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College Mission
OUR VISION
Central Arizona College is the leader of innovative learner success and the center for educational opportunities in our diverse communities.

OUR MISSION
Central Arizona College engages our diverse communities in quality learning experiences for lifelong success by providing accessible educational, economic, cultural, and personal growth opportunities.

OUR DIRECTIONS
• Students
• Quality Programs
• Academic Involvement K-12
• Facilities that Foster Learning
• Advanced Degrees
• Responsibility to Community
• Employee Development

ACCREDITATION
Central Arizona College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. For information about Central Arizona College’s accreditation, you can contact the Higher Learning Commission of the North Central Association of Colleges and Schools at 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, 312-263-0456 or online at ncahlc.org. You also may contact Central Arizona College, 8470 North Overfield Road, Coolidge, AZ 85128 or call 520-494-5444.

The programs and classes in this catalog have been approved for veteran’s benefits.

This publication and its provisions do not constitute, and should not be regarded as, a contract between CAC and any party or parties. At the time of publication, reasonable effort was made to ensure the factual accuracy of the information. However, this publication is not a complete statement of all policies, procedures, rules, regulations, academic requirements, and tuition and fees applicable to CAC, its students, or its programs. In addition, changes or additions may be made to the policies, procedures, rules, regulations, and academic requirements set out in this publication. CAC reserves the right to make these changes and additions to the information in this publication without prior notice. When a curriculum or graduation requirement is changed, it is not made retroactive unless the change is to the student’s advantage and can be accommodated within the span of years normally required for graduation. See an academic advisor for additional CAC policies.

DECLARATION OF CIVILITY
FOR A LEARNING COLLEGE
We affirm that all members of a learning college ought to be held in mutual respect; that they aspire to achieve and belong as do all people regardless of their title, job classification, or degree; that all members of the CAC community--student and teacher, manager and employee--are engaged in a common endeavor: the creation of an environment dedicated to learning.

We further affirm that the vitality of a learning college depends on a community where dialogues are both honest and civil, where tough questions are raised and we can disagree without being disagreeable. Thus, it is the duty of every member of the community to actively and consciously help make this possible, committing each of us to personally uphold the virtues that lead to such a culture and to hold others accountable as well, both privately and publicly. We should all be role models and hold each other to a consistent standard.

To achieve these ends, a behavior, which we shall call civility, must not only be practiced but form the basis for a new era of respect and trust among the members of this community. For without this civility--this respect and trust--the goal of becoming a place where learning is cherished will never be achieved. Civility as we understand it flows from these basic virtues:

Integrity, including
• Honesty
• Fairness
• Sincerity

Fidelity, including
• Faithfulness to the spirit of a learning college
• Allegiance to the public trust

Charity, including
• Kindness
• Caring
• Good will
• Tolerance
• Compassion

Responsibility, including
• Reliability
• Accountability
• Trustworthiness

Self-discipline, including
• Acting with reasonable restraint
• Not indulging in excessive behavior

Finally, we affirm that these virtues must be modeled first and foremost by those members who wear the mantle of leadership. It must be modeled foremost by the leaders within the student body, faculty, staff, and administration because it is to them that the rest of the community looks for direction, for support, and for wisdom in our common endeavor to make this a place of learning.

Central Arizona College provides equal opportunity in employment and educational programs and activities. Discrimination is prohibited on the basis of race, color, religion, sex, age, disability, national origin, military status or genetic test information.
Student Services
Admission Information
Central Arizona College provides equal opportunity in employment and educational programs and activities. Discrimination is prohibited on the basis of race, color, religion, sex, age, disability, national origin, military status or genetic test information.

Admission Requirements

Regular Admission
Regular admission to the college is granted to any person who meets one of the following criteria:

- Graduate of a regionally accredited high school as defined by the United States Office of Education or any other appropriate state educational agency
- Earned a high school certificate of equivalency (GED)
- 18 years of age or older and demonstrates evidence of potential success in the community college
- Transfer student in good academic standing from another college or university

Admission of Students Under the Age of 18
No person under age 18 shall be denied admission because of age, lack of a high school diploma or high school certificate of equivalency, grade in school, lack of permission of school officials or lack of concurrent enrollment in a public or private school if the student meets one of the following test scores:

- SAT (Scholastic Aptitude Test) composite (verbal and math) score of 930 or above;
- ACT (American College Test) composite score of 22 or above.

