two lecture. Two Lab.

CTM 124 (3)
Building Construction Methods II
Construction methods, materials, and safe working practices as they relate to carpentry framing with wood. Floor, interior and exterior walls, ceilings, and roof and stair framing are described. Window, door, insulation, drywall, flooring, roofing and cabinetry systems are described for residential construction. Prerequisite: CTM 123. Two lecture. Two Lab.

CTM 130 (3)
Blueprint Reading & Estimating
Reading construction blueprint documents and estimating the amount of building materials needed for building projects. Reading and interpreting architectural schedules, symbols, and specifications. Three lecture.

CTM 131 (1)
Green Building Introduction
Introduction to Green Building presents the Core Concepts and underlying reasons for approaching construction from a Sustainable methodology perspective. Several Categories of Green Building are introduced and explored. Categories include Building Site, Energy performance concepts & issues, Water Utilization, Indoor Environment, Materials resourcing and Recycling approaches. Green Building myths are dispelled. Co-requisite:
CTM 123 recommended or construction experience. One lecture. May be taken for S/U credit with instructor approval.

CTM 132 (2)
Solar Water Heating Systems
This course will describe the basics of heating domestic hot water via the sun. The basic parameters of solar design and system sizing will be described. Various components of a solar water heating system will be described and each of their functions presented. Several solar water heater systems diagrams will be presented, discussed, with advantages and disadvantages of each system discussed. The workshop will include hands-on disassembly of a flat plate collector and a “Batch Heater. System pumps, differential controllers and heat exchangers will be shown in a shop setting. A Batch solar water heater will be assembled from common materials in the shop using a hands-on approach. Prerequisite: CTM 110 recommended. One lecture, one lab. May be taken for S/U credit with instructor approval.

CTM 133 (1)
Solar Greenhouse Design
This course will lead students through basic passive solar design for solar greenhouses. Solar orientation, Home site evaluation and Energy Efficient design & Construction approaches will be considered for the architectural integration of the passive solar design and construction of a “solar” greenhouse. One lecture.

CTM 134 (1)
Rain Water Harvest Systems
This class will introduce students to rain water as a source of water for domestic and/or landscape use. All system components for proper and safe use of rainwater will be presented and discussed. Components include: roofing materials, gutters and gutter sizing, first flush diverters and downspouts, plumbing piping to and from tank, tanks, water purification, filtration and analysis issues, sources of contamination, water pumps and control devices, water conservation fixtures, water conservation strategies for domestic and landscape use, guiding principles for water conservation, examples of rain water harvest systems will be shown. One lecture, one lab. May be taken for S/U credit with instructor approval.

CTM 138 (1)
Introduction to Solar Design Applications
Basic introduction to the concepts and principles related to Solar Energy Applications. A survey of the many ways that Solar Energy can be used in your home & life. One lecture. May be taken for S/U credit with instructor approval.

CTM 139 (1)
Greywater
Don't let good "greywater" from tubs, sinks and washers do down the drain! Greywater re-use for landscape irrigation is safe and legal when done properly. In this class we'll explore greywater options, some simple, some
more complex, including systems that when combined with use of composting toilets constitute affordable alternatives for people with difficult “perc” conditions. One lecture. May be taken for S/U credit with instructor approval.

CTM 150 (3)
Basic Electrical Theory

CTM 151 (3)
House Wiring I
Basic Electrical theory and safety presented. Survey of electrical construction processes for residential applications. Determining materials, installation processes, safety, and code requirements of electrical construction will be emphasized and applied. Students will apply a variety of common residential receptacle and switch circuits in a shop practice setting. Two lecture. Two lab. May be taken for S/U credit with instructor approval.

CTM 152 (3)
House Wiring II
Survey of electrical construction processes for residential applications. Determining materials, installation processes, safety, and code requirements of electrical construction will be emphasized and applied. Prerequisites: CTM 151 House Wiring I or consent of instructor. Two lecture. Two lab. May be taken for S/U credit with instructor approval.

CTM 155 (4)
Commercial Wiring I
This class will emphasize Light Commercial Wiring Applications to determine sizes of service entrance conductors and feeders, conduit sizes and boxes, Transformer types, theory & sizing, and protection of transformers: referencing to the National Electric Code. Prerequisite: CTM 151 or consent of instructor. Three lecture, one lab. May be taken for S/U credit with instructor approval.

CTM 211 (3)
International Residential Code
Safety principles of building construction under the Uniform Building Code, including structural requirements for wood, masonry, fire resistant materials and ratings, and occupancy requirements. Three lecture.

CTM 221 (3)
Structural Design & Building Materials
Structural analysis in building design, basic relationships between structures and architectural form, principles, concepts, and procedures from statics and mechanics of materials, and analysis of reactions including shear, deflection, flexural, and shearing stresses. Prerequisite: *MAT 121, or *MAT 122, or placement. Three lecture.

CTM 224 (3)
Concrete & Concrete Form Systems
This course will provide instruction in structural and architectural applications of concrete. It will examine concrete chemistry, mix designs, placement and finishing methods, and forming systems. Two lecture; two lab.

CTM 235 (3)
Solar Home Design
Alternative passive solar building techniques such as adobe, earth brick, rammed earth, sand bag, and earth ship will be presented, along with environmental and aesthetic design considerations. Three lecture. May be taken for S/U credit with instructor approval.

CTM 236 (3)
Photovoltaics & Wind Power
This course will define the design and installation of photovoltaic and wind power systems. Emphasis will be placed on electrical safety and operation of trade tools and equipment and job site safety. Topics covered: photovoltaic and wind power system plans, safety, electrical materials and fittings, solar cell panel and wind generator wiring techniques, battery systems, inverters and charge controllers. Three lecture.

CTM 250 (3)
Innovative & Alternative Building Techniques
Innovative and alternative building techniques such as steel framing, SIP, Integra or Rastra block, adobe, earth brick, rammed earth, cast earth, sand bag, papercrete, straw bale and earth ship will be presented along with environmental and aesthetic design considerations. These concepts will be integrated with a “pattern language” and passive solar design approach for student design projects. Recommended: CTM 123/124, CTM 235, CTM 120, or prior construction related experience. Three lecture; one lab. May be taken for S/U credit with instructor approval.

CTM 253 (3)
Plane Surveying & Building Layout
Building layout and surveying to establish building location for excavation and for the accurate placement of the building foundation, including finish floor elevation. Three lecture.

CTM 260 (3)
Green Building I
Principles of Sustainable Construction introduces the student to the principles and techniques of designing, building and maintaining more comfortable, energy-and-resource-efficient buildings from a Sustainable / Green
Building categorical approach. Prerequisites: CTM 235 and CTM 250. Three lecture. May be taken for S/U credit with instructor approval.

CTM 270 (3)
Contractor’s License
Overview of construction business practices and government requirements designed to help the student prepare for obtaining a contractor’s license. Three lecture. May be taken for S/U credit with instructor approval.

CTM 288 (3)
Construction Supervision & Scheduling
Function of the construction site supervisor and the process used in scheduling, pre- and post-construction, communication techniques, and documentation of records and reports. Three lecture.

CTM 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit with instructor approval.

Dance

*Course has additional pre or co requisite(s)

DAN 100 (2)
Beginning Dance Movement

DAN 102 (2)
Pilates
Introduction to the Pilates method for improving flexibility, strength and total body conditioning. Two lecture. May be taken for S/U credit with instructor approval.

DAN 103 (1)
Cardio-Fitness Workout
An intense cardiovascular workout that combines aerobic exercise, free-weights, body-sculpting and nutrition. One lecture. May be taken for S/U credit with instructor approval.
DAN 105 (2)
Aerobic Dance I
Aerobic dance as a fun way to develop strength, endurance, and flexibility through strengthening, stretching, and cardiovascular activity. One lecture; two lab. May be taken for S/U credit with instructor approval.

DAN 110 (3)
Ballet I
Basic ballet techniques and appreciation of ballet as a form of artistic expression. Three lecture. May be taken for S/U credit with instructor approval.

DAN 1101, 1102, 1103, 1104 (3 credits each)
Ballet I Sequence for Dance Majors
Basic ballet techniques and appreciation of ballet as a form of artistic expression for Dance majors. Three lecture.

DAN 111 (2)
Beginning Yoga
Beginning Yoga including yoga postures, breathing, history, and philosophy. One lecture, two lab. May be taken for S/U credit with instructor approval.

DAN 120 (3)
Modern Dance I
Beginning modern dance technique. Three lecture. May be taken for S/U credit with instructor approval.

DAN 1201, 1202, 1203, 1204 (3 credits each)
Modern Dance I Sequence for Dance Majors
Beginning modern dance technique for Dance majors. Three lecture.

DAN 130 (4)
Company Class and Rehearsal
Class and rehearsal for the student dance company. Four lecture. Prerequisite: by audition. May be taken for S/U credit with instructor approval.

DAN 140 (1)
Folk Dance I
Elements of folk dancing. Two lab. May be taken for S/U credit with instructor approval.

DAN 145 (2)
Tap Dance
Introduction to Basic Tap Dance Technique. Two Lecture. May be taken for S/U credit.
DAN 150 (3)
Jazz Dance I
Basic jazz dance technique. Three lecture. May be taken for S/U credit with instructor approval.

DAN 1501, 1502, 1503, 1504 (3 credits each)
Jazz Dance I Sequence for Dance Majors
Basic jazz dance technique for Dance majors. Three lecture.

DAN 151 (2)
Turkish-Egyptian Dance I
An introduction to basic Turkish and Egyptian dance movement. Two lecture. May be taken for S/U credit.

DAN 152 (2)
Turkish-Egyptian Dance II
Intermediate Turkish and Egyptian dance movement. Prerequisite: DAN 151 or consent of instructor. Two Lecture. May be taken for S/U credit with instructor approval.

DAN 153 (2)
Beginning Flamenco I
Introduction to Flamenco dance and its cultural history. Two Lecture. May be taken for S/U credit.

DAN 154 (2)
Beginning Flamenco II

DAN 155 (3)
Tai Chi Chuan
An introduction to the basic philosophy and movements of Tai Chi Chuan (Yang Style Long Form). Three lecture. May be taken for S/U credit with instructor approval.

DAN 156 (2)
West African Dance
Introduction to the music, rhythms and dance movement of West Africa. Two lecture. May be taken for S/U credit with instructor approval.

DAN 160 (3)
Awareness through Dance
This is a class for students wishing to gain a greater sense of awareness of themselves through movement and dance techniques. The class incorporates different movement and awareness modalities such as Feldenkrais, yoga, Tai Chi, and improvisational dance. Three lecture. May be taken for S/U credit with instructor approval.
DAN 180 (3)
Dance Production
Theory and practice of lighting, scenery, sound, and stage management for dance production. Three lecture. May be taken for S/U credit with instructor approval.

DAN 199 (0.5–6)
Dance Workshop
Designed to provide workshop courses based on student and faculty interest in pursuing or presenting an original topic. Workshops may be developed to enhance existing curriculum or to give students experience that is not covered by existing curriculum. One-half to six variable credit hours.

DAN 200 (3)
Introduction to Choreography
Introduction to principles of dance improvisation and choreography. Study and development of creative movement sources and potential through exploration of human and environmental relationships. Three lecture.

DAN 201 (3)
Dance History
History of dance from the ancient world to the present including cultural dance, performance dance and social dance. General Education: Arts/Humanities, Special Requirements: Ethnic/Race/Gender Awareness, Contemporary Global/International Awareness or Historical Awareness. Three lecture.

DAN 202 (2)
Pilates II
Intermediate studies in the Pilates method for improving flexibility, strength and total body conditioning. Two lecture. May be taken for S/U credit with instructor approval.

DAN 205 (2)
Careers in Dance
An overview of careers in dance, and the business aspects regarding those careers. Two lecture.

DAN 210 (2)
Yoga II
Intermediate studies in Yoga including yoga postures, breathing, history, and philosophy. Includes study into various yoga styles including, but not limited to gentle/restorative, flow, yin, Siyananda, and Kripalu. Prerequisite: DAN 111 or consent of instructor. One lecture, two lab. May be taken for S/U credit with instructor approval.

DAN 211 (3)
Ballet II
Ballet techniques for the student with previous ballet experience. Prerequisite: DAN 110 or consent of instructor. Two lecture; two lab. May be taken for S/U credit.

DAN 2111, 2112, 2113, and 2114 (3 credits each)
Ballet II Sequence for Dance Majors
Ballet techniques for dance majors with previous ballet experience. Prerequisite: DAN 110 or consent of instructor. Two lecture; two lab.

DAN 212 (3)
Ballet III
Advanced ballet technique. Prerequisite: DAN 211 or consent of instructor. Two lecture. Two lab. May be taken for S/U credit.

DAN 2121, 2122, 2123, and 2124 (3 credits each)
Ballet III Sequence for Dance Majors
Advanced Ballet technique for dance majors. Prerequisite: *DAN 211 or consent of instructor. Two lecture; two lab.

DAN 215 (3)
Teaching Methods in Dance
Theory and practice of teaching creative dance. Prerequisites: DAN 200 and one of the following: DAN 211 or DAN 221 or DAN 250; or consent of instructor. Three lecture. May be taken for S/U credit with instructor approval.

DAN 217 (3)
Ballet IV
A study of Classical Ballet incorporating techniques from the Royal Academy of Dance Advanced level. Prerequisites: *DAN 212 or consent of instructor. Two lecture, two lab. May be taken for S/U credit with instructor approval.

DAN 2171, 2172, 2173, 2174 (3 credits each)
Ballet IV Sequence for Dance Majors
A study of Classical Ballet incorporating techniques from the Royal Academy of Dance Advanced level for Dance majors. Prerequisites: *DAN 212 or consent of instructor. Two lecture, two lab.

DAN 221 (3)
Modern Dance II
Intermediate modern dance techniques. Two lecture; two lab. May be taken for S/U credit with instructor approval.
DAN 2211, 2212, 2213, and 2214 (3 credits each)
Modern Dance II Sequence for Dance Majors
Intermediate modern dance techniques for dance majors. Two lecture; two lab.

DAN 222 (3)
Modern Dance III
Advanced modern dance technique, theory and aesthetics. Prerequisite: DAN 221 or consent of instructor. Two lecture. Two lab. May be taken for S/U credit with instructor approval.

DAN 2221, 2222, 2223, and 2224 (3 credits each)
Modern Dance III Sequence for Dance Majors
Advanced modern dance technique, theory and aesthetics for dance majors. Prerequisite: *DAN 221 or consent of instructor. Two lecture. Two lab.

DAN 230 (3)
Choreography
Introduction to basic choreographic principles including composition and form and content in dance. Prerequisites: DAN 200 and one of the following: *DAN 210 or DAN 221 or DAN 250; or consent of instructor. Two lecture; two lab.

DAN 250 (3)
Jazz Dance II
Study of technical detail in the development and conditioning of the body for jazz and professional dance today. Two lecture; two lab. May be taken for S/U credit with instructor approval.

DAN 2501, 2502, 2503, and 2504 (3 credits each)
Jazz Dance II Sequence for Dance Majors
Study of technical detail in the development and conditioning of the body for jazz and professional dance today for dance majors. Two lecture; two lab.

DAN 251 (3)
Jazz Dance III
Advanced study of the art and technique of jazz dance at a pre-professional level. Prerequisite: DAN 250 or permission of the instructor. Two lecture; two lab. May be taken for S/U credit with instructor approval.

DAN 2511, 2512, 2513, and 2514 (3 credits each)
Jazz Dance III Sequence for Dance Majors
Advanced study of the art and technique of jazz dance at a pre-professional level for dance majors. Prerequisite: DAN 250, 2501, or permission of the instructor. Two lecture; two lab.

DAN 290 (3)
Dance and Performing Arts/Dance Fitness Practicum
Portfolio development and community based service learning experience for Dance majors. Generally taken last semester of degree program. One lecture, three lab.

**Drafting**

*Course has additional pre or co requisite(s)*

**DFT 110 (3)**
**Technical Drafting & CAD Fundamentals**
Technical drafting fundamentals, supported by introductions to computer-aided drafting (CAD), enabling the familiarization and visualization of drafting principles, standards, tools, and techniques. Two lecture; two lab.

**DFT 125 (3)**
**Architectural Drafting I**
Principles of architectural drafting design and techniques. This board-drafting course covers fundamentals of design, space, utilization, drafting tool usage, construction drafting requirements, and the development of a set of blueprints. Prerequisite: DFT 110 or consent of instructor. Two lecture; two lab.

**DFT 150 (3)**
**Auto CAD 2D**
This course will enable students to utilize computer-aided drafting (CAD) in a 2D medium. Prerequisite: DFT 110 or consent of instructor. Two lecture; two lab.

**DFT 200 (3)**
**AutoCAD 3D**
This course furthers a student’s mastery of computer-aided drafting (CAD) by exploring how to unlock the power of 3D through the use of advanced AutoCAD applications. Prerequisite: *DFT 150. Two lecture; two lab.

**DFT 225 (3)**
**Architectural Drafting I: CAD**
Application of constructing architectural drawings uses the power of computer-aided drafting (CAD) as the medium for drafting. Utilizes working drawings to focus on scale to drawing parameters, symbol libraries, dimensioning, and drawing enhancement. Prerequisites: *DFT 125 and *DFT 150. Two lecture; two lab.

**DFT 260 (3)**
**Architectural Drafting II: CAD**
Advanced application of construction architectural drawings using the power of 2D and 3D computer-aided drafting (CAD) as the medium for drafting. Advanced 2D detail views, electrical, mechanical, and plumbing. 3D drawings including floor plans, plot plans, elevations, perspectives, landscape, and detail views, utilizing several working drawings interfacing with a multi-pen plotter. Prerequisites: *DFT 200 and *DFT 225. Two lecture; two lab.
DFT 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic
and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment
of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior
experience or course work in the field of interest is required. One to six variable credit hours. May be taken for
S/U credit.

Early Childhood Education

ECE 100 (3)
Introduction to Early Childhood Education
This course is an introduction to the profession of Early Childhood Education, including a historical overview,
developmentally appropriate practices, cultural diversity, family roles, teacher roles, professional development,
and current issues. Students will perform 30 hours of classroom experiential involvement in local organizations
that care for children 0-8 years of age. Three lecture.

ECE 110 (3)
Early Childhood Curriculum
The fundamentals of curriculum theory and design appropriate to the developmental needs of young children.
Three lecture.

ECE 120 (3)
Health, Safety & Nutrition for the Young Child
Provides a study of health, safety and nutrition with related activities including current issues, guidelines and
practices in early childhood settings. Three lecture.

ECE 200 (3)
Child Guidance
Exploration, through observation and recording, of behaviors of young children. Emphasis placed on positive
guidance techniques to promote pro-social behaviors and self-guidance for young children. Three lecture.

ECE 210 (3)
Creative Arts for the Young Child
Evaluating and designing developmentally appropriate activities for the young child. Emphasis given to visual arts,
dramatic play, creative music and movement, exploration and discovery. Three lecture.

ECE 220 (3)
Language Arts for the Young Child
Study of theories and practices to assist young children in language and literacy development. Focus on both oral
and written literacy through listening, speaking, reading and writing. Three lecture.
ECE 230 (3)
Exploration & Discovery for the Young Child
Study of theories, methods and materials for promoting questioning and problem solving in young children. An emphasis on math and science through discovery and play. Three lecture.

ECE 234 (3)
Child Growth and Development
Child development from conception to eight years old, emphasizing cognitive, social and physical growth. Including theories of development. Three lecture.

ECE 240 (3)
School, Family & Community Relations
Study of the relationship between the child, the family, the community and the early childhood educators. Involves multicultural issues and diversity. Prerequisite: ECE 100. Three lecture.