Students who are participants in a special program or class sponsored by the college, such as the First Step Program and Early College, or who are currently in dual enrollment course(s) in both their high school and Central Arizona College may be considered for Special Admissions. A student admitted under this criterion is not guaranteed admission to a specific degree program or to all courses offered at the college. The number of credits in which a student may enroll may be limited.

Students seeking admission to the college as their primary institution must provide evidence of:

- Completion of the Admission Student Information Form;
- Completion of Request for Special Admission Form;
- Submission of a letter stating the reason for the special admission request;
- Completion of college placement exam (COMPASS/ASSET);
- Consultation with a member of the college academic advising staff and/or;
- Consultation with an approved Special Admit designated official.

Admission of Students in Special Status
Persons not meeting any of the provisions stated above may be admitted on an individual basis with the approval of college officials, so long as such students meet the established requirements of the course(s) for which they enroll and the College officials determine that such admission is in the best interest of the student. An admission form must be completed and a letter stating the reason for the special admission request is required.

Admission of F-1 Nonimmigrant Students – International Students
International students seeking admission based on F-1 student visa status must achieve the following:

- Completion of Admission Form/Registration Student Information form;
- Graduation from a high school equivalent to the 12th grade level in the United States. It is recommended that students have graduated in the upper 50 percent of their secondary school (high school or equivalent) in order to ensure success in academic classes at this college. Official high school transcripts must be mailed directly to the Records Office;
- Evidence of financial support or deposit of tuition. The college has no provision for scholarships for international students; therefore, students must be prepared to meet the necessary financial obligations for the entire time they will be in the United States. It is estimated that each student will need at least $10,000 per academic year in order to meet all expenses, exclusive of travel;
- Proof of health insurance that will cover medical expenses in the United States or purchase of health/accident insurance after arriving at CAC;
- Translation of documents into English, if required.

Admission of students supplementing secondary school or home school with college courses

- Completion of Admission/Registration Student Information Form;
- Submission of completed Approval for Enrollment of High School Student Form;
- Submission of a letter stating the reason for the special admission request;
- Completion of the college placement exam (COMPASS/ASSET), if required for the courses in which the student plans to enroll;
- Consultation with academic advising staff and/or consultation with an approved Special Admit designated official.
Students enrolling in a program sponsored by the college or in courses for dual credit
- Completion of Admission/Registration Student Information Form;
- Completion of the college placement exam (COMPASS/ASSET), if required for the courses in which the student plans to enroll.

Students returning to CAC following an absence of more than one year
- Completion of Admission/Registration Student Information Form.

Residency Guidelines
Students are classified for tuition purposes under one of the following resident classifications:
- Resident, in-state
- Non-resident (includes out-of-state, F-1 nonimmigrant students and students without legal immigration status)

Residency regulations are published in their entirety under Official Residency Guidelines.

Resident status will be assigned under the following conditions:
- Students who are U.S. citizens;
- Dependent students who have lived in Arizona for less than a year, but reside with their parents or legal guardians who have established domicile in Arizona for one year and claim the student as an exemption for state and federal tax purposes;
- Financially independent students who have resided in Arizona for at least 12 months prior to the start of the semester in which they are enrolling and have established Arizona as their permanent domicile;
- Students who have transferred to Arizona by their employer for employment purposes;
- Students or spouses who are members of the Armed Forces of the United States, stationed in Arizona pursuant to military orders;
- Students who are members of Native American tribes whose reservation lands lie in Arizona and extend into another state and who are residents of that reservation.

Non-resident status will be assigned under the following conditions:
- Students who are claimed as exemptions by parents or legal guardians for U.S. federal or state income tax purposes and the parent or guardians are not residents of Arizona;
- Persons who have lived in Arizona less than one calendar year;
- Students who have not established Arizona as their permanent domicile after moving to Arizona;
- Winter visitors who have not established Arizona as their permanent domicile, even if residing in Arizona for more than one year;
- Students who are not U.S. citizens.