ECE 250 (3)
Children with Special Needs
Study of young children ages 0-8 with special needs including assessment of needs, current practices, curriculum development, available resources, advocacy roles and legislative issues. Prerequisite: ECE 234 (Child Growth and Development), or consent of instructor. Three Lecture.

ECE 260 (2)
Child Development Associate (CDA) Assessment
Candidates for the CDA Credential complete the application for the CDA and are observed working as lead teacher in a federally approved setting. Prerequisite: ECE 100, 110, 120, 200, 234, or 240 and approval of ECE department advisor. One lecture; two lab.

ECE 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

Economics

*Course has additional pre or co requisite(s)

ECN 204 (3) ECN 2201
Macroeconomic Principles

**ECN 205 (3)**  **ECN 2202**

**Microeconomic Principles**


**Education**

*Course has additional pre or co requisite(s)*

**EDU 200 (3)**

**Introduction to Education**

An examination of the development of education in the United States, the historical development and social foundations of education, the student as learner, the teacher as a professional and current issues and trends in education. This course includes 30 hours of classroom observations and experiences. Pre requisite: *ENG 101 or consent of instructor. Three lecture.

**EDU 222 (3)**

**Introduction to Special Education**

Study of special education with emphasis on factors relating to current practices, identification, and characteristics of the exception learner, one who differs from the average learner. Pre or Co-requisite: *ENG 102 or consent of instructor. Three lecture.

**EDU 230 (3)**

**Cultural Diversity in Education**

This course examines the relationship of cultural values and social contexts to the formation of the child's self concept and success in the educational environment. An examination of the role of prejudice, stereotypes, institutional racism and sexism,. and cultural incompatibilities in education will be included. Emphasis on considering different world views, preparing future teachers to offer an equal educational opportunity to children of all cultural groups, and considering course concepts in relationship to the work environment. Pre or Corequisite: *ENG 102. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

**EDU 235 (3)**

**Relationships in Classroom Settings**

Provides an introduction to K-12 classroom settings and the relationships between teachers and their
students. Includes a focus on class management, developing positive and appropriate individual relationships with students, and classroom observations and participation. Course includes fieldwork in actual classroom settings. Prerequisite: *EDU 222. Two lecture. Two lab.

EDU 236 (3)
Structured English Immersion
This course prepares teachers to successfully work with English Language Learners in the K-12 classroom, exploring the history, theoretical foundations and practical applications of Structured English Immersion. Course topics are in compliance with the Arizona Department of Education requirements for provisional Structured English Immersion (SEI) endorsement. Three lecture.

EDU 247 (1)
Beginning Community College Teaching
A beginning methods course that focuses on an analysis of teaching and learning styles, delivery, classroom management and college policies. One Lecture.

EDU 248 (1)
Intermediate Community College Teaching
Explore development and purpose of the community college in the United States including current practices and issues with a particular focus on The Learning College. A methods course that focuses on student advisement and course articulation, assessment at both the course and program level, and technical expertise in the classroom. One Lecture.

EDU 249 (1)
Advanced Community College Teaching
A methods course that focuses on an application of teaching and learning styles and delivery, including discipline specific techniques and skills and advanced curriculum development. One Lecture.

EDU 250 (3)
The Community College
Development and purpose of the community college in the United States including current practices and issues. A methods course that focuses on analysis of teaching and learning styles, delivery, student assessment at course and program level, and curriculum development. Completing EDU 247, EDU 248, and EDU 249 is equivalent to EDU 250. Three lecture.

EDU 260 (3)
Principles and Philosophy of Career and Technical Education
Students explore and learn the history and philosophy of the comprehensive CTE program in Arizona including its various components: Program Standards and Measures, Performance Standards/ Data Reporting. Three Lecture.
EDU 261 (3)  
Methods for Teaching Career and Technical Education  
Students examine CTE philosophy and teaching methods, preparation and use of instructional material for the CTE classroom. Three Lecture.

EDU 262 (3)  
Curriculum Development and Assessment for Career and Technical Education  
Students study the process for developing curriculum for a CTE program including: courses of study, syllabi, lesson plans and assessment. Three Lecture.

EDU 263 (3)  
Career and Technical Education Student Leadership Organizations  
Students explore the benefits of integrating student leadership organizations in secondary and postsecondary CTE programs. Three Lecture.

EDU 264 (3)  
Career and Technical Education Internship/Practicum  
Students study the various components of quality CTE Instructional programs. Three Lecture.

EDU 289 (1–6)  
Internship I  
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

Electronics

*Course has additional pre or co requisite(s)

ELT 100 (3)  
Concepts of Electricity & Basic Electronics  
Electronics, including DC and AC, transistors, optoelectronic devices, linear and digital ICs, and electronic career opportunities. One lecture; three lab.

ELT 120 (3)  
Direct Current (DC)  
Basic electricity theory and components beginning with Ohm's Law and atomic structure and progressing to circuit analysis techniques used in solving series, parallel and series-parallel networks. Uses network theorems to evaluate multisource circuits. Prerequisite: *MAT 121, *MAT 122, or placement. Two lecture; two lab.
ELT 130 (3)
Alternating Current (AC)
Basic electrical theory as it applies to circuits containing capacitance, inductance, and resistance with sinusoidal voltages applied. Simple and complex circuits are studied and measured using instruments such as a signal generator and oscilloscope. Prerequisite: *MAT 121, *MAT 122, or placement. Two lecture; two lab.

ELT 135 (3)
Microcomputer Operating Systems & Architecture
Theory of digital logic gates, characteristics of input and output devices, memory hierarchy, central processing action, program processing, data transfer groups, interrupts, programmable peripheral group, C high level language, parallel and serial ports. Operation of utility programs to analyze system performance, diagnosis and correction of disk problems using real-world applications. Prerequisite: CIS 111. Co-requisite: *MAT 121, or *MAT 122, or consent of instructor. Two lecture; two lab. May be taken for S/U credit.

ELT 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

Electrical Training

*Course has additional pre or co requisite(s)
ETC 100 (3)
Soft Skills for the Construction Industry
Essential workplace skills geared for the construction industry: communication skills and resolving workplace issues. Three lecture. May be taken for S/U credit with instructor approval.

ETC 105 (1)
Electrical and Construction Safety
Provisions of and implementation of OSHA (Occupational Safety and Health Administration) Act in the work place. Rights and responsibilities under the OSHA Act. Appeals process, record keeping, and voluntary protection programs. OSHA's construction and general industry standards. Meets the OSHA 10-hour course requirements. One lecture. May be taken for S/U credit with instructor approval.

ETC 107 (3)
Mathematics for Electricians
Mathematics topics geared for the electrician trades areas, including ratio, proportion, measure, trigonometry and
applications. Prerequisite: *MAT 086 or placement. Three lecture. May be taken for S/U credit with instructor approval.

ETC 110 (4)
Commercial and Industrial Electrical I
An overview of basic construction and electrical-skills training: basic construction safety, basic construction math, introduction to hand and power tools, introduction to blueprints and basic rigging. Orientation to the electrical trade, hand bending of conduit, and an introduction to electrical theory. Four lecture. May be taken for S/U credit with instructor approval.

ETC 120 (4)
Commercial and Industrial Electrical II
Introductory electrical-skills training: electrical safety, AC & DC theory, boxes, fittings, and conductors. NEC and electrical drawings overview. Residential services and electrical test equipment. Prerequisite: ETC 110 or placement. Four lecture. May be taken for S/U credit with instructor approval.

ETC 121 (1)
Commercial and Industrial Electrical II Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 120. Corequisite: *ETC 120. One lecture. May be taken for S/U credit with instructor approval.

ETC 130 (4)
Commercial and Industrial Electrical III
Advanced AC Theory and motor theory. Introduction to electric lighting. Electric and hydraulic conduit bending. Selecting and sizing pull and junction boxes. Prerequisite: *ETC 120 or Apprenticeship Council placement. Corequisite: ETC 131 or consent of instructor. Four lecture. May be offered for S/U credit with instructor approval.

ETC 131(1)
Commercial and Industrial Electrical III Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 130. Corequisite: *ETC 130 or consent of instructor. One lecture. May be taken for S/U credit with instructor approval.

ETC 140 (4)
Commercial and Industrial Electrical IV
Conductor installations and terminations and use of cable tray. Grounding vs. Bonding. Circuit breakers, fuses, and fundamental control components. Prerequisite: *ETC 130 or placement. Corequisite: ETC 141 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.
ETC 141 (1)
Commercial and Industrial Electrical IV Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 140.
Corequisite: *ETC 140 or consent of instructor. One lecture. May be taken for S/U credit with instructor approval.

ETC 250 (4)
Commercial and Industrial Electrical V
Load and conductor calculations. Practical applications of lighting. Hazardous locations and overcurrent protection. Prerequisite: *ETC 140 or placement. Corequisite: ETC 251 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

ETC 251 (1)
Commercial and Industrial Electrical V Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 250. Corequisite: *ETC 250 or consent of instructor. One lecture. May be taken for S/U credit with instructor approval.

ETC 260 (4)
Commercial and Industrial Electrical VI
Distribution equipment and transformers. Commercial services. Motor calculations and controls. Voice, data, and video. Prerequisite: *ETC 250 or placement. Corequisite: ETC 261 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

ETC 261 (1)
Commercial and Industrial Electrical VI Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 260. Corequisite: *ETC 260 or consent of instructor. One lecture. May be taken for S/U credit with instructor approval.

ETC 270 (4)
Commercial and Industrial Electrical VII
Load calculations (feeders and services). Health care facilities. Standby and emergency systems. Basic electronics and fire alarm systems. Specialty transformers. Prerequisite: *ETC 260 or placement. Corequisite: ETC 271 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

ETC 271 (1)
Commercial and Industrial Electrical VII Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 270.
ETC 280 (4)
Commercial and Industrial Electrical VIII
Advanced controls and HVAC controls. Heat tracing and freeze protection. Motor operation and motor maintenance. Medium-voltage terminations and splices. Special locations for electrical services and equipment. Prerequisite: *ETC 270 or placement. Corequisite: ETC 281 or consent of instructor. Four lecture. May be taken for S/U credit with instructor approval.

ETC 281 (1)
Commercial and Industrial Electrical VIII Media Lab
A combination of Computer-Based Training, DVD training, and On-Line e-training to compliment ETC 280. Corequisite: *ETC 280 or consent of instructor. One lecture. May be taken for S/U credit with instructor approval.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.

Emergency Medical Services

EMS 100 (3)
Emergency Medical Services First Response Training Course
Working knowledge of emergency medicine per the U.S. Department of Transportation guidelines. Two lecture; two lab.

EMS 105 (4)
Wilderness First Responder
Wilderness First Responder course using the curriculum of the Wilderness Medical Society (WMS), a nonprofit organization consisting of physicians and healthcare providers from around the world who have approved and recommended practice guidelines and minimum course topics on the best methods of handling wilderness related trauma, illness and environmental emergencies. Four Lecture.

EMS 131 (8)
Emergency Medical Technician
Emergency Medical Technician course using the 1994 curriculum adapted by the Arizona Department of Health Services. This course will help prepare students for the Arizona State Department of Health Services EMT Examination. Prerequisites per DHS standards are required prior to entry into course: 18 years old by the end of the course, Professional/Healthcare Provider C.P.R. certification, verification that student has proficiency in
reading at the 9th grade level, TB skin test no longer than six month prior to the beginning of class, proof of MMR or titer vaccinations. Lecture eight.

EMS 211 (2)
Emergency Medical Technician Refresher
Updates basic EMT graduates on new techniques and reviews important principles in client care, basic life support, and transportation of the sick and injured. Emphasizes practical usage and experience in all phases. Meets Arizona Department of Health Services refresher training requirements. Prerequisite: EMS 131 or equivalent. May be repeated for additional credit as an exception to general college policy; maximum of six credits in EMS 211 may apply toward a degree. Two lecture.

EMS 262 (47)
Certified Emergency Paramedic
Preparation of the Certified Basic Emergency Medical Technician for transition to an advanced Certified Emergency Paramedic provider level. Includes human anatomy and physiology, physical assessment, advanced airway and ventilation techniques, intravenous therapy, medical emergencies, and trauma patient management. Interested students will go through a rigorous testing process and should contact the EMS program coordinator. Prerequisite: One year as a Certified EMT-Basic and acceptance to the program. Lecture twenty-seven. Lab forty.

English

*Course has additional pre or co requisite(s)

ENG 021 (1)
Grammar Skills
Individualized, self-paced instruction in grammar with emphasis on correct verb, pronoun, adverb, and adjective usage. Prerequisite: consent of advisor. Three lab. May be taken for S/U credit.

ENG 090 (4)
Intensive Writing Skills

ENG 100 (4)
Fundamentals of Composition
Integrated reading/critical thinking/writing approach to basic skills needed for success in college. Extensive writing practice with emphasis on purpose, organization, and revision for clarity and correctness. Prerequisite: *ENG 090 or placement. Four lecture.

ENG 101 (3)       ENG 1101
College Composition I
Extensive practice in critical reading, thinking, and writing, with emphasis on using the writing process to communicate in multiple formats, both formal and informal, and for multiple audiences and purposes. Includes documented research. Prerequisites: *ENG 100 and *RDG 099, or placement. General Education: English Composition. Three lecture.

ENG 102 (3)  ENG 1102  
College Composition II  
Continued development of ideas and strategies introduced in ENG 101. Extensive practice in critical thinking, reading, and writing with emphasis on composing analytical essays on literary topics and a documented research paper. Prerequisite: *ENG 101. General Education: English Composition. Three lecture.

ENG 139 (3)  
Introduction to Creative Writing  
Techniques of writing poetry, fiction, and creative nonfiction, with analysis of both published and student writing. Prerequisites: *ENG 100, *ENG 101 or consent of instructor. Three lecture. May be taken for S/U credit.

ENG 220 (3)  
A Sense of Place: Writers on the Colorado Plateau  
Literature of the land and peoples of the Colorado Plateau and contemporary concerns of writers of the region. Pre or Co-requisite: *ENG 102. Three lecture.

ENG 236 (3)  
Introduction to the American Short Story  
A survey of American short fiction from the Colonial period through 21st Century authors. Includes the examination of ethnic, race, gender, and other cultural issues. Prerequisite: *ENG 101 or consent of instructor. General Education: Arts and Humanities. Special Requirements: Ethic/Race/Gender Awareness. Three lecture.

ENG 237 (3)  
Women in Literature  
Literature by and about women emphasizing stereotypes, changing roles, and psychological and philosophical concerns. Prerequisite: *ENG 101 or consent of instructor. General Education: Arts and Humanities. Special Requirements: Ethic/Race/Gender Awareness. Three lecture.

ENG 238 (3)  
Literature of the Southwest  
Literature of the land and peoples of the Southwest, the influence and interaction of Native American, Chicano, and Anglo cultures, and contemporary concerns of Southwestern writers. Prerequisite: ENG 101 or consent of instructor. General Education: Arts and Humanities. Special Requirements: Ethic/Race/Gender Awareness. Three lecture.
ENG 240 (3)
English Literature I

A general survey of the major works in English literature from Beowulf through the Neoclassical period. Prerequisite: *ENG 101 or consent of instructor. Three lecture.

ENG 270 (3)
Creative Writing: Fiction
Extensive practice in writing and revising fiction, with emphasis on critical analysis of published models and students’ work. Prerequisite: *ENG 101 or consent of instructor. Three lecture. May be taken for S/U credit.

ENG 271 (3)
Creative Writing: Poetry
Extensive practice in writing and revising poetry, with emphasis on critical analysis of published models and students’ poems. Prerequisite: *ENG 101 or consent of instructor. Three lecture. May be taken for S/U credit.

ENG 272 (3)
Creative Writing: Non-Fiction

ENG 289 (1–6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. Credit hours: one to six. May be taken for S/U credit.

Environmental Studies

*Course has additional pre or co requisite(s)

ENV 111 (3)
Local Environmental Issues
Learners will examine their local biophysical environment, survey the regional history and economics, and then assess local environmental issues that may affect the health and well being of the local environment. Topics of concern vary depending on specific location and issues of concern. Learners may submit comments of concern to appropriate government officials. Field trips required. May be taken for S/U credit. Three lecture.
ENV 113 (3)
Global Environmental Issues
Students will examine the scientific basis of and reasons for concern about human population growth, loss of biodiversity and atmospheric alterations (global warming and ozone depletion). Prerequisite: any science course numbered *100-level or above, or consent of instructor. Three lecture.

ENV 299 (.5-3)
Environmental Studies Workshop
Designed for community members to take courses in Environmental Science and/or Studies that are of local, regional, or national interest. Prerequisite: *ENG101 or consent of instructor. Co-requisite: *MAT 091 or consent of instructor. .5 to three variable credit hours.

Forensics

FOR 101 (3)
Introduction to Forensics
Students in this course will study the techniques and technologies of the various forensic sciences as they relate to criminal investigations. Students will become fully aware of the legal issues that pertain to these activities and current forensic practices. Three lecture.

FOR 150 (3)
Death Investigations
This course is designed to provide students with an overview of the procedures of Scene Investigators, and the Medical Examiner’s Office, in determining cause and manner of death. Students will study the techniques and technologies utilized in modern death investigations, and become fully aware of the legal issues surrounding these activities. Three lecture.

FOR 170 (3)
Forensic Interviewing
This course will examine the legal aspects, required skills, psychological issues, and current investigative techniques relating to forensic interviewing. Three lecture.

FOR 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.
French

*Courses may have additional pre or co requisite(s)

FRE 101 (4)     FRE 1101
Beginning French I
Basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing French. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.

FRE 102 (4)
Beginning French II
Further emphasis in basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing French. Prerequisite: FRE 101 or consent of instructor. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

FRE 128 (2)
French for Travelers
A short course for students who have little or no prior experience with French and need specific vocabulary and cultural information for their anticipated adventures in traveling to countries where French is used. Two lecture. May be taken for S/U credit.

FRE 131 (3)
Conversational French I
Basic grammar, vocabulary, and culture in conversational practice. Three lecture. May be taken for S/U credit.

FRE 201 (4)
Intermediate French I
Improving basic skills of speaking, comprehension, reading, and writing. Taught in French. Prerequisite: *FRE 102 or consent of instructor. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.

FRE 202 (4)
Intermediate French II
Further development of speaking and writing communication skills with emphasis on compositions and readings. Taught in French. Prerequisite: *FRE 201 or consent of instructor. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

Fire Science

*Courses may have additional pre or co requisite(s)
FSC 135 (3)
Fundamentals of Fire Prevention
Role and functions of fire prevention. Practical rather than theoretical aspects of fire prevention. Three lecture.

FSC 136 (4)
Fire Apparatus & Hydraulics
Principles of care, maintenance, and operation of fire apparatus and pumps. Pump construction, pumping and pump accessories, power development and transmission, driving, trouble shooting, and producing effective fire streams. Three lecture; two lab.

FSC 138 (3)
Hazardous Materials/First Responder
Definition, detection, identification, scene management, basic training, equipment planning, strategy, and tactics in the management of hazardous materials incidents. Preparation for Department of Emergency Services certificate. Three lecture.

FSC 180 (8)
Firefighter I & II
For the new firefighter or student interested in firefighting. Fire behavior and basic firefighting skills, with hands-on use of firefighting equipment. Prerequisite: FSC 138 and *EMS 131 or consent of Fire Science Coordinator. Six lecture. Four lab.

FSC 233 (4)
Introduction to Wildland Fire Suppression
Provides a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior, and control techniques along with an introduction to the Incident Command System. Covers material from, I-100, I-200, S-130, S-190, CPS, and S-211. After completion, students may qualify for “Red Card” certification. Four lecture.

FSC 234 (3)
Fire Investigation
Methods of determining point of fire origin and fire cause, and detection of incendiary fires. Includes simplified physics and chemistry necessary to analyze fire behavior. Three lecture.

FSC 235 (3)
Fire Protection Systems
Required standard for water supply, protection systems, automatic sprinklers, and special extinguishing systems, including analysis of various automatic signaling and detection systems. Prerequisite: *FSC 180 or consent of instructor. Three lecture.

FSC 236 (3)
Firefighter Occupational Safety
Informational base to reduce injuries to fire fighting personnel. Awareness, training, and research of equipment to develop a safety program to meet the needs of the fire service. Three lecture.

FSC 238 (3)
Emergency Scene Management
Effective methods of managing emergency incidents including multiple alarm fires, high-rise fires, brush fires, hazardous materials incidents, and multi-casualty medical incidents. Includes effective interaction among numerous agencies to achieve control. Prerequisite: *FSC 180 or consent of instructor. Three lecture.

FSC 239 (3)
Fire Department Company Officer
Administrative methods for the fire department in fire safety, department organization, and personnel supervision. Includes elements of management needed for the fire department first-level supervisor. Prerequisite: BUS 209 or consent of instructor. Three lecture.

FSC 241 (3)
Firefighter Safety & Building Construction
Safety for firefighters on the fire ground. Effects of fire and heat on various types of building construction resulting in the loss of structure will be explored. Includes signs and symptoms of structural damage. Three lecture.

FSC 243 (4)
Intermediate Wildland Fire Suppression
Instructions for Firefighter Type I training, wildland fire chain saw safety practices, and fire behavior prediction skills and knowledge. Course covers material from S-131, S-212, and S-290. After completion students may qualify for Red Card Certification. Prerequisite: FSC 233 or consent of instructor. Four lecture.

FSC 253 (4)
Advanced Wildland Fire Suppression
Designed to train qualified squad bosses in firing techniques and firing devices along with advanced training in the incident command system. Covers materials from P-110, S-215, S-234 Prerequisites: FSC 233 and *FSC 243, or consent of instructor. Four lecture.

FSC 289 (1–6)
Fire Science Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required One to six variable credit hours. May be taken for S/U credit.
Geography

GEO 102 (3)
Human Geography
Thematic approach towards the study of global attributes to provide a bridge between the social and environmental sciences that considers how trends, patterns, and interactions developed within and between countries. Emphasis consists of comparisons and contrasts of the physical, socio-cultural, economic, and political aspects among regions of the world and application of geographical concepts and theories that explain or predict the cause and effect leading to the development of specific aspects for a country or region. General Education: Social and Behavioral Sciences, Special Requirement Contemporary Global/International and Historical Awareness. Three lecture.

GEO 131 (4)
Introduction to Physical Geography
Natural processes of weather, climate, hydrology, ecology, geology and tectonics, diastrophism, volcanism, denudation, soils, glaciations, and coastal processes emphasizing geographic distribution. General Education: Physical and Biological Sciences. Three lecture; three lab.

GEO 133 (3)  GEO 1121
World/Regional Geography
Physical (climate, vegetation, landform) and cultural (ethnic, religious, political, economic) attributes of the world’s major regions and the interplay between them. Includes a study of world place-name geography. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

German

*Courses may have additional pre or co requisite(s)

GER 101 (4)  GER 1101
Beginning German I
Basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing German. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.

GER 102 (4)  GER 1102
Beginning German II
Further emphasis in basic grammar, vocabulary, and culture. Practice in speaking, understanding, reading, and writing German. Prerequisite: GER 101 or consent of instructor. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

GER 128 (2)
German for Travelers
A short course for students who have little or no prior experience with German and need specific vocabulary and cultural information for their anticipated adventures in traveling to countries where German is used. Two lecture. May be taken for S/U credit.

GER 201 (4) GER 2201
Intermediate German I
Improving basic speaking and writing communication skills with emphasis on comprehension, reading, and writing. Prerequisite: *GER 102 or consent of instructor. Taught in German. General Education: Options. Four lecture. Fall and/or summer semesters. May be taken for S/U credit with instructor approval.

GER 202 (4) GER 2202
Intermediate German II
Further development of German communication skills with emphasis on comprehension, reading, and writing. Prerequisite: *GER 201 or consent of instructor. Taught in German. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

Geology

GLG 101 (4) GLG 1101
Physical Geology
The study of Earth’s processes and materials including rocks and minerals, structures, landforms and their origins. General Education: Physical and Biological Sciences. Three lecture; three lab.

GLG 102 (4)
Historical Geology
Chronological study of the sequence of events involved in the formation and development of the earth and its inhabitants as revealed in the geological record. General Education: Physical and Biological Sciences. Three lecture; three lab.

GLG 105 (4)
Introduction to Planetary Science
A survey of Solar System objects and their geologic evolution, surfaces, interiors, atmospheres, and processes, the methods used to study them, and the history of space exploration; weekly laboratory for data analysis and experiments; may include field trip(s). General Education: Physical and Biological Sciences. Three lecture. Three lab.

GLG 110 (4)
Natural Disasters
Examine the forces behind the geologic, atmospheric, and climatic processes that have caused great loss of life
and property throughout history as a result of natural disasters with a focus on causation, prediction, preparation, and mitigation. General Education: Physical and Biological Sciences. Three lecture. Three lab.

GLG 112 (2)
Geology of the Grand Canyon
Concepts in stratigraphy, volcanology, geomorphology, and glacial and structural geology in the Grand Canyon. Field trips. One lecture; three lab.

GLG 199 (.5-6)
Geology Workshop
Designed to provide workshop courses based on student and faculty interest in pursuing or presenting an original topic. Workshops may be developed to enhance existing curriculum or to give students experience that is not covered by existing curriculum. .5 to six variable credit hours.

GLG 232 (4)
Geology of the Colorado Plateau
Examine and observe the geology and geologic processes of the Colorado Plateau and how it has affected its inhabitants. Three lecture. Three lab.

Human Development Education

HDE 102 (3)
College Study Skills
Exploration of techniques that facilitate learning, improve academic performance, and help students succeed in the college environment. Topics include time management, reading textbooks, taking notes, critical thinking, learning styles, library research and preparing for tests. Three lecture.

History

HIS 131 (3)
U.S. History to 1877
Study of the peoples and forces that comprise the history of the United States from the pre-Columbian era to the end of Reconstruction (1877). General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness, Ethnic/Race/Gender Awareness. Three lecture.

HIS 132 (3)
U.S. History from 1877
History of the United States and the peoples and forces that shape it from the end of Reconstruction to the present. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness, Ethnic/Race/Gender Awareness. Three lecture.
HIS 136 (3)
Women in American History
Roles and contributions of women in the history of the U.S., with an emphasis on the social and cultural aspects of the feminist movements in the nineteenth and twentieth centuries. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness, Contemporary Global/International Awareness or Historical Awareness. Three lecture.

HIS 201 (3)
Western Civilization to 1660
Interdisciplinary approach to the history and development of Western civilizations from the ancient civilization of Egypt and Mesopotamia to 1660 or the dawning of modern Europe. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

HIS 202 (3)
Western Civilization from 1660
Interdisciplinary approach to the history and development of Western civilizations from 1660 to the present. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

HIS 211 (3)
World History to 1500
This course introduces students to the wide range of civilizations and cultural traditions in the world prior to 1500. Course highlights how various civilizations found unique solutions to common problems, which, combined with increasing contact and exchange, resulted in the diverse contemporary world. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three Lecture.

HIS 212 (3)
World History from 1500
This course introduces students to the global community that develops after 1500 out of the diverse civilizations and cultures that existed before 1500. Course highlights various civilizations found unique solutions to common problems, which, combined with increasing contact and exchange, resulted in the diverse contemporary world. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three Lecture.

HIS 238 (3)
Navajo History
Examines Diné (The People) history with emphasis on the role the Navajo have played in the economic, cultural, and political life of the Navajo nation. Three lecture.
Honors

HON 298 (1–6)
Special Topics
Designed to meet the needs of an individual(s) who has an interest in pursuing an original topic in an instructional area under faculty supervision. Prerequisites: Must have verifiable overall GPA of 3.0 or above with 12 hours earned in residence at CCC, or consent of instructor. One to six variable credit hours.

Hotel & Restaurant Management

HRM 100 (3)
Introduction to Hospitality
History, policies, and procedures of the hospitality industry relating to hotel/restaurant management. Three lecture.

HRM 140 (3)
Food Production Concepts
Introductory course identifying and describing the various interrelated components of systematic food service management. Three lecture.

HRM 210 (3)
Guest Service Management
Overviews of the hotel industry, front office management, guest expectations, reservations, uniformed services, and guest accounting. Also emphasizes the importance of communication and the key role front office plays within the framework of the entire hotel. Three lecture.

HRM 220 (3)
Property Management
Introduction to the direction and control of housekeeping operations, personnel and facilities management, problem solving techniques, and guest security and safety. Three lecture.

HRM 240 (3)
Commercial Food Production
Introduction to the operations, principles, and presentation techniques associated with the large and small commercial food services industry. Two lecture. Three lab.

HRM 270 (3)
Hospitality Information Technology II
Study and learn to use hotel and restaurant information management systems. Learn how to manage functionality of industry specific application to meet the goals of the organization. Prerequisite: CIS 120. Three lecture.
HRM 289 (1–6)
**Hotel and Restaurant Management Internship**
Designed for students who are looking for paid or voluntary, practical application of applied hotel and restaurant management skills. Agreed upon internship will have a direct link to responsibilities regarding customer service, employee responsibility, proper handling, preparation or management of resources (food, equipment, supplies, linen, etc.). Credit hours will be negotiated based on the successful completion of a course contract. Each credit hour requires the completion of a minimum of 45 hours of related work as indicated by the course contract. Prior experience or course work in the area of interest is required. One to six variable credit hours. May be taken for S/U credit.

**Humanities**

*COURSE HAS ADDITIONAL PRE OR CO REQUISITE (S)*

HUM 205 (3)
**Technology and Human Values**
Explores the relationship between technological development and individual and social values in the Western World from ancient times through the present. Includes technologies connected with a variety of areas, such as medicine, printing, agricultural production, work, ethics, art and architecture. General Education: Arts and Humanities. Special requirements: Intensive Writing and Critical Inquiry, Contemporary Global/International Awareness or Historical Awareness. Pre or Co-requisite: *ENG 102. Three lecture.*

HUM 235 (3)
**American Arts & Ideas**
Cultural development of the arts, literature, and philosophical and religious movements within the United States from the colonial period through the present. Pre- or co-requisite: *ENG 101. General Education: Arts and Humanities. Three lecture.*

HUM 241 (3)
**Humanities I**
Cultural development of the western world from the ancient Greeks to the Renaissance as reflected in the literature, visual arts, architecture, and performing arts of the various periods. Pre- or co-requisite: *ENG 102. General Education: Arts and Humanities. Special Requirements: Intensive Writing/Critical Inquiry. Three lecture.*

HUM 242 (3)
**Humanities II**
Cultural development of the Western World from the Renaissance to the present as reflected in the literature, visual arts, architecture, and performing arts of the various periods. Pre- or co-requisite: *ENG 102. General Education: Arts and Humanities. Special Requirements: Intensive Writing/Critical Inquiry, Contemporary Global/International Awareness or Historical Awareness. Three lecture.*
Industrial Maintenance Technology

IMT 101 (6)
Industrial Maintenance Technology Core Curriculum
This course is designed to provide students with classroom and laboratory experience in the core curriculum for introductory craft skills as defined by the National Center for Construction Education & Research (NCCER). Modules include Basic Safety, Introduction to Construction Math, Introduction to Hand Tools, Introduction to Power Tools, Introduction to Blueprints, and Basic Rigging. Six lecture.

IMT 120 (10)
Industrial Maintenance Electrical and Instrumentation Technician Level 1
This course is the first level in a four level program designed to provide students with classroom and laboratory experience in the Industrial Maintenance Electrical and Instrumentation Technician Level 1 curriculum as defined by the National Center for Construction Education & Research (NCCER). Modules include Orientation to the Trade, Tools of the Trade, Fasteners and Anchors, Oxyfuel Cutting, Gaskets and Packing, Craft-related Mathematics, Construction Drawings, Pumps and Drivers, Introduction to Valves, Introduction to Test Equipment, Material Handling and Hand Rigging, Mobile and Support Equipment, and Lubrication. Ten lecture.

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Interpreter Training Program

*Course has additional pre or co requisite (s)

ITP 210 (3)
Intro to Professional Interpreting & Ethics
A foundation course to discuss the role, function, responsibilities, and communication strategies of the ASL interpreter, including situational application of national standards and the Code of Professional Conduct. Prerequisite: *ASL 202 or consent of instructor. Three lecture. May be taken for S/U credit with instructor approval.

ITP 213 (4)
Consecutive Interpreting
Intensive practice of consecutive (following dialogue) ASL to English, and English to ASL using a variety of vocabulary and linguistic situations including source language analysis and application of appropriate techniques. Prerequisite: *ITP 210. Co requisite: *ASL 203. Four lecture. May be taken for S/U credit with instructor approval.

ITP 214 (4)
Simultaneous Interpreting
Intensive practice of simultaneous (immediate) ASL to English, and English to ASL using a variety of vocabulary and linguistic situations including source language analysis and application of appropriate techniques. Prerequisites: *ITP 210 and *ITP 213. Co requisite: *ASL 203. Four lecture. May be taken for S/U credit with instructor approval.

**ITP 215 (3)**
Transliterating
Learning the techniques of interpreting in manually coded English, using conceptually-accurate American Sign Language in a variety of interpreting situations. Prerequisite: *ASL 212. Three lecture. May be taken for S/U credit with instructor approval.

**ITP 216 (3)**
Educational Interpreting
A course specifically designed for the student who wishes to interpret in the K12 and post-secondary educational settings. Includes 20 clock hours of clinical experience or service learning in the field. Prerequisite: Consent of instructor. Three lecture. May be taken for S/U credit with instructor approval.

**ITP 217 (3)**
Interpreting Seminar
Capstone course designed to give students practice of all the combined skills required for professional interpreting in a variety of situations and role play opportunities. Students will gain further understanding of the certification and licensure process, as well as continuing education units. This capstone course is required for all program completers. Prerequisite: Consent of instructor. Three lecture. May be taken for S/U credit with instructor approval.

**ITP 289 (1-6)**
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. Credit hours: one to six. May be taken for S/U credit.

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**Italian**

*Course has additional pre or co requisite(s)*

**ITA 101 (4)**

**ITA 1101**
Beginning Italian I
Basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Italian. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.

**ITA 102 (4)**  \[\text{SUN}^{2}\]  ITA 1102

**Beginning Italian II**
Further emphasis on basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Italian. Prerequisite: ITA 101 or consent of instructor. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

**ITA 128 (2)**

**Italian for Travelers**
A short course for students who have little or no prior experience with Italian and need specific vocabulary and cultural information for their anticipated adventures in traveling to countries where Italian is used. Two lecture. May be taken for S/U credit.

**ITA 201 (4)**  \[\text{SUN}^{2}\]  ITA 2201

**Intermediate Italian I**
Improving basic skills of speaking, comprehension, reading, and writing. Taught in Italian. Prerequisite: *ITA 102 or consent of instructor. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.

**ITA 202 (4)**  \[\text{SUN}^{2}\]  ITA 2202

**Intermediate Italian II**
Further development of speaking and writing communication skills with emphasis on writing and reading. Taught in Italian. Prerequisite: *ITA 201 or consent of instructor. General Education: Options. Four lecture. Spring. May be taken for S/U credit with instructor approval.

**Latin**

**LAT 101 (4)**  \[\text{SUN}^{2}\]  LAT 1101

**Beginning Latin I**
Basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Latin. General Education: Options. Four lecture. May be taken for S/U credit with instructor approval.

**LAT 102 (4)**  \[\text{SUN}^{2}\]  LAT 1102

**Beginning Latin II**
Further emphasis on basic Latin grammar, vocabulary, and culture. Practice in speaking, reading, and writing Latin. Prerequisite: Lat 101 or consent of instructor. General Education: Options. Four lecture. May be taken for S/U credit with instructor approval.
Leadership

LDR 115 (1)
Workplace Ethics

LDR 201 (2)
Leadership Basics
Introduction to leadership in which students will develop a personal leadership philosophy, learn to articulate a vision, and practice leading by serving. Two lecture.

LDR 202 (2)
Leadership and Decision-Making
Exploration of goal-setting, decision-making, and time management as they relate to personal and organizational success. One lecture; two lab.

LDR 203 (2)
Leadership and Communication
Development of communication skills, team-building strategies, and change management techniques. One lecture; two lab.

LDR 204 (2)
Leadership and Power
Exploration of the complexities inherent in ethical leadership, conflict resolution, the use of power, and the empowerment of others. Upon completion of LDR 204, students may request an Award of Completion. Two lecture.

LDR 289 (1-6)
Leadership Internship
Designed for students who are looking for paid or voluntary, practical application of applied leadership principles. Agreed upon internship will have a direct link to responsibilities regarding goal-setting, decision-making, conflict resolution, team building, supervision, and service. Credit hours will be negotiated based on the successful completion of a course contract. Each credit hour requires the completion of a minimum of 45 hours of related work as indicated by the course contract. Prior experience or course work in the area of interest is required. One to six variable credit hours. May be taken for S/U credit.

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Mathematics
*Course has additional pre or co requisite(s)*

**MAT 010**
Math Help- 911 (2)

**MAT 082 (3)**
Arithmetic Review
Review of arithmetic skills, including fractions, decimals, and percent. Prerequisite: Placement. Three lecture.

**MAT 086 (3)**
Prealgebra
Basic measurement, and geometry concepts. Introduction to signed numbers, algebraic expressions, and linear equations. Prerequisite *MAT 082 or placement Three lecture.

**MAT 091 (4)**
Beginning Algebra
Basic algebraic concepts including operations with signed numbers, exponents and radicals, linear equations and inequalities, polynomials, and graphing. Prerequisite: *MAT 086 or placement. Four lecture.

**MAT 111 (2)**
Math Help 411

**MAT 121 (4)**
Intermediate Algebra
Basic algebraic concepts, including exponents and radicals, systems of equations, polynomials, graphing, and quadratic equations. Prerequisite: *MAT 091 or placement. Four lecture.

**MAT 122 (3)**
Intermediate Mathematics
Basic algebraic concepts, including exponents and radicals, graphing, logarithmic and exponential functions, and quadratic equations. Prerequisite: *MAT 091 or placement. Three lecture.

**MAT 142 (3)**
College Mathematics
Students will examine finance, growth, probability, statistics, and common applications encountered in society.
General Education: Mathematics. Prerequisite: *MAT 122 recommended, or *MAT 121, or placement. Three lecture.

MAT 151 (4)  MAT 1151
College Algebra
College level algebra, including equations, functions, matrices, inequalities, sequences and series, and fundamental algebra theorems will be studied. Prerequisite: *MAT 121 recommended, or *MAT 122, or placement. General Education: Mathematics. Four lecture.

MAT 160 (3)
Introduction to Statistics
Statistical tools and techniques used in research and general applications. Includes descriptive statistics, probability and probability distributions, point and interval estimates of population parameters, hypothesis testing, and correlation and regression. Prerequisite: *MAT 142 or higher. General Education: Options. Three lecture.

MAT 172 (3)
Finite Mathematics
Various analytical methods used in business and social sciences, including algebra review, functions and modeling, systems of linear equations, matrices, linear programming, mathematics of finance, probability, and combinations. Prerequisite: *MAT 151 or placement. Three lecture.