Official Residency Guidelines
The following guidelines concerning the determination of residency for tuition purposes are a compilation of statutory law (and A.R.S. 15-1801). Due to the complexity in interpreting these laws, students having difficulty in determining their residency should contact the Records Office for further explanation.

Proposition 300, A.R.S. §15-1803(B) now holds that “a person who is not a citizen or legal resident of the United States or who is without lawful immigration status is not entitled to classification as an in-state student pursuant to section 15-1802 or entitled to classification as a county resident pursuant to section 15-1802.01.”

A.R.S. §15-1825 requires that 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 a public university or community college “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 the Records and Financial Aid Offices for further details.

Implementation of Guidelines
- Each student shall have the question of legal residence determined prior to the time of registration and payment of fees. It is the responsibility of the student to register under the correct resident determination.
- Enforcement of residency requirements shall be the responsibility of the President of Central Arizona College. The President has designated the Records Office to make the initial domicile classification. In determining a student’s classification, the college may consider all evidence, written or oral, presented by the student and any other information received from any source that is relevant to determining classification. The college may request written sworn statements or sworn testimony of the student.
- A request for a review of the initial classification may be made to the Records and Registration Office. The request must be in writing, signed by the student and accompanied by a sworn statement of all facts relative to the matter. The request must be filed within 10 days of receipt of notification of classification as a non-resident. Failure to properly file a request for review within the prescribed time limit constitutes a waiver of review for the current enrollment period. The decision of the Records and Registration Office shall be final.
STUDENT SERVICES

- Central Arizona College has policies relative to Title IX that support nondiscrimination and prohibit discriminatory behavior including sexual harassment and sexual violence. Such policies apply to all educational programs, services, activities, and facilities. Inquiries concerning the application of Title IX policies or the filing of a specific complaint may be referred to CAC’s Title IX Coordinator, Dr. James D. Moore, Vice President of College Affairs, (520) 494-5406, at james.moore7@centralaz.edu.

Definitions
- “Armed Forces of the United States” means the: Army, Navy, National Guard, the Air Force, Marine Corps, Coast Guard, Commissioned Corps of the United States Public Health Services and National Oceanographic and Atmospheric Administration.
- “Continuous attendance” means student is enrolled at an Arizona educational institution; as such term is defined by the institution’s governing body, for a normal academic year. Such person need not attend summer sessions or other such intercessions beyond the normal academic year in order to maintain continuous attendance.
- “Domicile” means a person’s true, fixed and permanent home and place of habitation. It is the place where he/she intends to remain and to which he/she expects to return when he/she leaves without intending to establish a new domicile elsewhere.
- “Emancipated person” means a person who is neither under a legal duty of service to his parent nor entitled to the support of such parent under the laws of this state.
- “Parent” means a person’s father or mother; if one parent has custody, that parent (or if there is no surviving parent or the whereabouts of the parents are unknown) or a guardian of an unemancipated person. There may not be circumstances indicating that such guardianship was created primarily for the purpose of conferring the status of an in-state student on such unemancipated person.

Proof of Residency
When a student’s residency is questioned, or when a student wishes to have his/her residency status reviewed, the following proof will be required:
- A complete domicile affidavit signed by the student must be filed with the Records and Registration Office;
- Submitting evidence of at least three of the following items will be used in determining a student’s domicile in Arizona:
  a. Arizona income tax return
  b. Arizona voter registration
  c. Arizona automobile registration
  d. Arizona driver’s license
  e. Place of high school graduation
  f. Source of financial support
  g. Dependency as indicated on federal income tax return
  h. Notarized statement from landlord or employer
  i. Bank accounts
  j. Other relevant information
  k. Birth certificate
- Student who is honorably discharged from the armed forces and demonstrated evidence of intent to be a resident of Arizona.

Concurrent Enrollment: Non-resident Tuition
- It is unlawful for any non-resident student to register concurrently in two or more public institutions of higher education in this state, including any university or community college, for a combined student credit hour enrollment of more than six semester hours without payment of non-resident tuition at one of the institutions.
- Any non-resident student desiring to enroll concurrently in two or more public institutions of higher education in this state, including any university or community college, for a combined total of more than six semester hours shall pay the non-resident tuition at the institution of his choice in an amount equivalent to non-resident tuition for the combined total semester hours at all institutions in which he/she is currently enrolled.