MAT 180 (3)
Mathematics for Elementary Teachers I
Mathematical foundations of elementary school mathematics curriculum. including problem solving, principles of whole numbers, integers, rational numbers, ratios, proportions and percentages. Emphasizes the use of models and manipulatives to increase understanding of the mathematical concepts. Pre- or co-requisite: *MAT 142 or higher. Three lecture.

MAT 181 (3)
Mathematics for Elementary Teachers II
Mathematical foundations of the elementary school mathematics curriculum including measurement, geometry, probability, and statistics. Emphasizes the use of models and manipulatives to increase understanding of the mathematical concepts. Prerequisite: *MAT 180. Three lecture.

MAT 187 (5)
Pre-Calculus
College level algebra and trigonometric topics to prepare for calculus. Functions, equations, and inequalities, trigonometry, and fundamental algebra theorems will be studied. General Education: Mathematics. Prerequisite: *MAT 121 recommended, or *MAT 122, or placement. Five lecture.
MAT 211 (4)
Business Calculus
Integral and differential calculus, including multidimensional, with business and social science applications. General Education: Mathematics. Prerequisite: *MAT 151 or *MAT 187 or placement. Four lecture.

MAT 220 (5)  MAT 2220
Calculus & Analytic Geometry I
Limits, continuity, differential, and integral operations on algebraic and trigonometric functions and applications. Prerequisite: *MAT 187 or placement. General Education: Mathematics. Five lecture.

MAT 230 (5)  MAT 2230
Calculus & Analytic Geometry II

MAT 241 (4)  MAT 2241
Calculus & Analytic Geometry III
Multidimensional calculus. Includes conic sections, polar coordinates, partial derivatives, gradients, directional derivatives, extreme, multiple and iterated integrals, vector calculus, line integrals, and Green’s Theorem. Prerequisite: *MAT 230. General Education: Mathematics. Four lecture.

MAT 261 (4)  MAT 2262
Differential Equations

Machine Shop

MCH 110 (3)
Machining Level I
Overview of metal machine practices and shop safety designed to help the student have a better understanding of machine shop procedures. Two lecture; two lab. May be taken for S/U credit.

MCH 111 (3)
Level II Machining
MCH 289 (1–6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

Military Science

*Course has additional pre or co requisite(s)

MSC 101 (1)
Basic Military Science I
Studies the defense establishment and organization of the U.S. Army. Introduces military discipline, traditions, and historical perspectives. Studies the roles of the different branches of the U.S. Army in our nation’s defense. Includes training in marksmanship, field craft, rappelling, and first aid. One lecture.

MSC 102 (1)
Basic Leadership
This course is an introduction to problem solving, decision-making, leadership and helps students become more effective leaders and managers, whether they serve in the military or become leaders in civilian life. Topics addressed include problem solving and methods, critical thinking, leadership theory, followership, group cohesion, goal setting, and feedback mechanisms. One lecture.

MSC 130 (1)
Leadership Lab I
Studies military leadership through practical application and challenging outdoor activities. Includes training in troop-leading organizational procedures, how to prepare operation orders, how to perform basic tactical exercises, and how to prepare and give classes in an outdoor environment. This is in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in fall semester only. One lab.

MSC 131 (1)
Leadership Lab I
Studies military leadership through practical application and challenging outdoor activities. Includes training in troop leading organizational procedures, how to prepare operation orders, how to perform basic tactical exercises, and how to prepare and give classes in an outdoor environment. This is in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in spring semester only. One lab.
MSC 150 (1)
Army Physical Fitness I
Improves the physical fitness of students and develops a physical fitness program tailored to the student’s needs and abilities. The focus of the course is to develop personal knowledge of the components of a good fitness program, improve individual fitness levels through scheduled training, and gain an understanding of the U.S. Army physical fitness training (PT) and testing doctrine. The course is designed to train students to meet Army physical fitness standards. Includes training in troop leading procedures in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in fall semester only. One lecture.

MSC 151 (1)
Army Physical Fitness I
Improves the physical fitness of students and develops a physical fitness program tailored to the student’s needs and abilities. The focus of the course is to develop personal knowledge of the components of a good fitness program, improve individual fitness levels through scheduled training, and gain an understanding of the U.S. Army physical fitness training (PT) and testing doctrine. The course is designed to train students to meet Army physical fitness standards. Includes training in troop leading procedures in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in spring semester only. One lecture.

MSC 201 (2)
Advanced Leadership
Theoretical and practical leadership instruction, in which students will examine several aspects of communication and leadership concepts such as written and oral communications, effective listening, assertiveness, personality, adult development, motivation, and organizational culture and change. Students will be well grounded in fundamental leadership principles and will be better prepared to apply such principles to a wide variety of life experiences. Prerequisites: MSC 101 and MSC 102. Two lecture.

MSC 202 (2)
Officership
Provides an extensive examination of the unique purpose, roles, and obligations of commissioned officers. It includes a detailed look at the origins of U.S. Army values and their practical application in decision-making and leadership. Includes military tactics, values and ethics, leadership, oral and written communications, and the Army’s successes and failures from the Vietnam War to present. Prerequisite: *MSC 201. Two lecture.

MSC 203 (1)
Land Navigation & Orienteering
Studies land navigation and orienteering techniques as well as first aid. Acquaints students with basic soldier skills. Includes training in how to use a map and compass, land navigation, direction finding, and first aid. One lecture.
MSC 204 (1)
Basic Military Skills
Studies the skills necessary to successfully navigate in diverse terrain with map and compass and to survive in the outdoors under various conditions with limited resource, taught through a combination of classroom instruction and practical exercises. Includes map reading and land navigation and wilderness survival and primitive living techniques. This course is offered in the spring semester only. One lecture.

MSC 230 (1)
Leadership Lab II
Studies military leadership through practical application and challenging outdoor activities. Includes training in troop leading organizational procedures, how to prepare operation orders, how to perform basic tactical exercises, and how to prepare and give classes in an outdoor environment. This is in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in fall semester only. One lab hour.

MSC 231 (1)
Leadership Lab II
Studies military leadership through practical application and challenging outdoor activities. Includes training in troop leading organizational procedures, how to prepare operation orders, how to perform basic tactical exercises, and how to prepare and give classes in an outdoor environment. This is in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in spring semester only. One lab hour.

MSC 250 (1)
Army Physical Fitness II
Improves the physical fitness of students and develops a physical fitness program tailored to the student’s needs and abilities. The focus of the course is to develop personal knowledge of the components of a good fitness program, improve individual fitness levels through scheduled training, and gain an understanding of the U.S. Army physical fitness training (PT) and testing doctrine. The course is designed to train students to meet Army physical fitness standards. Includes training in troop leading procedures in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in fall semester only. One lecture.

MSC 251 (1)
Army Physical Fitness II
Improves the physical fitness of students and develops a physical fitness program tailored to the student’s needs and abilities. The focus of the course is to develop personal knowledge of the components of a good fitness program, improve individual fitness levels through scheduled training, and gain an understanding of the U.S. Army physical fitness training (PT) and testing doctrine. The course is designed to train students to meet Army physical fitness standards. Includes training in troop leading procedures in preparation for the Advanced Army ROTC Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in fall semester only. One lecture.
Program and commissioning as an officer in the United States Army, Arizona National Guard, or United States Army Reserves. This course is offered in spring semester only. One lecture.

Music

MUS 100 (3)  
Music Appreciation  
Development of understanding and enjoyment of various musical forms and styles. Including an introduction to musical history. Relates concepts of music style and technique to those of other arts. General Education: Arts and Humanities. Three lecture.

MUS 120 (3)  
Introduction to Music Theory  
An introduction to the fundamentals of music: reading, notation, rhythm, scales, intervals, triads, sight-singing, and dictation. Three lecture. May be taken for S/U credit.

MUS 130 (3)  
Fundamentals of Music  
Basic elements of music including study of the staff, clefs, signatures, notes, rhythms, definitions, ear training, sight singing, and dictation. Three lecture.

MUS 145 (3)  
Jazz History & Literature  
History and development of jazz music from its origin to the present day. General Education: Arts and Humanities. Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

MUS 199 (0.5–6)  
Music Workshop  
Designed to provide workshop courses based on student and faculty interest in pursuing or presenting an original topic. Workshops may be developed to enhance existing curriculum or to give students experience that is not covered by existing curriculum. One-half to six variable credit hours.

MUS 207 (3)  
American Popular Music  
Develops listening skills and an understanding of how American geography, history, politics, and economics relate to the development of selected musical styles. General Education: Arts and Humanities, Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

Music Performance
MUP 105 (1)  
Voice Class I  
Fundamentals of singing. Three lab. May be taken for S/U credit.

MUP 107 (1)  
Guitar I  
Beginning instruction on guitar including open position scales, arpeggio studies, chord forms, rhythm  
accompaniment, and the fundamentals of music theory, note-reading studies, and picking techniques. Instruction  
in and exploration of basic classical and flamenco, folk, country, blues, and rock styles of playing. No guitars  
provided. One lecture; one lab. May be taken for S/U credit.

MUP 108 (2)  
Guitar II  
Second level instruction on guitar including moveable position scales and arpeggios, moveable chord form, melodic  
rhythm accompaniment, music theory, all major keys, reading music and notation, picking variations. Instruction  
in and exploration of more complex music styles in classical and flamenco, folk, country, blues, and rock.  
Prerequisite: MUP 107 or consent of instructor (audition). One lecture; two lab. May be taken for S/U credit.

MUP 110 (1)  
Woodwind Ensemble  
Rehearsal and public performance of standard ensemble literature for woodwind instruments. Two lab. May be  
taken for S/U credit.

MUP 113 (1)  
Jazz Ensemble  
Performance group focusing on jazz from 1900 to the present. The works performed will depend on the available  
instrumentation of the group and the choice of the instructor. Two lab. May be taken for S/U credit.

MUP 117 (2)  
Community Orchestra  
Rehearsal and public performance of standard orchestral literature. Two lecture. May be taken for S/U credit.

MUP 120 (1)  
String Ensemble  
Rehearsal and public performance of standard ensemble literature for string instruments. Two lab. May be taken  
for S/U credit.

MUP 121 (2)  
College Choir  
Performance group with participation based on auditions with the director. Attendance at all rehearsals and  
participation in all public performances is required. Two lecture. May be taken for S/U credit.
**MUP 125 (1)**
**Community Choir**
Performance group focusing on choral music from the popular literature of the Gay Nineties through the World Wars, as well as music from Broadway and the theatres. Two lab. May be taken for S/U credit.

**MUP 128 (1)**
**Jazz Improvisation I**
Basic jazz scales, chords, and rhythms, and jazz pieces exemplifying these basics. Two lab. May be taken for S/U credit.

**MUP 199 (0.5–6)**
**Music Performance Workshop**
Designed to provide workshop courses based on student and faculty interest in pursuing or presenting an original topic. Workshops may be developed to enhance existing curriculum or to give students experience that is not covered by existing curriculum. One-half to six variable credit hours.

**MUP 207 (2)**
**Guitar III**
Third level of instruction on guitar. Emphasis on playing techniques which combine scales, arpeggios, chords, rhythm and lead guitar patterns; control over rhythm patterns including triplet and sixteenth note exercises, syncopation, and constant base coordination. More intricate techniques applied to classical and flamenco, folk, country, blues, and rock styles of music. No guitars provided. Prerequisite: MUP 108 or consent of instructor (audition). One lecture; two lab. May be taken for S/U credit.

**MUP 209 (2)**
**Blues Guitar**
Introduction to a variety of blues guitar styles and techniques. Course will include blues rhythm and lead guitar techniques, finger picking and beginning slide guitar. Delta, Texas, Chicago styles, and others will be covered. No guitars provided. Prerequisite: MUP 108 or consent of instructor (audition). Two lecture; one lab. May be taken for S/U credit.

**Navajo**

*Course has additional pre or co requisite(s)*

**NAV 101 (4)**
**Beginning Navajo I**
Basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Navajo. General Education: Options. Four lecture. Fall. May be taken for S/U credit with instructor approval.
NAV 102 (4)  
Beginning Navajo II  
Further emphasis on basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Navajo.  
Prerequisite: NAV 101 or consent of instructor. General Education: Options. Four lecture. Spring. May be taken for  
S/U credit with instructor approval.

NAV 201 (4)  
Intermediate Navajo I  
Emphasis on improving basic skills in speaking, comprehension, reading, and writing. Taught in Navajo.  
Prerequisite: *NAV 102 or consent of instructor. General Education: Options; Contemporary global/International  
Awareness or Historical Awareness. Four lecture. May be taken for S/U credit with instructor approval.

NAV 202 (4)  
Intermediate Navajo II  
Further development of speaking and writing communication skills with emphasis on compositions and readings of  
the Diné language. Taught in Navajo. Prerequisite: *NAV 201 or consent of instructor. General Education: Options,  
Contemporary global/International Awareness or Historical Awareness. Four lecture. Spring. May be taken for S/U  
credit with instructor approval.

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Nursing

*Course has additional pre or co requisite(s)

NUR 110 (4)  
Nursing Assistant I  
Basic concepts common to all members of the health team in acute and long-term care settings. Basic principles of  
communication, nutrition, emergency care, medical terminology, environmental safety and comfort, and  
ethical/legal aspects of health care. Basic nursing skills based upon fundamental nursing concepts in giving  
individualized client care. Student wishing to become a Certified Nursing Assistant must pass NUR 110 with a B or  
better and then complete NUR 111. Prerequisite: *RDG 099, or placement, or consent of instructor; current  
American Heart Association Health Care Provider CPR certificate; health requirements including evidence of TB  
testing within the past year, measles, mumps, and rubella immunization or titers, Tuberculosis, Diptheria, and  
Pertussis (TDAP); confirmation of Varicella or immunization. Pre or co requisite: *AHS 131. Three lecture. One lab.

NUR 111 (1)  
Nursing Assistant Clinical  
To provide students with the necessary clinical time required for application for state certification as a Certified  
Nursing Assistant. Students will practice basic concepts common to all members of the health team in acute and
long-term care settings which include basic principles of communication, nutrition, emergency care, medical terminology, environmental safety and comfort, ethical/legal aspects of health care, basic nursing skills based upon fundamental nursing concepts in giving individualized client care. Co-requisite: *NUR 110 with a grade of B or better. Prerequisites: Current American Heart Association Health Care Provider CPR certificate; health requirements including evidence of TB testing within the past year, measles, mumps, and rubella immunization or titers; Tuberculosis, Diptheria, and Pertussis (TDAP); confirmation of Varicella or immunization. One lab. May be taken for S/U credit.

NUR 114 (2)
Introduction to Nursing Pharmacology
This introductory pharmacology nursing course is an overview of pharmacological concepts and the nursing process. Emphasis will be placed on understanding drug classifications and basic foundations of pharmacology. Prerequisite: Admission to the nursing program. Pre or Co-requisite, *ENG 102, *BIO 202, Co-requisites: *NUR 116. Two lab, 1.5 lecture.

NUR 116 (7)
Nursing Concepts I
This introductory nursing course focuses on the core components of nursing practice and caring as the essence of nursing. Emphasis will be placed on professional roles of the nurse, the nursing process, critical thinking, basic assessment, communication skills, medication administration and basic nursing skills. Pre-requisites: Admission to the nursing program. Pre or Co-requisites: *ENG 102, *BIO 202; Co requisite: *NUR 114. Five lecture; Seven lab.

NUR 120 (2)
Mental Health Nursing
This course focuses on the utilization of the nursing process and critical thinking in the care of the client and family with alterations in mental health and illness. Emphasis will be placed on psychiatric/mental health and emotional problems in hospitalized patients as well as in the community settings. Pre-requisites: NUR 114, NUR 116 Pre or Co-requisite: BIO 218, PSY 240. Co-requisites: NUR 120. 1.5 lecture; 2 lab.

NUR 124 (7)
Nursing Concepts II
This course focuses on the utilization of the nursing process and critical thinking in the care of the childbearing and childrearing family. Emphasis is placed on health promotion, health maintenance and health restoration in families, during pregnancy, and in children. Prerequisites: *NUR 114, *NUR 116, Pre or Co-requisite: *BIO 218, *PSY 240, Co-requisite: *NUR 120, Five lecture. Five lab.

NUR 215 (8)
Nursing Concepts III
This course focuses on the utilization of the nursing process and critical thinking in the care of adult and geriatric clients with commonly occurring health care needs. Emphasis is placed on chronic disease processes in
hospitalized patients as well as in the community settings. Prerequisites: *NUR 120, *NUR 124. Pre or Co-requisite: *BIO 205, *NTR 135, Five lecture; eight lab.

NUR 220 (9)
Nursing Concepts IV
This course focuses on the utilization of the nursing process and critical thinking in the care of adult and geriatric clients with acute health care needs. Emphasis is placed on acute disease processes in hospitalized patients. Includes basic concepts of critical care and emergency/disaster nursing. Prerequisites: *NUR 215 Pre or Co-requisite: Humanities Elective, Co-requisites: *NUR 222. Five lecture. Fifteen lab.

NUR 222 (2)
Management and Leadership in Nursing
This course focuses on the current trends and issues in nursing practice. Emphasis will be placed on providing practical guidelines and strategies for the student’s transition into entry level nursing. Prerequisites: *NUR 215. Pre or Co-requisite: Humanities elective, Co-requisite: *NUR 220. Two lecture.

Nutrition
Course has additional pre or co requisite(s)

NTR 135 (3)
Human Nutrition
Principles of nutrition in critical periods throughout the life cycle, diet in disease, and the essentials for the nutritional care of people suffering from various diseases. Prerequisites: *CHM 130 or *CHM 151. Three lecture.

NTR 298 (1–6)
Special Topics
Designed to meet the needs of an individual(s) with interest in pursuing an original topic in an instructional area under faculty supervision. One to six variable credit hours.

Physical Education

PHE 220 (2)
Water Safety Instructor
Water safety techniques leading to certification by the American Red Cross. Two lecture.

Philosophy

PHI 101 (3)  PHI 1101
Introduction to Philosophy
Philosophical readings, discussion, and analysis on topics including metaphysics, truth, knowledge, and ethics.
General Education: Arts and Humanities. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

**PHI 103 (3) ** Philosophy

*Introduction to Logic*

The systematic study, with emphasis on analysis and evaluation, of arguments. Topics will include both classical and current arguments from various disciplines of study. Three lecture.

**PHI 105 (3) ** Philosophy

*Introduction to Ethics*

Key concepts and problems in ethics and social and political philosophy. Historic and contemporary reading with application to modern concerns. General Education: Arts and Humanities. Special Requirements:

Ethnic/Race/Gender Awareness. Three lecture.

**Physics**

*Course has additional pre or co requisite(s)*

**PHY 111 (4) ** Physics

*College Physics I*

Algebra-based study of motion, static and dynamic mechanics, waves and sound. Prerequisites: *MAT 187. General Education: Physical and Biological Sciences. Three lecture; three lab.

**PHY 112 (4) ** Physics

*College Physics II*

Introduction to the concepts of electricity and magnetism, light, and optics. Additional topics in quantum physics, atomic physics, nuclear physics, thermodynamics, or relativity will be discussed Prerequisite: *PHY 111. General Education: Lab Sciences. Three lecture; three lab.

**PHY 161 (4) ** Physics

*University Physics I*

First semester calculus-based physics course designed for pre-engineering and pre-science majors. Mechanics, motion, statics and dynamics, work, power and energy, impulse, and momentum will be studied. Prerequisites: *MAT 220. General Education: Physical and Biological Sciences. Three lecture; three lab.

**PHY 180 (4) ** Physics

*Introduction to Astronomy*

Motion and structure of the sun, planets, constellations, comets, asteroids, and meteors. Cosmic explosions, quasars, and stellar evolution including white dwarfs, neutron stars and black holes. Lab component requires numerous night observations. General Education: Physical and Biological Sciences. Three lecture; three lab.
PHY 253 (4)
Archaeoastronomy
Examination of how pre-historical societies used celestial movements to anticipate ceremonial and survival activities. Concentrates on motions of the sky, research methodologies and cultural interpretation of sites. Field trips. Co-requisite: *MAT 121 or *MAT 122. General Education: Physical and Biological Sciences. Special Requirements: Ethnic/Race/Gender Awareness, Contemporary Global/International Awareness or Historical Awareness. Three lecture; three lab.

PHY 262 (4)  PHY 1131
University Physics II
Second semester calculus-based physics course. Topics include electrostatic phenomena, conductors, electric and magnetic fields, resistance, capacitance, and other basic circuit components and analysis, and magnetic forces and currents. Prerequisite: *PHY161. Pre- or co-requisite: *MAT 230. General Education: Physical/Biological Sciences. Three lecture; three lab.

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Political Science

POS 101 (3)
Introduction to Politics
Issues in contemporary political analysis, human values, and political goals; how governments differ and change; relationship between individuals and government; how nation-states influence one another. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

POS 110 (3)  POS 1110
American National Government
Introduction to the American national government; constitutional and philosophical foundations, federalism, structure and evolution of the federal government, and recent trends and issues in the federal government. General Education: Social and Behavioral Sciences. Three lecture.

POS 120 (3)  POS 1120
Introduction to World Politics
Introduction to the international system, its actors and their capabilities; international political economy; ends and means of foreign policy; international cooperation, tension, and conflict. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness or Historical Awareness. Three lecture.

POS 140 (3)
Introduction to Public Administration
Political context of American public administration, alternative frameworks for the analysis of the policy process in government agencies, the budgetary process, accountability and responsibility in government, bureaucratic politics, and administrative reform and reorganization. Three lecture.

**POS 201 (3)**
**Introduction to Political Ideologies**
Political ideas and belief systems, including liberalism, conservatism, Marxism, fascism, and feminism: the functions of ideology for the individual and society. Three lecture.

**POS 220 (3)**
**Arizona & National Constitution**

**POS 221 (1)**
**Arizona Constitution & Government**
Arizona Government and Constitution designed to meet the requirements for Arizona state teaching certification. One lecture.

**POS 222 (2)**
**National Constitution & Government**
United States Government and Constitution designed to meet the requirements for Arizona state teaching certification. Two lecture.

**POS 233 (3)**
**Global Environmental Politics**
International environmental policies, issues and concerns involving environmental ethics, resource use, global environmental divisions, ecological degradation, biodiversity and other global changes. General Education: Social and Behavioral Sciences. Special Requirements: Contemporary Global/International Awareness OR Historical Awareness. Three lecture.

**Power Plant Operations**

*Course has additional pre or co requisite(s)*

**PPO 110 (5)**
**Maintenance Fundamentals**
Introduction to the basic skills needed for individuals working as maintenance technicians in a power plant. Prerequisite: Admission into the Navajo Generating Station maintenance apprenticeship program. Five lecture.
PPO 150 (4)
Electrician / Instrument Tech II
Introduction to electricity, circuits, and electronics, as well as types, function, maintenance, and troubleshooting of electronic equipment. Prerequisite: PPO 110. Four lecture.

PPO 151 (5)
Plant Mechanic II
Introduction to the operation, maintenance, and troubleshooting of various types of mechanical systems.
Prerequisite: PPO 110. Five lecture.

PPO 152 (4)
Machinist II
Introduction to the components and operation of various types of mechanical equipment. Prerequisite: PPO 110.
Four lecture.

PPO 153 (4)
Metal Fabricator II
Introduction to rigging, the tools of the metal fabricator’s work bench, and properties of different types of metals.
Prerequisite: PPO 110. Four lecture.

PPO 155 (5)
Construction & Maintenance
Introduction to sheet metal, insulating, painting, masonry, scaffolding, concrete construction, carpentry, and plumbing. Prerequisite: PPO 110. Five lecture.

PPO 200 (3)
Plant Electrician III
Training in types, uses, maintenance, and repair of different mechanical and electronic systems. Prerequisite: PPO 150. Three lecture.

PPO 201 (3)
Plant Mechanic III
Builds upon the knowledge gained in PPO 151 to give training in energy conservation and further knowledge on the operation, maintenance, and troubleshooting of various types of mechanical systems. Prerequisite: PPO 151.
Three lecture.

PPO 202 (3)
Machinist III
Training on power machines used in a machinist shop. Prerequisite: PPO 152. Three lecture.
PPO 203 (4)
Metal Fabricator III
Introduction to metallography and an overview of safe practices and technique for gas and arc welding.
Prerequisite: *PPO 153. Four lecture.

PPO 204 (4)
Instrument Technician III
Training on a variety of mechanical, hydraulic, pneumatic, and electrical systems. Prerequisite: *PPO 150. Four lecture.

PPO 205 (5)
Construction & Maintenance III
Builds upon the material presented in PPO 155 to give further instruction in the areas of sheet metal, insulating, painting, masonry, concrete finishing, carpentry, and plumbing. Prerequisite: *PPO 155. Five lecture.

PPO 250 (3)
Plant Electrician IV
Training in energy conservation, computer systems, industrial rigging, and basic welding principles. Prerequisite: *PPO 200. Three lecture.

PPO 251 (2)
Plant Mechanic IV
Training on rigging, installation of large equipment, and different types of welding. Pre-requisite: *PPO 201. Two lecture.

PPO 252 (2)
Machinist IV
Training on using machinist tools and welding techniques. Prerequisite: *PPO 202. Two lecture.

PPO 253 (5)
Metal Fabricator IV
Training on interpreting and producing mechanical drawings with an emphasis on drawings of steel structures. Prerequisite: *PPO 203. Five lecture.

PPO 254 (5)
Instrument Technician IV
Training on computer and process control systems. Prerequisite: *PPO 204. Five lecture.

PPO 255 (5)
Construction & Maintenance IV
Builds upon the material presented in PPO 205 to give advanced instruction in the areas of sheet metal, insulating, painting, masonry, carpentry, and plumbing. Prerequisite: *PPO 205. Five lecture.

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**Psychology**

*Course has additional pre or co requisite(s)*

**PSY 101 (3) PSY 1101**
Introduction to Psychology
A foundation course in the science of behavior. The course will provide an overview of the factors that affect behavior and mental processes including biological, behavioral, cognitive, and socio-cultural influences. General Education: Social and Behavioral Sciences. AGEC Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

**PSY 205 (3)**
Introduction to Abnormal Psychology
This course provides an introduction to the classification, causes, and treatment of various disorders, including anxiety, mood, schizophrenic, substance abuse, personality, and developmentally-related disorders. Prerequisite: PSY 101. Three lecture.

**PSY 227 (3)**
Personality Development
Survey and comparison of different personality theories, including the dynamics that underlie personality development, assessment, and research. Prerequisite: PSY 101. General Education: Social and Behavioral Sciences. Three lecture.

**PSY 230 (3)**
Introduction to Statistics
Basic concepts in descriptive and inferential statistics, emphasizing application to the behavioral sciences. Includes methods of data collection, sampling techniques, central tendency, standard scores, correlation and regression, and hypothesis testing. Student’s t test, non-parametric analysis, and analysis of variance. Prerequisite: *MAT 142 or higher, or placement. Three lecture.

**PSY 236 (3)**
Psychology of Women
A cross-cultural study of the definition, trends, and issues of the psychological status of women, including an examination and evaluation of the psychological theories, as well as the operative forces behind women’s role in

PSY 240 (3)
Developmental Psychology
Life span development, including the scientific study of normal physiological, emotional, cognitive, and social development and the factors that influence this development, from conception until death. Prerequisite: PSY 101. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

PSY 241 (3)
Substance Abuse
Physical, social, and psychological effects of substance abuse. Three lecture.

PSY 250 (4)
Social Psychology
Introduction to the study of social psychological processes including those of persuasion and conformity, leadership and dominance, aggression and altruism, attraction and friendship formation, attitude formation and change, intercultural encounters and nonverbal behavior. General Education: Social and Behavioral Sciences. Special Requirements: Intensive Writing/Critical Thinking, Ethnic/Race/Gender Awareness; Global and International Awareness Course. Prerequisite: PSY 101. Pre- or co-requisite: *ENG 102. Four lecture.

PSY 289 (1-6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum of 45 hours on the job participation. Prior experience or course work in the field of interest is required. Credit hours: one to six. May be taken for S/U credit.

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Real Estate

RES 101 (3)
Real Estate Principles
National and Arizona real estate requirements, real estate business, real estate law, agency, contracts, ownership, legal descriptions, title, finance, listing, and leases. Three lecture.
Real Estate Practices
National and Arizona real estate requirements, property management, appraisals, land use, fair housing, real estate investment, closings, and real estate mathematics. Three lecture.

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Religious Studies

REL 200 (3)
Native American Religions
This course is designed to give a brief overview of the history, experiences, and religious traditions of the Native Americans of the Americas. The survey provides a sufficient knowledge base upon which to build further study and will familiarize students with basic patterns and issues in the study of Native religious traditions. Three lecture. May be taken for S/U credit.

REL 201 (3)
Comparative Religions
Study of the world's major religions including religious and philosophical concepts pertaining to the existence and nature of the Absolute. Indigenous religions, Native American Religions, Hinduism, Buddhism, Jainism, Sikhism, Taoism, Confucianism, Zoroastrianism, Judaism, Christianity and Islam. General Education: Arts and Humanities. Special Requirements: Contemporary Global/International Awareness OR Historical Awareness. Three lecture.

REL 206 (3)
American Religions
This course will introduce the student to religions in America through the consideration of four thematic approaches to a description of American religions as a whole. These thematic approaches cut across religious traditions and attempt to characterize some of the ways in which the extraordinary variety in the American religious imagination shares characteristics by virtue of its common environment and its common history. The four thematic descriptions of American religions that we will examine are Natural Religion, Disestablished Religion, Constitutional Religion, and Antebellum Religions. There are other themes that could be chosen and we will from time to time note those other themes as they touch on our work. Three lecture.

REL 241 (3)
Asian Religions
A cross analysis of Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, Zoroastrianism, Islam and Shintoism including religious and philosophical contents pertaining to Divinity, rituals, doctrines, beliefs and geographic Locations. General Education. Contemporary Global/International Awareness OR Historical Awareness.
Sociology

*Course has additional pre or co requisite.

SOC 101 (3)  SOC 1101
Introduction to Sociology
Fundamental concepts of social organization, culture, race, ethnicity, socialization, social institutions, and social change. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness.

SOC 125 (3)
Domestic Violence

SOC 130 (3)
Human Sexuality
Sociological, biological, psychological, and cultural factors which influence human sexuality, including ethics, gender roles, and changing values in contemporary society. Three lecture.

SOC 140 (3)
Marriage & the Family in Contemporary America
Institutions and systems of kinship, marriage, family grouping, child rearing and status placement are studied. General Education: Social and Behavioral Sciences, Special Requirements: Ethnic/Race/Gender Awareness. Three Lecture.

SOC 210 (3)
Sociology of Gender
Overview of theories of gender development; examination of social, cultural, political and economic conditions affecting the experience of gender; and exploration of issues involved in the different roles and expectations placed on women and men in various cultures at different periods in history, with particular emphasis on contemporary American culture. General Education: Social and Behavioral Sciences, Special Requirements: Ethnic/Race/Gender Awareness Prerequisite: SOC 101. Three lecture.

SOC 215 (3)  SOC 2215
Race & Ethnic Relations
Sociological perspectives and theories on race and ethnic relations including: contemporary and historical racial and ethnic intergroup relations, cultural origins, developments, and problems experienced by minority groups. General Education: Social and Behavioral Sciences. Special Requirements: Ethnic/Race/Gender Awareness. Three lecture.

**SOC 220 (3)**

*Introduction to Social Work*

An introduction to the fields within the area of social work through a study of the disciplines of social case work, social group work, and community organization and opportunities to experience the various techniques of practice within each discipline. Prerequisite: *ENG 101. Three lecture.*

**SOC 236 (3)**

*Crime & Delinquency*

Deviance in American society, emphasizing the extent of crime, crime trends, types of crime and criminals, theories and factors in crime causation, the impact of crime on society and the individual, and the relationship between social variables and crime. Three lecture.

**SOC 250 (4)**

*Contemporary Social Problems*

This capstone course will identify and critically examine contemporary social problems in the United States, using various sociological perspectives namely functionalism, conflict theory, interactionist perspective, and social constructionism. Prerequisite: SOC 101 and Pre-or co-requisite: *ENG 102, General Education: Social and Behavioral Sciences. Special Requirements: Intensive Writing/Critical Thinking, Ethnic/Race/Gender Awareness. Four lecture.*

**SOC 285 (3)**

*Health Care Systems*

Predominant health care systems in the U.S. including Medicare and Medicaid. Examines the availability and utilization of various resources, as well as ethics and quality of care. Three lecture.

**SOC 289 (3)**

*Internship*

Opportunity to gain experience in applying knowledge and skills in an appropriate setting. Three lecture; three lab.

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**Sheet Metal Technology**

*Course has additional pre or co requisite(s)*

**SMT 101 (5)**  
Sheet Metal I  
History and background of the sheet metal apprentice. Basics of drafting, layout and pattern development used in the sheet metal trade. Prerequisite: Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.

**SMT 102 (5)**  
Sheet Metal II  
The importance of time management. Layout and pattern development. Use of power equipment and common sheet metal materials, trade mathematics and orientation to air flow movement. Prerequisite: SMT 101, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.

**SMT 103 (5)**  
Sheet Metal III  
Safe use of hand tools. Also, seams and locks and types of materials common to the sheet metal industry. Basic mathematics and introduction to service work, and field installation covered. Prerequisites: *SMT 102, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.*

**SMT 104 (5)**  
Sheet Metal IV  
Field installations emphasizing hanging duct, inserts, equipment and housings. Includes roofs and roof pitch, blueprint reading and sheet metal drafting. Also, residential heating and air conditioning, blowpipe, plastics and fiberglass. Overview of food service equipment. Prerequisites: *SMT 103, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.*

**SMT 105 (5)**  
Sheet Metal V  
Intermediate drafting skills with more complicated pattern layout development. Operation and safety methods for hand operated shop machines. Use of special materials. Introduction to the use of formulas. Prerequisites: *SMT 104, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.*

**SMT 106 (5)**  
Sheet Metal VI  
Advanced layout and pattern development. Use of special sheet metal power equipment. Also, trigonometric functions as applicable to the sheet metal trade and basic principles of refrigeration and air conditioning, field
installation procedures. Prerequisites: *SMT 105, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.

**SMT 107 (5)**
*Sheet Metal VII*

Various types of formulas and functions. Moving heavy equipment and planning a duct job in the field. Requirements, types, seams, and locks for architectural sheet metal are covered. Also, blueprint reading, residential heating and air conditioning, and blowpipe systems. Prerequisites: *SMT 106, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.

**SMT 108 (5)**
*Sheet Metal VIII*

Advanced blueprint and detailing including materials estimates. Solar heating principles and installation procedures. Also, use of plastics, installation of food service equipment and sign building. Rigid fibrous duct board, sound attenuation, testing and balancing. Prerequisites: *SMT 107, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.

**SMT 109 (5)**
*Sheet Metal IX*


**SMT 110 (5)**
*Sheet Metal X*

Components of blueprint plans to coordinate sheet metal work with other trades. Reading and interpreting specifications, mechanical plans, electrical plans, industrial plans and specialty plans. Basic principles of air-conditioning. Emphasizes air distribution, outlets, applied load estimating, commercial and residential load estimating, residential and commercial controls, and the metric system. Prerequisites: *SMT 109, Indentured Apprentice with the Phoenix Sheet Metal Joint Apprenticeship and Training Committee. Five lecture.

**SMT 289 (1–6)**
*Internship I*

Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.
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**Spanish**

*Course has additional pre or co requisite(s)*

**SPA 101 (4)**  SPA 1101

**Beginning Spanish I**
Basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Spanish. General Education: Options. Four lecture. Recommended: Spanish placement exam if you have previous Spanish experience of any kind. Spring, Fall, Summer. May be taken for S/U credit with instructor approval.

**SPA 102 (4)**  SPA 1102

**Beginning Spanish II**
Further emphasis on basic grammar, vocabulary, and culture. Practice in speaking, reading, and writing Spanish. Prerequisite: SPA 101 or placement. General Education: Options. Four lecture. Spring, Fall, Summer. May be taken for S/U credit with instructor approval.

**SPA 125 (3)**

**Spanish for Health Professionals**
Develops a practical speaking knowledge of common medical terms frequently used in a variety of health care settings. Provides significant cultural information essential to field. Prior knowledge of Spanish useful but not required. Three lecture. May be taken for S/U credit.

**SPA 126 (3)**

**Spanish for Public Safety Personnel**
Develops a practical speaking, writing and cultural knowledge of common terminology frequently used in the public safety fields, including: Fire, Emergency Medical, and Criminal Justice. Prior knowledge of Spanish useful but not required. Three lecture. May be taken for S/U credit.

**SPA 127 (3)**

**Spanish in the Classroom K-12**
Develops a practical speaking and/or writing knowledge of common terminology frequently used in the K-12 classroom. Three lecture. Fall/Spring semesters. May be taken for S/U credit.

**SPA 128 (2)**

**Spanish for Travelers**
A short course for students who have little or no prior experience with Spanish and need specific vocabulary and cultural information for their anticipated adventures in traveling to countries where Spanish is used. Two lecture. May be taken for S/U credit.
SPA 131 (3)  
Conversational Spanish I  
Basic grammar, vocabulary, and culture in conversational practice. Three lecture. May be taken for S/U credit.

SPA 132 (3)  
Conversational Spanish II  
Further emphasis on basic grammar, vocabulary, and culture in conversational practice. Prerequisite: SPA 131 or consent of instructor. Three lecture. May be taken for S/U credit.

SPA 201 (4)  
Intermediate Spanish I  
Improving basic skills of speaking, comprehension, reading, and writing. Taught in Spanish. Prerequisite: *SPA 102 or placement. General Education: Options. Four lecture. Spring, Fall. May be taken for S/U credit with instructor approval.

SPA 202 (4)  
Intermediate Spanish II  
Further development of speaking and writing communication skills with emphasis on compositions and readings. Taught in Spanish. Prerequisite: *SPA 201 or placement. General Education: Options. Four lecture. Spring, Fall. May be taken for S/U credit with instructor approval.

SPA 212 (2)  
Introduction to Translation & Interpretation  
Designed specifically for native or fluent speakers of Spanish, to introduce and familiarize them with the techniques of proper written translation and oral interpretation. Serves only as an introduction to the broad field; intended to help students decide if they want to pursue it further. Two lecture.

SPA 213 (3)  
Health Care Interpreting  
Designed specifically for fluent speakers with confident speaking ability in English/Spanish, this course provides preparation for health care interpreting and includes; ethics and protocol, consecutive, simultaneous, and sight translation practice. Prerequisites: Bilingual proficiency in English/Spanish and consent of instructor. Three lecture.

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Speech

SPC 100 (3)  
Fundamentals of Speech Communication

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**Theatre**

**THR 101 (3)**
*Introduction to Theatre*
A survey of theatre, introducing basic elements and principles of production, styles and/or historical perspectives of theatre, dramatic literature and criticism. General Education: Arts and Humanities. Three lecture. May be taken for S/U credit.