Western Undergraduate Exchange Program
Students from 16 Western states are eligible to participate in the Western Undergraduate Exchange Program (W.U.E.). The program allows full-time students who are seeking degrees or certificates to pay 150 percent resident tuition, rather than out-of-state tuition. Central Arizona College participates in the program along with other colleges and universities in Arizona, Alaska, California, Colorado, Common Wealth of the Northern Mariana Islands, Hawai‘i, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

New Mexico Resident Tuition Waiver Program
Central Arizona College and Western New Mexico University in Silver City have established a tuition waiver agreement, which is subject to renewal. A New Mexico resident who attends Central Arizona College may qualify to be assessed in-state tuition. There are a limited number of waivers available. Contact the Records and Registration Office for an application form or additional information.

Out-of-County Residence Affidavit
An Arizona resident attending classes in Pinal County from Apache, Gila, Greenlee or Santa Cruz counties must submit a completed Out-of-County Residence Affidavit every semester.

Classification of Students
- First year: A student with less than 30 semester hours of college credit.
- Sophomore: A student who has completed 30 or more hours of college credit.
- **Part-Time Student**: A student enrolled for less than 12 semester hours.
- **Full-Time Student**: A student enrolled for 12 or more semester hours.

**Transfer Students**

Transfer students are required to supply official transcript(s) from any previous college(s) for the purpose of evaluation of transfer credit(s). The college reserves the right to determine what credit(s) will be granted for courses transferred to the college to satisfy certificate or degree requirements.

**Readmission of Academically Dismissed Students**

Students who are academically dismissed or have been away from the college for a semester or more, and wish to be considered for readmission, must seek approval from the Chief Academic Officer. A request for readmission must be made in writing and must include reasons why readmission should be considered. If approved, the student will be required to meet with an academic advisor to formulate a detailed plan for completion of course work. Students who are admitted will have a restricted academic load. The Chief Academic Officer has the final decision and will notify appropriate areas of the decision and any academic restrictions. Readmission to the college does not necessarily mean readmission to a specific program.

**Catalog Year of Admission**

Admitted students should follow the College Catalog graduation requirements in effect at the time of their initial enrollment. Students who enter the college and are continuously enrolled without a break through subsequent fall and spring semesters (summers excluded) are subject to the graduation requirements of the catalog upon their initial entrance or a current year catalog.

Students who enter the college, then miss more than two semesters and return, are subject to the requirements of the catalog based upon the date of their return.

Transfer students’ initial enrollment is the date upon which they enter Central Arizona College.

Nursing students’ catalog year is based upon the year they are accepted into the nursing program.

Tech Prep students’ catalog year is based upon the year they enter the Tech Prep program. These students must continue enrollment with no more than a one-year break after high school to maintain their catalog of initial enrollment.

All students have the option to choose the current year catalog for degree or certificate graduation requirements or follow their initial enrollment catalog. Students who complete a degree program and elect to pursue another degree are subject to the degree requirements of the catalog at the time they select the new degree. This catalog is for information only, and shall not be construed to create any contractual rights. Central Arizona College reserves the right, with or without notice, to change any or all fees, tuition or other charges; or to add, delete or modify any course or program offering, services, requirements for graduation, regulations, or any other information contained herein.

**Program Requirements**

There are a number of programs at CAC, including the nursing program, that have specific program requirements in order to meet the criteria for their particular accrediting bodies and licensing boards. In the case of these programs, the requirements may differ from the requirements of the college. It is necessary that students meet all program requirements for the individual disciplines according to the policies in place for each specific program.

**Academic Advising**

Students are encouraged to actively participate in their learning experience. Advising is a developmental process by which students are offered the opportunity to understand the nature and purpose of higher education and to plan courses and activities that support their career objectives. Students are encouraged to schedule return visits with their academic advisor to receive continuous support, resources, and services. The developmental advising model supports student’s personal, academic and professional growth. Students are encouraged to participate in programs, classes and activities that help students develop a sense of community and identity with the college.