**THR 110 (3)**
*Acting I*
The fundamental techniques of acting are explored through physical and vocal expression, improvisation and scene work with an emphasis on the performer’s approach to characterization. Three lecture. May be taken for S/U credit.

**THR 199 (0.5–6)**
*Theater Workshop*
Designed to provide workshop courses based on student and faculty interest in pursuing or presenting an original topic. Workshops may be developed to enhance existing curriculum or to give students experience that is not covered by existing curriculum. One-half to six variable credit hours. May be taken for S/U credit.

**THR 210 (3)**
*Acting II*
The fundamental techniques of acting are further explored through script analysis, rehearsal and in-class performance of scenes with emphasis on various styles. Prerequisite: THR 110 or consent of instructor. Three lecture. May be taken for S/U credit.

**Welding Technology**

**WLD 100 (2)**
*Basic Welding*
Shop procedures, safety and personal protection. Grinders, drill presses, and saws. Resistance and oxyacetylene welders. Arc welders; alternating current (AC) and direct current (DC) modes, electrodes, positioning and securing. Prerequisites: Registered apprentice status with Northern Arizona Carpenters Joint Apprenticeship Training Committee or permission of the apprenticeship coordinator. One lecture. Two lab. May be taken for S/U credit.
WLD 102 (3)
Basic Welding Fabrication
Fundamentals of basic arc welding procedures, equipment, and safety techniques. Various arc welding tasks in the flat, horizontal, vertical-up, and overhead positions. Two lecture; two lab.

WLD 106 (3)
Intermediate Welding
Advanced arc welding procedures, equipment, and safety techniques. Instruction in the selection of electrode, gas, cups, and filler rod for gas tungsten arc weld (GTAW) welding. Techniques and practice in welding butt-joint, t-joint, lap and corner joints in various positions and numerous cutting procedures. Prerequisite: WLD 102 or consent of instructor. Two lecture; two lab.

WLD 111 (3)
Introduction to Artistic Blacksmithing
This course provide an introduction to hand forging low carbon and tool steel, design, techniques, safe working habits, and methods used in blacksmithing. The class will include blacksmithing tools and processes, hammer control techniques, hand forging theory and metalworking practice. Student Safety Equipment: Each student will be required to have suitable clothing: leather work boots above the ankle, cotton pants and shirts and some kind of cotton (welding) cap is suggested. Prerequisites: Emancipated adult with manual dexterity, physical ability and mobility sufficient to accomplish course content. One lecture; three lab. May be taken for S/U credit with instructor approval.

WLD 289 (1–6)
Internship I
Designed for students who are looking for paid or voluntary, practical learning experiences that apply academic and occupational education to real-life, on-the-job situations. Credit hours will be negotiated based on fulfillment of a contract. Each credit hour requires the completion of a minimum 45 hours of on-the-job participation. Prior experience or course work in the field of interest is required. One to six variable credit hours. May be taken for S/U credit.

WLD 298 (1–6)
Special Topics
Designed to meet the needs of an individual(s) with interest in pursuing an original topic in an instructional area under faculty supervision. One to six variable credit hours.
Adult Education

Welcome and thank you for choosing CCC Adult Education for help in meeting your learning needs. GED prep classes (ABE) are currently offered in Flagstaff, Page and Williams. English language classes (ELAA) are offered in Flagstaff and Williams. Classes are open to all who are at least 16 years old and lawfully present in the US. We also offer a distance learning option for students in rural areas or with other barriers to attending classes.

Getting started:

Step 1 - Complete intake forms (3). Forms can be filled out at the location nearest you or by using the links below.

- [intake](#)
- [fee assessment](#)
- [documentation of eligibility for services](#)

Step 2 - Visit the location nearest you during class hours to turn in forms and show required identification document(s) (see page 2 of documentation of eligibility form above). If you plan to attend ABE classes in Flagstaff, you will be asked to sign up for an orientation session prior to starting class. Orientation Dates. English language students are not required to attend orientation.

Step 3 - Pay fees - Note that students enrolled in ESL classes are not charged a fee.

Step 4 - Begin classes - During your first week of class, an instructor will review your test results from orientation and help you set educational goals and develop a study plan. If you plan to attend class in Page or Williams, your initial tests will be given during the first week of class.

Office Phone: (928) 526-7639

[www.coconino.edu/adulted](http://www.coconino.edu/adulted)
Admissions and Registration

Admissions Information

Admissions Requirements (501-01)

1. Admission is not required for non-credit classes or Adult Education, though such students may be admitted if they intend to later enroll in credit courses.

2. Regular Admission applies to students meeting one of the following:
   a. Graduation from a regionally accredited high school as defined by the U.S. Department of Education, or approved by the Arizona Department of Education or other appropriate state-level educational agency.
   b. High school certificate of equivalency (GED).
   c. Transfer in good standing from a college or university.

3. Special Admissions - State-Mandated Underage Admissions: The College must admit students of any age if they meet one or the following:
   a. Composite score of 93 or more on Preliminary Scholastic Aptitude Test.
   b. Composite score of 930 or more on Scholastic Aptitude Test.
   c. Composite score of 22 or more on American College Test.
   d. Passing score on relevant parts of AIMS test.
   e. Completion of a College-designated placement test that indicates the student is at the appropriate preparedness level for the course.
   f. Graduate of a high school or has a high school certificate of equivalency.
   g. No student below grade 11 may be admitted except when required by State law or to a program or class designed for and limited to an underage group.
   h. Special Admits are limited to six (6) credits per term without advisor approval.
   i. Special Admits, including Concurrent and CAVIAT students (other than Dual Enrollment) and their parent must sign a waiver approved by legal counsel acknowledging they understand that:
      1. The College is an adult learning environment.
      2. Students may be exposed to graphic depiction or discussion of violence, sexuality, or other mature themes.
      3. Sex offenders may be enrolled in the class or at the College.
      4. The College cannot guarantee the safety of students.
      5. Home-schooled students are treated the same as students in high school unless State or federal law directs otherwise.
      6. Dual Enrollment: Credit classes on high school property in regular high school hours. All students in a class including those who do not elect College credit must meet course
prerequisites and be in grades 11 or 12, except that: 25% of students may be in grades 9 and 10 if the following is met:

a. The criteria examine purposes and requirements of each course and identify which 9th and 10th graders meet prerequisites and are able to benefit.
b. Dual Enrollment coordinator annually reports exceptions and justifications to the State. The Registrar keeps reports on file

7. **CAVIAT**: High school enrolled students taking credit classes on College property.

8. **Concurrent**: Credit classes on College property or via Internet. Such students also require approval of high school counselor, instructor, and parent.

**Residency Requirements (501-02)**

The Registrar/Director of Enrollment Services, or designee, determines residency.

1. The question of residency must be put to each student at the time of admission based upon information supplied on College applications, residency statements, affidavits, and additional information provided by the student. Registration and payment of fees will be in accordance with the residency assigned at the time of official admission.

2. The College notifies a student of his/her residency status upon admission.

3. The Registrar/Director of Enrollment Services or designee is responsible for making the initial residency classification.

4. An appeal of the initial classification may be made to the Registrar/Director of Enrollment Services. The appeal must be in writing, signed by the student, and accompanied by a petition to include sworn statement of all relevant facts. The appeal must be filed with Registration and Enrollment Services within ten (10) days of notification of residency classification. Failure to properly file a request for review within the time limit constitutes a waiver of review for the current enrollment period.

5. **Definition of Terms**:
   a. **Armed Forces of the United States**: The Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the commissioned corps of the United States Public Health Service and the National Oceanographic and Atmospheric Administration, the National Guard and any military reserve unit of any branch of the armed forces of the United States.
   b. **Continuous Attendance**: Enrollment at an Arizona educational institution for a normal academic year since the beginning of the period for which continuous attendance is claimed. Enrollment in summer sessions or other such inter-sessions beyond the normal academic year is not required in order to maintain continuous attendance.
   c. **Domicile**: A person’s true, fixed, and permanent home and place of habitation. It is the place where one intends to remain and to which one expects to return when one leaves without intending to establish a new domicile elsewhere.
   d. **Emancipated Person**: A person who is neither under a legal duty of service to parents, nor entitled to the support of such parents under laws of the state.
e. Parent: Father or mother, custodial parent, or legal guardian of a non-emancipated person. Circumstances must not indicate that guardianship was created primarily for the purpose of conferring the status of an in-state student on the non-emancipated person.

6. **In-State Student Status:**
   a. Except as otherwise provided in this article, no person having a domicile elsewhere than in this state is eligible for classification as an in-state student for tuition purposes.
   b. A person is not entitled to classification as an in-state student until domiciled in this state for 1 year (previous 12 months) unless he/she meets one of the following requirements:
      1. His/her parent’s domicile is in this state and that parent is entitled to claim him/her as an exemption for state and federal tax purposes.
      2. He/she is an employee or spouse of an employee transferred to this state for employment purposes.
      3. The domicile of a non-emancipated person is that of his/her parent.
      4. A non-emancipated person, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state classification if his/her parent moves from this state.
   c. A person who is a member of the armed forces of the United States stationed in the state pursuant to military orders or his/her spouse or dependent child (as defined in Section 43-1001) is entitled to classification as an in-state student. The student, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state student classification.
   d. A person who is a member of an Indian tribe recognized by the United States Department of the Interior whose reservation land lies in the state and extends into another state and who is a resident of the reservation is entitled to classification as an in-state student.

7. **Permanent Resident/Alien Status:** A permanent resident alien is entitled to classification as an in-state student if such person has been granted permanent resident status in accordance with all applicable laws of the United States and has met all other requirements for residency. Students with Refugee /Amnesty status may also be classified with in-state status.

8. No emancipated person can establish a domicile in the state while attending any educational institution in this state as a full time student.

9. A person who has been domiciled in this state immediately prior to becoming a member of the Armed Forces of the United States shall not lose in-state status by reason of his/her presence in any other state or country while a member of the Armed Forces of the United States.

10. Kane County, Utah students who are lawfully present in the U.S. pay a tuition rate equivalent to in-state tuition.

11. Dual Enrollment and CAVIAT students who are lawfully present in the U.S. have tuition accounted for equivalently to in-state tuition.
Western Undergraduate Exchange (WUE) Program

WUE is the Western Undergraduate Exchange, a program coordinated by the Western Interstate Commission for Higher Education (WICHE). Through WUE, students in western states may enroll in many two-year and four-year college programs at a reduced tuition level: 150 percent of the institution’s regular in-state resident tuition. In all cases, WUE tuition is considerably less than nonresident tuition.
If the student is a legal resident of Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, or Wyoming then they are qualified for this program. Mark the appropriate residence code on the application for admission form to be declared a WUE student.

Registration Information

Students should register for classes in accordance with calendars and procedures published in the appropriate Schedule of Classes. To participate in registration, new students must have completed an application for admission. Students in the following categories are admitted conditionally pending receipt of documents verifying or clarifying their status (see also Admission Information). Categories include: high school graduates; GED completion; transfer students; mature students (without high school diploma or GED); students on academic probation at a previous college; students on academic suspension at a previous college; and “special” students especially those taking classes while still enrolled in high school. Students in the foregoing categories who do not provide required documents may be barred from participation in future registrations.

Academic Load

Semester
The normal full-time academic load is defined as 12 credit hours per semester. A student may take no more than 18 credit hours in a single fall or spring semester without prior approval. A student with a grade point average of 3.00 or better for 12 or more credit hours during one semester or summer session is eligible to petition to the Registrar/Director for Admissions to carry in excess of the 18 hour maximum. Exceptions to this procedure may be considered on a case-by-case basis.

Summer
Summer classes are intensive; therefore, the recommended maximum academic load for the entire summer is 12-credit hours. A student with a grade point average of 3.00 or better for 12 or more credit hours during one semester or summer session is eligible to petition to the Registrar/Director for Admissions to carry credit hours in excess of the 12 credit hour maximum. Exceptions to this procedure are considered on a case-by-case basis.

Registration Add/Drop Procedures (501-03)
The Registrar oversees registration and publishes dates in the Class Schedule. This procedure refers to credit courses.

1. Students must be admitted before registering or at the time of registration.
2. Registration timelines are set in the Academic Calendar.
3. Students are solely responsible for adding and dropping classes by deadlines.

4. Add/drop deadlines:

<table>
<thead>
<tr>
<th></th>
<th>Open period to add</th>
<th>Add with instructor approval</th>
<th>Add with approved petition</th>
<th>Drop without W (no record)</th>
<th>Drop with W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall and Spring full-term</td>
<td>1st week of term</td>
<td>2nd week of term</td>
<td>3rd week to 45th calendar day of term</td>
<td>By 45th calendar day of term</td>
<td>Before last 2 weeks of instruction for term</td>
</tr>
<tr>
<td>Short-term</td>
<td>1st day of class</td>
<td>2nd day of class</td>
<td>3rd day of class</td>
<td>By 3rd day of class</td>
<td>Before last third of classes</td>
</tr>
</tbody>
</table>

a. State law defines short-term classes.
b. Late add petitions require approval of instructor, department, and Registrar.

**Non Credit Courses Procedure (303-08)**

A non-credit course or workshop carries its own fee, and the class time invested cannot, under any circumstances, be converted to credit. Information on noncredit courses is published in the Class Schedule and on the College website.

**Catalog Choice (501-05)**

1. Catalog choice determines the requirements a student must meet to graduate.
2. Waivers and exceptions to graduation requirements must be approved by the appropriate Department Chair and documented by the Registrar.
3. A student may choose degree or certificate requirements from the Catalog in effect the initial term of enrollment or a later term in which credits are earned.
4. If a student earns no credits in two (2) consecutive fall or spring terms the student must use the Catalog in effect at re-entry to the College or a later term in which credits are earned.
5. The Catalog cannot be more than five (5) years old at the time of selection.
6. A student’s Catalog choice is documented in Student Support Services and made available to staff and faculty advisors and graduation evaluators.
7. Students may select any Catalog permissible, and may change their choice where allowed, but may not mix requirements from different Catalogs.
1. Class level defined in semester credits:
   a. First year - under 30 credits in current program
   b. Second year - 30 to 59.9 credits in current program
   c. Third year - 60 or more credits in an approved 90-30 program

2. Enrollment status:
   a. Credits needed for fall, spring, or summer.

<table>
<thead>
<tr>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Three-quarter time</td>
</tr>
<tr>
<td>12</td>
<td>9</td>
</tr>
</tbody>
</table>

   b. Summer status may be met in any combination of summer terms

3. Disability Resources may confirm an enrollment status exception to the Registrar to consider a part-time student to be full-time if the student:
   a. Must take reduced credits due to documented disability and would otherwise be denied access to a College program, benefit, or service.
   b. This exception does not and may not apply to any non-College matters or to financial aid awards.

4. Only the Registrar or designee may verify class level and enrollment status.

5. National Student Clearinghouse is an authorizing agent to provide enrollment certificates on behalf of the College.
Transferring Credit

Transcripts Procedure (501-07)

1. **Definitions**
   
a. **Residency:** Minimum required credit hours taken at the Coconino Community College prior to award of degree or certificate.

b. **Official Transcript:** One that has been mailed from the granting institution to the College.

c. **Regionally accredited higher education institutions,** those that are accredited by:
   1. Middle States Association of Colleges and Secondary Schools
   2. New England Association of Colleges and Schools, Inc.
   3. North Central Association of Colleges and Schools
   4. Southern Association of Colleges and Schools
   5. Western Association of Schools and Colleges
   6. Northwest Committee on colleges and Universities

2. **Residency**

   The College has established residency requirements for degree and certificate seeking students. Transfer credits are accepted up to the total credits required for each program minus the residency requirement.

   a. **Degree programs:** minimum of fifteen (15) credit hours

   b. **Certificate programs:** minimum of 30% of total certificate credit hours

3. **Transcripts**

   a. Students who desire to transfer previous college or university credits to Coconino Community College must submit official transcripts to the College from all institutions regardless of when credit was earned or level of grade received.

   b. Only credit from regionally accredited institutions will be accepted as transfer credit.

4. **Transcript Evaluation**

   a. The transcript evaluation procedure includes a review process.

   b. Credits earned more than five (5) years ago may be subject to special evaluation. Courses satisfying general education requirements have no time limit.

   c. The official transcript evaluation requires that students certify they are declaring all previous credit.

Transfer Credit to the College (501-08)

1. **Definitions**

   a. AGEC: Arizona General Education Curriculum

   b. CEG: Course Equivalency Guide
2. Transfer of AGEC courses from other Arizona community colleges, Arizona tribal colleges, Arizona public universities, non-Arizona colleges or universities, or non-public Arizona universities.
   a. If a course is in the GECC of the transferring Arizona Community College or Tribal College, the College will accept the credits as defined by the source institution. If the course fulfills one (1) or more of the AGEC Special Requirements at the transferring institution, the College will transfer it to fulfill those requirements.
   b. Coursework transferred from regionally accredited non-AGEC granting institutions (i.e., Arizona public universities, out of state institutions) may be applied to AGEC as follows:
      1. Transfer coursework deemed by the AGEC granting institution to be equivalent to a course on that institution’s formal AGEC list may be used to satisfy AGEC in the same manner as the institution’s own course.
      2. Transfer coursework that is equivalent to a non-AGEC course may not be used to satisfy AGEC.
      3. Transfer coursework not having a direct equivalency shall be evaluated by the AGEC granting institution using the AGEC granting institution’s own institutional curricular standards for identifying AGEC courses.
   3. Transfer of non-AGEC courses will be accepted on a course-by-course basis by reviewing and comparing course descriptions or additional course materials.

4. Credit for Prior Learning Experience
   Students enrolled at the College may be awarded up to thirty (30) credit hours for Prior Learning completed through:
   a. College Level Examination Program (CLEP)
   b. Defense Activity for Non-Traditional Support Examination program (DANTES)
   c. Advanced Placement Examination (AP)
   d. International Baccalaureate (IB)
   e. Military Training
   f. Previously acquired knowledge and/or competencies required to complete a particular class and that instruction in this area would be repetitive.

Transfer Credit to Other Institutions (501-09)

1. Transferring Credit from Coconino Community College
   The academic policies and operation of the College are governed by the CCC District Governing Board:
   a. The College adheres to the Arizona General Education Curriculum (AGEC) approved by Academic Program Articulation Steering Committee (APASC).
   b. The College is accredited by the North Central Association of Colleges and Schools, the regional accrediting body.
   c. Courses numbered 100-299 may be eligible for transfer to other colleges and universities.
   d. To determine the transferability of particular CCC courses taught:
1. Fall semester 1991 or Spring semester 1992: Refer to Arizona’s regionally accredited Yavapai College course prefix and number system and its course outlines.

2. Summer semester 1992 forward: Consult the CCC section of the appropriate Course Equivalency Guide published by the Arizona Commission for Postsecondary Education.

2. Transferring to Arizona Public Universities
   a. Arizona public community colleges and universities have agreed upon a common structure for a transfer general education curriculum. This provides students the opportunity to build a general education curriculum that is transferable upon completion without loss of credit to another Arizona state community college, Arizona tribal colleges, or university.
   b. Completion of the AGEC will fulfill lower division general education requirements for all Arizona community colleges, Arizona tribal colleges, and Arizona public universities.
   c. Students are required to fulfill lower division major requirements and prerequisites within their college and major/minor area of study.

3. Arizona Transfer Liaison (ATL)
   a. The College has appointed an ATL to resolve problems by transfer students as reported by students, advisors, faculty members, and college officials.
   b. The ATL ensures compliance with the transfer and articulation agreements and resolves problems concerning the transfer and applicability of community college credit to university programs.

Reverse Transfer of Credit (501-10)

Students leaving Coconino Community College prior to earning an associate degree or certificate may transfer credit back to the College from another post-secondary institution in order to fulfill the CCC program requirements.

1. Reverse transfer procedures may be governed by individual IGAs or agreements with specific universities for the benefit of the student. The Registrar will maintain copies of any and all agreements related to reverse transfer.

2. For institutions/universities that do not have agreements on file, the following is the responsibility of the student:
   a. Courses/credits that may be applicable for reverse transfer credit must be determined by the Registrar or designee.
   b. Students should contact their advisor for an appointment to determine what courses fulfill remaining degree or certificate requirements.
   c. Students must complete all program requirements including the number of credits necessary for the degree.
   d. From the Transfer Institution: After successfully completing the determined course(s) with a C or higher, the student must request an official transcript be sent to Coconino Community College to be evaluated by the Registrar or designee unless an IGA allows official transcripts to be shared without a student request.
3. Upon completion and approval of graduation application paperwork, the College will notify the student that he/she has completed the degree or certificate.

4. To receive an AGEC stamp on the CCC transcript using transferred credits from another post-secondary institution, students must attend at least fifteen (15) credit hours at CCC.

5. Courses numbered 300 and above may transfer as elective credit with a designation of 3XX or 4XX.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.
Financial Information

Class Fees
Certain classes charge fees in addition to tuition. Refer to the Schedule of Classes published each semester and summer session for class fee information. The Schedule of Classes is subject to change without notice.

Cost of Attendance
Coconino Community College’s charges for educational fees are approved annually by the CCC District Governing Board are subject to modification by this Board. The following is intended to provide prospective students with information regarding approximate expenses. It is not to be interpreted as limiting the College’s need to adjust charges in response to rising costs.
- An Arizona resident who registers as a full-time student should expect to pay approximately $900 per semester for tuition and about $500 per semester on books and supplies.
- A part-time student who registers for 6 credit hours should expect to pay approximately $450 per semester for tuition and about $375 on books and supplies.
- The student should consult the most recent Schedule of Classes for current and complete information concerning expenses.
For more information on direct and indirect costs associated with attending CCC, please visit http://www.coconino.edu/sa/finaid/Pages/CostofAttendance.aspx.

Tax Credit for Tuition and Fees
There are two tax credits available to help offset the costs of higher education by reducing the amount of your income tax. They are the Hope credit and the lifetime learning credit. Refer to IRS Publication 970, Tax Benefits for Education for more information.

Non-Payment of Tuition and Fees
A student who fails to meet financial obligations to CCC may be dropped from classes and will be barred from future enrollment until debts are settled.

Returned Checks
Any check returned by the bank will result in the assessment of a $25 processing fee to the student’s account. A student who pays for registration or any other college obligation with a returned check may be subject to legal action and/or the cancellation of registration. The College reserves the right to refuse credit cards or checks for any transaction. Paying for the use of other college services by personal checks may be disallowed for any individual who has a check returned by the bank. If any payment tendered is unauthorized, incomplete, or received after the due date, registration fees will be considered as unpaid and the student will be dropped from all classes.
Tuition and Payment
Tuition costs are summarized in the appropriate Schedule of Classes. Tuition does not include additional charges for class fees, books or supplies. To complete advance registration, tuition and fees must be paid (or financial aid arrangements completed, including the FACTS payment plan) by the payment deadline for advance registrants. To register for classes at any other registration period, payment is due at the time of registration unless financial aid arrangements have been made.

Withholding Student Records
Coconino Community College may deny enrollment, official transcripts, degrees, and/or certificates to students with outstanding obligations to the College relating to fees, college equipment or materials, or any other obligation. Failure to respond to notifications regarding outstanding obligations may result in the withholding of student records and involuntary withdrawal from the College.

Canceled Classes
In the event a class is canceled by the College, a 100% refund of tuition and fees will be issued. The refund due the student will be processed after the add/drop period and will be mailed to the student’s last known address unless prior arrangements have been made with the Business Office.

Refund Policies (208.01)
1. A refund of tuition and fees is made only to students who follow official withdrawal procedures. A withdrawal is not official until cleared through the Office of Student Financial Aid and processed by Admission and Records.
2. 100% of tuition and fees paid for regular semester and summer session courses will be refunded to students officially withdrawn through the 5th business day of the semester/summer session. There will be no refund after the 5th business day.
3. 100% of tuition and fees paid for short courses will be refunded to students officially withdrawn up to and including the first class session. The withdrawal must be initiated no later than the 1st business day following the first class session. There will be no refund after the 1st business day following the first class session.
4. A student may request a refund outside of the refund deadlines under the following circumstances:
   a. Refund for serious illness - prorated from the date of withdrawal.
   b. Refund for death of student or student’s spouse, parent, or child - prorated from the date of withdrawal.
   c. Refund for military service - 100% refund.
5. A student may petition for an exception to the refund procedure for circumstances not included in the Refund Procedure. The Refund Review Committee will determine refunds requested through the petition process.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.
Financial Aid (520)

The Director of Student Financial Aid determines eligibility according to federal and state regulations and College policy, and awards financial aid to eligible students. The College maximizes educational access by awarding grants, scholarships, work-study and supplements with student loans while helping students identify other resources and payment options.

Overview (520.10)

The Director of the Office of Student Financial Aid oversees determination of eligibility, awards aid to eligible students, and coordinates financial aid programs at the College as required by the Program Participation Agreement with the Department of Education.

1. The Office of Student Financial Aid publishes information for students, the public, and employees including:
   a. Application process with types of aid and award criteria.
   b. Attendance requirements.
   c. Awarding and disbursement of aid.
   d. Consortium and inter-institutional agreements.
   e. How to find and apply for outside aid.
   f. Lawful presence requirement for state and federal monies.
   g. Effect of withdrawing on Financial Aid.
   h. Refund and repayment.
   i. Satisfactory Academic Progress and right to appeal.
   j. Student rights, responsibilities, loan information, and budgeting tips.

2. Student Financial Aid assists in college financial planning for future students.

3. Grants, scholarships, and work-study are awarded prior to loans when possible.

4. The Director of the Office of Student Financial Aid is responsible for assisting in keeping the College compliances and disclosures website information updated with regulations changes.

5. The Office of Student Financial Aid is required to verify all files selected by the Department of Education, at least 30% of all financial aid applicants. All documentation must be evaluated and verified and conflicting information must be resolved prior to awarding of Title IV Financial Aid.

6. The Director of the Office of Student Financial Aid informs senior management and College Council of significant student aid issues and opportunities and makes recommendations.

7. Satisfactory Academic Progress standards criteria changes shall be set in consultation with the Academic Standards Committee.

8. The Office of Student Financial Aid reports the number of students denied aid due to unlawful presence in the U.S. as stipulated in State law.

Financial Aid Institutional Awards (520.20)

The Director of the Office of Student Financial Aid oversees determination of eligibility and awards institutional
funds to students. As appropriate, College Council, Foundation and the District Governing Board approve significant changes to Institutional Aid awarding philosophy.

1. **CCC Grant**: Approximately 50% of tuition, prorated for part-time status, for students with reduced or no Pell. Priority to Arizona residents in degree and certificate programs.

2. **CCC Scholarship**: Approximately 50% of tuition, prorated for part-time status. Priority to Arizona residents in degree and certificate programs with highest need and completed CCC scholarship application.

3. **High School Scholarship**: Up to 100% of tuition, prorated for part-time status. Priority to Coconino County high school graduates in degree and certificate programs with a high school GPA of at least 3.0.

4. **All Arizona Academic Team**: Merit-based scholarship for current CCC students transferring to a four-year institution. Selection is performed by the Student Support Services Office.

5. **Emergency Loan**: Up to $500 per term, unless approval is given by the Director of the Office of Student Financial Aid. Limited to those eligible for Title IV aid. A processing fee shall be applied but may be waived on exception.

6. **Employee Waivers**: Are awarded via Human Resources procedures by the Human Resources Office.

7. **Purple Heart**: A member of the Arizona National Guard who received a purple heart citation on or after September 11, 2001 or a former member of the Arizona National Guard who was medically discharged from the Arizona National Guard due to an injury or disability suffered during status under Title 10, United States Code, in weekend training status, in annual training status or in response to a state of emergency declared by the governor is eligible for a full tuition waiver scholarship provided for in this section. Per ASRS 15-1808.

8. **Peace Officers Memorial**: Full tuition waiver of child or spouse of peace officer, correctional officer, fire fighter, emergency paramedic or National Guard member killed in the line of duty or a disabled National Guard member. Per ASRS 15-1808.

9. **GED Scholarship**: One-time full tuition up to 3 credits for Arizona residents who graduated from the College’s GED program within one year before start of term.

10. The Director of Financial Aid may apply professional judgment consistent with federal regulations, state regulations, College policy and College mission to adjust institutional aid awards and criteria.

**Financial Aid and Tuition Deferment (520.30)**

Provides guidance for students who have financial aid pending, but not ready for disbursement when classes are about to begin.

1. Students will be provided payment options for tuition and fees for credit classes.

2. Payment options will include but are not be limited to:
   a. Installment payment plans.
   b. Being held in classes by the Office of Student Financial Aid pending financial aid through the College.
   c. Being held in classes by the Office of Student Financial Aid pending receipt of confirmed outside agency awards.

3. Installment payment plans are the responsibility of the Cashier.

4. Deferment plans are the responsibility of the Director of Student Financial Aid.

5. Payment plans and deferment options are published and explained on the CCC website.
Financial Aid Program Fundability (520.40)
Defines eligibility for funding of classes, degrees and certificates using Financial Aid.
1. Class and program fundability is defined in Title IV regulations.
2. New certificate programs developed by the College must be approved by the Department of Education before financial aid funding can begin.
3. The College’s course numbering definitions establish which courses are fundable with Title IV aid.
4. In cases where a course’s level, content, or number are unclear, the Director of Financial Aid will alert appropriate personnel and resolve questions to determine fundability.
5. Courses whose numbering, content, or level cannot be determined, or that conflict with federal regulations, cannot be funded with Title IV aid.
6. Courses that are at a level below the high school level cannot be funded with Title IV aid.

Financial Aid Outside Resources (520.50)
Provide coordination of special financial assistance programs outside the Office of Student Financial Aid, but within the College.
1. Staff outside the Office of Student Financial Aid who provide financial assistance to students shall coordinate their programs with the Office of Student Financial Aid.
2. Such coordination is required from all CCC departments and programs and campuses. This includes but is not limited to: Foundation scholarships, Passages program, staff waivers, outside tuition reimbursement and third party billing.
3. The Office of Student Financial Aid assures that outside resources and Financial Aid packages do not conflict and that over-awarding of aid does not occur.

Title IV and Higher Education Act Compliance (520.60)
Ensures Title IV and Higher Education Act (HEA) compliance throughout the College.
1. Compliance with Title IV and HEA regulations is a shared responsibility of all employees and departments of the College.
2. The Director of Financial Aid maintains the compliance webpage and assists in creating disclosures to faculty, staff and students through the Class Schedule.
3. The Director of Financial Aid works with affected departments to achieve compliance.
4. The summary of requirements is provided to the College, faculty, staff and students at least annually. Significant changes are provided to the College when they arise.

Financial Aid for Veterans (520.70)
Veterans Services assists veterans and eligible dependents of deceased or disabled veterans in seeking benefits and support to enhance student success.
1. The Veterans Coordinator works comprehensively with College departments and divisions to increase College understanding of Veteran’s issues and needs.
2. Veterans or dependents cannot enroll in repeat courses, audits or independent studies courses without prior approval of the Veterans Coordinator.

3. Veterans or dependents must complete the courses that they are funded for and meet the College's standards for academic good standing. The VA may require repayment for withdrawing from a class for which benefits have been paid.

4. The Veterans Coordinator publishes information for Veteran Students covering:
   a. Application process.
   b. Community and College support resources.
   c. Disbursement or receipt of financial aid.
   d. Documentation students need to provide and when it is due.
   e. Enrollment, attendance, and progress requirements.
   f. Student rights and responsibilities.
   g. Veterans Administration role in determining which Chapter to apply under.

Financial Aid Web Links

The following links may be helpful:
College Compliances and Student Right to Know
http://www.coconino.edu/academics/curriculum/collegecatalog/Pages/CollegeCompliances.aspx

Cost of Attendance http://www.coconino.edu/sa/finaid/Pages/CostofAttendance.aspx

Disbursement of Financial Aid http://www.coconino.edu/sa/finaid/Pages/Disbursement.aspx

Disclosure of Financial Aid Office involvement with other entities
http://www.coconino.edu/sa/finaid/Pages/DisclosureofCCCInvolvementwith.aspx

FAFSA (Free Application for Federal Student Aid) http://www.fafsa.ed.gov/

Federal Work Study http://www.coconino.edu/sa/finaid/Pages/FederalWorkStudy.aspx

Financial Aid Office Code of Conduct
http://www.coconino.edu/sa/finaid/Pages/CodeofConductfortheFinancialAidOffice.aspx

Frequently asked questions http://www.coconino.edu/sa/finaid/Pages/FrequentlyAskedQuestions.aspx

How to apply for Financial Aid
http://www.coconino.edu/sa/finaid/Pages/TypesofFinancialAidAvailable.aspx

Satisfactory Academic Progress http://www.coconino.edu/sa/finaid/Pages/SAP.aspx

Scholarships http://www.coconino.edu/sa/finaid/Pages/Scholarships.aspx

Student Loan Information http://www.coconino.edu/sa/finaid/Pages/LoanInformation.aspx

Types of Financial Aid Available
http://www.coconino.edu/sa/finaid/Pages/TypesofFinancialAidAvailable.aspx

Veterans Educational Benefits http://www.coconino.edu/sa/finaid/Pages/VeteransInformation.aspx
Academic Standards & Procedures

Academic Integrity (303.11)

1. Honesty

Honesty in academic work is a central element of the learning environment. The presentation of another individual’s work as one’s own or the act of seeking unfair academic advantage through cheating is a violation of the College’s Student Code of Conduct. The general descriptions below emphasize those boundaries of academic conduct that are essential to the learning environment. The following acts of academic dishonesty are among those, which may lead to College disciplinary action or possible dismissal.

2. Plagiarism

Plagiarism is defined as submitting assignments, examinations, or other academic work, which is not entirely the work of the student. This can include, but is not limited to such practices as: quoting without giving proper credit to a source, expanding someone else’s work without giving proper credit, adopting as one’s own an actual document (including the copying of computer or other electronic media), directly using someone else’s ideas rather than words without giving proper credit.

3. Cheating

Cheating is defined as submitting assignments, examinations, or other work, which is based upon sources or activities forbidden by the instructor. Cheating includes the furnishing of materials to another person for purposes of aiding that person to cheat. When an unfair academic advantage is gained by a person, through deception or other means, it is defined as cheating.

4. Violation of Copyright

The unauthorized copying of copyrighted material, whether print or computer media, is unacceptable and is considered an act of academic dishonesty. Moreover, such practice is illegal and makes the violator subject to legal penalty.

5. Penalties

The following penalties may be applied in instances of academic dishonesty:

A. A student caught in an act of academic dishonesty on an assignment may or will, at the discretion of the instructor, be assigned a grade of “F” for that assignment or for the entire course, regardless of the length of time the student has been in attendance.

B. A student found to have committed an act of academic dishonesty may be dismissed from CCC. The length or time period of the dismissal will depend upon the nature of the offense and may be permanent.
Academic Progress (303.12)

1. Grades are published at the end of each semester.
2. Students are placed on academic probation when their cumulative grade point average drops below 2.00.
3. Students on probation have two regular (fall and spring) semesters to raise the cumulative grade point average to 2.00 or they will be placed on academic suspension.
4. Suspended students may apply for re-admission by submitting a petition for re-admission to the Office of Admissions, Records and Registration.
5. Students may appeal academic probation, suspension, or denial of re-admission by submitting a letter to the Office of Admissions, Records and Registration.
6. Students receiving financial aid are subject to Financial Aid Satisfactory Academic Progress (SAP) rules.

Attendance (303.2)

1. Students are expected to regularly and punctually attend all in-person classes and participate in all online courses in which they are enrolled. Requirements about attendance in traditional classes and participation in online courses must be published in the class syllabus. Participation in online courses is defined as taking an assessment, submitting an assignment, contributing in a chat or discussion, or emailing the instructor. Logging into an online course and then immediately logging out is not considered participation.
2. Students are responsible for notifying their instructors in advance of a planned absence and must complete all class assignments as required. Students are responsible for following registration deadlines and understanding the ramifications of dropping or withdrawing from a class.
3. Students must not be penalized for missing class for a religious observance, jury duty, military duty or other mandatory civic duty, representing the College in an official capacity, or participating on field trips for another class, if they have given the instructor reasonable notice.
4. Students who do not attend the first week of an in-person class will be dropped. Some classes may have stricter standards that require students to be present the first day of class or be dropped.
5. Students in online courses must log in and participate in their course by 11:59 p.m. Saturday of the first week of class or they will be dropped.
6. Participants in the CAVIAT program must adhere to the attendance policy. However, the instructor must inform the High School Transitions office after two, consecutively missed in-person class meetings or one week of failed participation in an online course and prior to removal from the class for any reason. The High School Transitions office will investigate the absences and facilitate all necessary drops between the CAVIAT Coordinator and the instructor.
7. Prior to FTSE, instructors must drop students who are not attending in-person classes or are not participating in online courses. After FTSE and prior to the last date for student-initiated withdrawal, instructors must withdraw students who are not attending in-person classes or are not participating in online courses.
8. Instructors are responsible for keeping accurate attendance records, reporting last dates of attendance, submitting the FTSE roster and final grades to the Registrar.

9. Short courses and non-traditionally-scheduled courses follow a timeline proportionate to the regular semester.

10. It is the students’ responsibility to drop or withdraw from any class that they do not want to be registered in. Students are encouraged to discuss drop and withdrawal options with their instructors and with the Office of Student Financial Aid (if a financial aid recipient). Students may drop a course up to the FTSE date and no grade will be recorded on the transcript. Students may withdraw from a course after the FTSE date and up until the student-initiated withdrawal date; a “W” grade will be posted on the transcript.

Class Orientation (303.3)

Defines the syllabus content so that faculty and students are clear on all expectations of the course.

1. Instructors will provide each student a written course syllabus at the beginning of each credit course.

2. The syllabus must include key components including but not limited to the following:
   a. Attendance requirements
   b. Assignment schedule
   c. Formal evaluation plan
   d. Semester calendar
   e. Grading criteria
   f. Emergency closure information
   g. Course outcomes, goals and content (from the course outline)

Final Examinations (303.4)

Outlines the procedure for final examinations and exceptions.

1. Final examinations or projects are scheduled for most courses.

2. Final examinations or projects may not be taken early except under exceptional circumstances and with the instructors consent.

3. In cases of college closure, see the college closure procedure.
Grades and Grade Appeals

Grading (303.5)

1. The Coconino Community College grading system is as follows:

<table>
<thead>
<tr>
<th>Letters</th>
<th>Grades</th>
<th>Grade Points/Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Unsatisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>Au</td>
<td>Audit (no credit)</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NC</td>
<td>Non-credit (no credit)</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>S*</td>
<td>Satisfactory</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>U*</td>
<td>Unsatisfactory</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>IP*</td>
<td>In Progress</td>
<td>Not computed in GPA</td>
</tr>
</tbody>
</table>

*These grades are used for approved courses only.

2. To Calculate GPA:
   a. Multiply the number of credit hours earned in each class by the points assigned to the letter grade.
   b. Add the points of all classes.
   c. Divide by the total number of credits.

3. A grade of "I" may be requested by a student at the end of a semester in which the student meets the criteria for an incomplete.

4. A grade of “W” indicates that the student withdrew from the class after the end of the drop period but on or before the withdrawal deadline.

5. A grade of S/U is available for some courses as stated in the College Catalog. A grade of S is the equivalent to a grade of C or better. A grade of U shows on the transcript but not as credit earned for the semester.

6. A grade of “IP” is used when it is known at the time of registration that class completion will require work in excess of a single semester or session.

Grade Appeals (303.6)

Students may appeal a grade or other decision affecting completion of course requirements.

1. Students represent themselves in the appeal process.
2. Students have until the end of the following semester to appeal final course grades.
3. Students first appeal through informal procedures by talking with the instructor.
4. If a mutually satisfactory understanding is not reached, students may then appeal to the appropriate Department Chair or Division Dean, who will make every reasonable attempt to mediate a mutually satisfactory resolution.
5. If such an understanding is not reached, students may write an appeal to the Registrar’s office to begin the formal process for appeal to the Student Academic Appeals Committee.
6. The Student Academic Appeals Committee hears cases brought by students and renders recommendations to the Vice President of Academic Affairs.
7. The Vice President of Academic Affairs renders final decisions, and decisions are communicated to students.
8. All pertinent documentation shall become a part of students’ permanent file.
Graduation Procedures (303.13)

1. Definitions

Graduation: Awarding of a degree or certificate by Registrar or authorized designee.

Commencement: A ceremony to honor graduates and applicants for graduation.

Credentials: Degrees or certificates.

What this procedure does not cover: GED and Adult Education completions.

2. Methods of Graduation

There are three ways a student may achieve graduation from CCC.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student-initiated*</td>
<td>All students should use this method to ask the College to evaluate satisfaction of degree or certificate requirements.</td>
</tr>
<tr>
<td>College-initiated</td>
<td>The College may determine that a student has met graduation requirements after the student has left the College, award the credential, and notify the student.</td>
</tr>
<tr>
<td>Partnership-initiated</td>
<td>The College may accept transfer credits from a partner institution, such as NAU and use those credits to award a credential and notify the student.</td>
</tr>
</tbody>
</table>

*Student-initiated graduation applications are available at each registration area in the district as well as online.

3. Application for Graduation

Students who believe they will be eligible to graduate with a CCC degree or certificate must consult with their academic advisor and submit an application for graduation based on the following chart of deadlines. See the Academic Calendar for dates.

<table>
<thead>
<tr>
<th>Term of graduation</th>
<th>Early application</th>
<th>Final deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>July</td>
<td>October</td>
</tr>
<tr>
<td>Spring</td>
<td>October</td>
<td>March</td>
</tr>
<tr>
<td>Summer</td>
<td>March</td>
<td>July</td>
</tr>
</tbody>
</table>

4. A choice of catalog must be declared at the time of application. See Catalog Choice Procedure (501.5).

All required documents, including official transcripts, must be submitted to the Office of Admissions, Records and Registration by the stated deadline for each session. The graduation application initiates the graduation check procedure, completed by the Office of Admissions, Registration and Records to ensure that all requirements are met by the graduation semester.

5. Minimum Requirements:

a. Minimum CCC Hours:

1. To earn an Associate Degree, a student must successfully complete at least fifteen (15) credit hours of CCC coursework applicable to the degree. No more than twelve (12) credits may be completed with a grade "S". A grade of “S” is not applicable to the Arizona General Education Curriculum (AGEC) except when awarded for Advanced Placement (AP), College-Level Proficiency Examination (CLEP), and International Baccalaureate (IB) credit.
2. To earn a certificate a student must complete at least one-third of the required credit hours in CCC coursework applicable to the certificate. No more than three (3) credits may be completed with a grade of “S.”

b. Minimum Grade Point Average:
   A student must complete all degree or certificate coursework with a “C” or better and a cumulative grade point average of 2.00, unless a specific program requires a higher standard.

6. Waiver or Substitution of Program Requirements:
   Students may request a substitution of graduation course requirements. Program substitution requests will be evaluated on a case-by-case basis as recommended by the academic advisor or other College officials, and approved by the Department Chair.

7. Graduation with Honors:
   a. Students graduating with a degree who complete at least thirty (30) credits at CCC, and whose grades qualify will be granted the following designations:
      1. Cum Laude - 3.40 to 3.69 Cumulative CCC GPA
      2. Magna Cum Laude - 3.70 to 3.89 Cumulative CCC GPA
      3. Summa Cum Laude - 3.90 to 4.00 Cumulative CCC GPA
   b. Students graduating with a certificate who complete at least fifteen (15) credits at CCC, and whose grades qualify will be granted the following designations:
      1. Honors - 3.50 to 3.89 Cumulative GPA
      2. High Honors - 3.90 to 4.00 Cumulative GPA

8. Second Degree:
   a. Upon completion of an Associate of Arts, Associate of Science, Associate of Applied Science, or Associate of General Studies degree from CCC, a student who wishes to pursue an additional degree must meet the following criteria:
      1. The student must meet the requirements of that degree as outlined in the current College Catalog at the time the second degree is declared.
      2. The student must establish residency by completing a minimum of fifteen (15) credit hours beyond those earned in the previously awarded degree.
      3. All other graduation requirements must be met as outlined in this procedure.
   b. Students cannot pursue additional credit hours towards earning an Associate of General Studies degree as a second degree.
   c. Students who have completed an AGEC may request one of the following:
      1. AGEC Certificate
      2. AGEC stamp on their transcript
9. Evaluation, Verification and Posting of Degree:
   The College Registrar or designee has sole authority to approve or deny graduation or verify graduation. Upon final approval, a diploma or certificate will be issued and the credential posted to the transcript.

10. Commencement Ceremony:
   Attendance at Commencement does not confirm or bestow graduation (i.e., attendance is not in and of itself confirmation of receiving a degree or certificate).

Placement Proficiency and Prerequisites (501.4)

1. Placement Assessment
   Students are required to complete placement assessments under the following conditions:
   a. The student is taking his/her first college credit in English or Mathematics.
   b. The student should complete English and Mathematics placement testing prior to the first semester of enrollment in courses requiring placement. These requirements should be pursued in each subsequent semester until requirements are fulfilled.
   c. The student is degree seeking and does not have previous college credit in English or Mathematics. Degree-seeking students will not be allowed to enroll in classes after completion of eighteen (18) hours if they have not taken appropriate placement tests.
   d. The student is a transfer student who completes prerequisite courses more than five (5) years prior to the semester in which prerequisite proof is required.

2. Exemptions
   Students may be exempt from the placement tests if at least one of the following conditions applies:
   a. The student has an Associate’s degree, or higher. This exception does not apply to Spanish placement testing.
   b. The student has earned transferable college credits in Spanish with a grade of “C” or better within two (2) previous years to date of enrollment.
   c. The student has a record of placement assessment at CCC within the past two years.
   d. The student has SAT or ACT scores.

3. Course Placement
   a. A student’s score on a CCC placement test, the SAT, or ACT, determines his/her placement in a specific course.
   b. CCC course placement in Mathematics and English based on ACT or SAT scores.

4. Appeal
   Students who wish to appeal class placement must follow the procedures established by the academic department.

5. Implementation
   To ensure consistency of student placement within the CCC District, the following will apply:
   a. All sites shall use the same assessment instruments or their equivalents.
   b. All sites shall adhere to the same cut-off scores.
c. Placement scores will be valid for two (2) years from the date of original assessment.
d. The student will be permitted no more than one (1) re-test per discipline each semester.
e. Copies or placement test results will be kept on file in the Registrar’s Office.

6. Proficiency Test
   a. Requirements: The proficiency tests are designed to help students determine their preparedness for taking specific courses. Required tests are established by the academic department.
   b. Exemptions: Students may be exempt from the proficiency test(s) if the student has satisfied the appropriate course prerequisites.

Repeating Courses (303.9)
Defines limitations for repeating courses.

1. Students may repeat a course as necessary to:
   a. acquire certification
   b. update knowledge and/or skills due to periodic content changes (e.g. Software)
   c. Retrain or upgrade job-related skills
   d. with the exception of below

2. Students may repeat up to three (3) times after the initial attempt or as required by program: courses for credit in the case of music and dance performance, art studio, physical health and wellness, creative writing, and developmental courses necessary to raise skills to the college level.

3. Limitations to Exceptions:
   a. Specific CCC programs, including Financial Aid, limit the number of times a course may be repeated. Where those requirements are more stringent, they supersede this procedure. Students should refer to program requirements and contact Financial Aid for guidance surrounding the financial implications of repeating courses.

   a. Students may repeat, but not receive duplicate credit for a course:
      i. One (1) time in order to improve a grade of C or better.
      ii. Two (2) times for which the previous grade(s) received was “D,” “F” or “U”.

         Note: “W” will not count towards repeat

4. Credit courses at CCC will only be counted once towards fulfilling the credit requirements for any degree or certificate unless allowed in the degree or certificate requirements.

5. Only the higher grade(s) will be used in computing the grade point average. All grades will be posted on the permanent record and transcript. A student may be allowed to repeat a course beyond the limit with recommendation from appropriate: Instructor, Department Chair, Dean or Registrar.
6. Repeating in Violation of Procedure
   A student found to be repeating a course in violation of this procedure will have registration for the course canceled. Such cancellation may occur at the time of registration or whenever a College official becomes aware of the violation.

Special Courses (303.10)

1. Special courses:
   A. Are intended to allow students opportunities for academic learning beyond what the College provides in its regular curriculum. Are intended to allow students or faculty to design a special academic course or workshop to meet a special curricula that the College does not otherwise provide. Usually this study will be more advanced or specialized than the regular two-year college curriculum, and can be taken only after a student has completed the introductory courses in the discipline of interest.
   B. May be utilized for a limited number of credits towards graduation or substitution for other program requirements, depending on the specific degree and other college requirements, pending department chair approval prior to the student enrolling in the course.
   C. Are not created with transfer in mind and therefore may not be transferable to other institutions. It is the student’s responsibility to undertake any transfer attempts.
   D. Are not to be included in the Coconino Community College permanent course bank.
   E. Credits are between 5 and 6 credits.

2. Types of special courses:
   A. 297 Independent Study. Independent study is a student driven/student-generated course of study designed to meet the needs of a specific student.
   B. 298 Special Topics. One-time offerings created by faculty to address a unique topic or a special need.
   C. 299 Workshops. 299 workshops involve advanced work, technique, etc. that builds on 199 workshops or demonstration of prior training.

3. Special Topics courses are not intended to:
   A. Transfer to a university, four year, or two year college;
   B. Provide credit for prior experience or learning;
C. Replace developmental studies or non-college credit activities;

D. Provide cooperative job placements, work study, internships or similar activities if the course activity is part of routine job responsibilities and the work is not directly supervised by an instructor.

E. Duplicate the curriculum of other courses that appear in the College Catalog.


A. 297 Independent Study courses are limited to one student. If there is a need for a special course for more than one student, use 298 Special Topics.

B. A contract must be developed for the student.

C. The number of credits granted for a 297 Independent Study is determined by work expected in a regular, comparable course.
   
   i) Instructor establishes the number of credits awarded in consultation with the student.

   ii) The number of credits is validated by the department chair to meet departmental standards.

D. Compensation and load

   i) For specific information relating to compensation and load for low enrollment classes refer to policies 444.2.9 and 470.2.3.

E. Student outcomes, methods of evaluation and student assessment shall be:

   i) Comparable to those expected in a regular, comparable course.

   ii) Determined prior to implementation of the Independent Study course.

   iii) Established by the instructor in consultation with the student.

   iv) Validated by the department chair to meet departmental standards.

   v) Demonstrated upon completion of the Independent Study course.

F. Student responsibilities for a 297 Independent Study course

   i) Identify a topic or subject of interest.
ii) Consult with an instructor qualified to direct the Independent Study course to determine feasibility of the project.

iii) In consultation with the identified instructor, write a one paragraph prospectus/concept (electronic or hard copy) to go to the department chair.

iv) Upon approval of the prospectus/concept by the appropriate department chair or dean, consult with the qualified instructor to develop a contract per the Independent Study contract form.

G. Instructor Responsibilities for a 297 Independent Study Course

i) Consult with student. Note that participation in a 297 Independent Study course is totally voluntary on the instructor’s part until contractually committed.

ii) Forward the prospectus/concept (See 303.10.4.Fiii) to the appropriate department chair or dean for approval.

   (a) Upon approval of prospectus/concept by the appropriate department chair or dean, consult with the student to develop a contract per the Independent Study contract form.

iii) Meet with the student as established in the contract.

iv) Initiate and complete required paperwork such as grades, FTSE documentation, and completion of contract, for the Independent Study course.

v) Evaluate student work per contract and outcomes.

vi) Assign a grade for the Independent Study course.

vii) Forward copy of the contract along with student work used to demonstrate completion of outcomes to the appropriate department chair or dean.

H. Department chair/dean responsibilities

i) Determine the feasibility of the Independent Study prospectus/concept with the instructor. Feasibility includes practicality of the concept, qualifications of the instructor, and budgetary issues.

ii) Prepare paperwork for creation of the 297 Independent Study course.
iii) Evaluate the contract for approval. Only contracts approved by the relevant department chair and the relevant dean may be offered as a 297 Independent Study.

iv) Review completion of the contract for validation of the assigned grade.

5. Guidelines 298 Special Topics courses and 299 Workshops

A. All 298 and 299 courses must be approved by the respective department chair before they are scheduled.

B. Prior to the start of the course or workshop, a completed course outline must be submitted by the department chair to the respective dean and curriculum coordinator. Note: The outline need NOT be approved by the Curriculum Committee prior to the start of the course.

C. The instructor must provide the course outline along with the syllabus to the students on the first day of class.

i) Additionally, it should be noted on the syllabus that the student will need to keep a copy of the course outline if they are interested in attempting to transfer the course/workshop to another college or university.

ii) It is the student’s responsibility to undertake any transfer attempts.

D. Additional instructor responsibilities for 298s and 299s are identical to those under a regular comparable course.

E. Compensation and load for 298s and 299s are calculated per compensation and load for regular courses.

Student Rights and Responsibilities (503.1)

Assuming Self-Responsibility (503.1.1)
Self-responsibility entails respect for student rights, eliminating blame, acknowledging mistakes, working toward constructive change, and challenging injustice and unethical acts of others. As a member of the campus community, students are expected to be responsible for themselves, to assist others in accepting their responsibilities, and to help make the college community a better place.

Statement of Commitment to Students (503.1.2)
Coconino Community College provides personalized and accessible opportunities in higher education by offering transfer, career and technical programs, and community interest courses.
Coconino Community College offers its students the opportunity to learn in an environment where individual rights are respected. As in any group situation, respect for individual rights is best achieved when each group member acts in ways that are reasonable and responsible. Conduct is expected to be consistent with the learning environment and is subject to standards set by the College.

The Student Code of Conduct is designed for the promotion and protection of such an environment at the College and to balance the rights and needs of the individual with the responsibility of the individual to the college community.

Listed below are the conducts that may lead to college disciplinary actions or possible dismissal:

- Conviction of a crime or continued misconduct of any type that is an infraction of the established laws of the city, county, state or nation.
- Possession, use, solicitation, or distribution of intoxicating liquors, narcotics, controlled substances or illegal drugs on college-owned or controlled property.
- Theft or conversion of college-owned or personal property, possession of stolen property, or unauthorized entry into college-owned or controlled property.
- Malicious destruction of college or personal property.
- Endangering or threatening the life or physical safety of others or self, including detention or physical abuse of any person.
- Failure to meet financial obligations to the College.
- Falsification, misuse, or forgery of college records or documents including the Student ID card.
- Knowingly furnishing false or incomplete information to the College or to a college representative or official in response to an authorized request, including a legitimate request by an identified college official, that a person identify him/herself.
- Possession or use of firearms, explosives, dangerous chemicals, or other dangerous weapons or instruments on college-owned or controlled property except as expressly authorized by the law or by institutional regulation.
- Behavior that interferes with the orderly functioning of the College, interferes with an individual’s pursuit of an education, or disrupts the learning environment on college-owned or controlled property or during an authorized college class, field trip, seminar, or other meeting, or college-related activity on or off college property.

This catalog was prepared on the basis of the best information available at the time of publication. All information is subject to change without notice, obligation, or liability.
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Coconino Community College employs part-time associate faculty who contribute to the riches and breadth of the instructional program. Because of the large number of associate faculty employed, the faculty listed below are those who taught in the previous academic year. Information regarding associate faculty may be obtained from the Human Resources Department.

<table>
<thead>
<tr>
<th>Christina Anguiano</th>
<th>Chase Coleman</th>
<th>Marc Goldberg</th>
<th>John Owens</th>
<th>Vicky Vander Male</th>
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<tbody>
<tr>
<td>Jeremy Ashley</td>
<td>Carl Cooke</td>
<td>Ellena Gonzales</td>
<td>Julie Paschal</td>
<td>Robert Voytek</td>
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<tr>
<td>Gerald Bacon</td>
<td>Lauren Copeland-Glenn</td>
<td>Brian Grable</td>
<td>Samuel Piper</td>
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<td>Hope Barnett</td>
<td>Kathleen Corak</td>
<td>Candace Hadden</td>
<td>Janice Pulley</td>
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<td>Eva Begarra</td>
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<td>Suzanna Haertzen</td>
<td>Kevin Reid</td>
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<td>Joe Belman</td>
<td>Joe Corbett</td>
<td>Kristi Hagen</td>
<td>Robin Rickli</td>
<td>Johney Warner</td>
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<td>Don Bendel</td>
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<td>Russell Benford</td>
<td>Martha Crowley</td>
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<td>Nicole Bodie</td>
<td>Karen CusterThurston</td>
<td>Joan Heck</td>
<td>Shelly Santana</td>
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<td>Jason Bohnert</td>
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<td>Steven Herold</td>
<td>Melinda Schrambling</td>
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<td>Laurence Boles</td>
<td>Elaine Dillingham</td>
<td>Linda Houle</td>
<td>Jim Schroeder</td>
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<tr>
<td>Janice (Jan) Bourdage</td>
<td>Jill Divine</td>
<td>Deborah (Kim)</td>
<td>Wesley Scott</td>
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<td>Camille Brougher</td>
<td>Ashley Doyle</td>
<td>Renee Kaminski</td>
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<td>Kristin Brown</td>
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<td>Stephanie Brown</td>
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<td>David Cain</td>
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<td>Shawn Campbell</td>
<td>Josie Escoto</td>
<td>Kathleen Krahn</td>
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<td>John Cardani</td>
<td>Sarah Espahbodi</td>
<td>Jayne Lee</td>
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<td>Nola Cardani</td>
<td>Don Fethkener</td>
<td>John Linskey</td>
<td>Alex Terwilliger</td>
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<td>Christi Carey</td>
<td>Stephen Franklin</td>
<td>Jacqueline Myers</td>
<td>Chris Thomas</td>
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<td>Todd Carlson</td>
<td>Eric Freas</td>
<td>Kathleen Nelson</td>
<td>Sandra Thomas</td>
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<td>Barry Carpenter</td>
<td>Bernard Gazdzik</td>
<td>Rob Newman</td>
<td>Julie Thurston</td>
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<td>Alan Cartwright</td>
<td>Gary Gencarelle</td>
<td>Holly Oakleaf</td>
<td>Bening Tieke</td>
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<td>Daisy Cartwright</td>
<td>Leslie Gilmore</td>
<td>Haley Orthel</td>
<td>Joe Toth</td>
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<tr>
<td>Abby Chan</td>
<td>Tracy Glau</td>
<td>Teresa Osburn</td>
<td>Lee Vadnais</td>
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</tbody>
</table>
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