- **New Student Orientation** is a program designed to introduce all students to the campus environment and provides information, resources, and connections that help students through the transition to college life.
- Advisors, faculty and staff are available to work with students in many capacities; they can help students become acquainted with the college and provide information and referrals.

**Placement Testing**

Prior to meeting with an academic advisor and registering for classes, most students will complete placement testing. Students in the following categories must test:

- All new students enrolling in a degree or certificate program;
- Students registering in English, mathematics, or reading;
- Students registering in courses with a prerequisite in one of those fields.

Students may contact the Testing Center to make an appointment for placement testing.
Students may be exempt from the reading and writing placement tests if they have earned 9 or more transferable, academic and literacy intensive* college credits (with a grade of C or higher) from a regionally accredited college or university as recognized by the U.S. Department of Education. Those students who have earned this exemption will be classified as having met the reading requirement for graduation. *Academic and literacy intensive shall be defined as courses that require college-level reading and writing activities as part of their core curriculum.

Basic Skills
Students cannot “fail” their placement tests. Test results in writing, mathematics and reading are indicators of current student skill levels which assist in selecting appropriate courses. Students may need to enroll in developmental courses to help gain the academic skills necessary for success at the college level.

Course Sequence and Prerequisite Courses
Courses numbered 100 to 199 are usually first-year (freshman level) courses; courses numbered 200-299 are usually second-year (sophomore level) courses. Courses with lower numbers may be prerequisites for courses with higher numbers and should be completed first. All prerequisite courses must be completed with a grade of “C” or higher to advance to the next course level. Course prerequisites are listed with the course descriptions in the back of the catalog.

Academic Advising for New Students
New degree- and certificate-seeking students are encouraged to meet with an academic advisor or faculty advisor prior to registering for the first time. The student and advisor will discuss the student’s life and academic goals, review placement test scores, and select a program and courses consistent with the student’s interests and level of preparation. Students are highly encouraged to visit their academic advisor frequently to create a Master Academic Plan and review their progress.

Academic Advising for Returning Students
Continuing students should see an advisor for assistance in developing a Master Academic Plan, and to track their progress toward completion of their degree or certificate. Advisors can help students with information regarding transfer to a four-year institution. Students who plan to transfer to one of Arizona’s three public universities should consult AZ Transfer online at www.aztransfer.com

Reading Requirement
Demonstrated proficiency in reading is a requirement for all degrees awarded. Students must achieve an appropriate score on their placement test or complete RDG 094 with a grade of “C” or better to meet the college graduation requirement.

Reading is a prerequisite or co-requisite for many courses and programs. When test scores indicate a required level of reading and writing skill, the student may need to enroll in developmental courses to help gain these skills. Developmental courses are academic courses that require college-level reading and writing activities as part of their core curriculum. Students must achieve an appropriate score on their placement test or complete RDG 094 with a grade of “C” or better to meet the college graduation requirement.

Academic Load
College level classes generally require two to three hours of outside preparation for each hour spent in class. To enable students to succeed in the classroom, the college monitors academic loads. Students may enroll in up to 20 credit hours without special permission. Students who wish to enroll in more than 20 credits during a regular semester must obtain approval from a Dean or designee.

Students carrying at least 12 credits during a regular semester are considered full-time students. During summer school, six credits per session are considered full time. Academic loads for short-term courses will vary with the required instructional time.

New Student Orientation
Orientation to College provides new and returning students and their families the opportunity to connect with other students, faculty and staff. One-day orientations include topics ranging from how to get connected to student activities, locate academic resources and be successful at Central Arizona College…just to name a few.

Call 800-237-9814, ext. 5524 for dates and times or register at www.centralaz.edu/orientation.

Transfer of Credits
The Arizona Commission for Postsecondary Education in conjunction with the Arizona Board of Regents developed the Arizona Higher Education Course Equivalency Guide (CEG) (az.transfer.com) to assist students in transferring courses from one college to another within the state of Arizona.

The CEG equivalency does not mean that the community college course is identical to the university course or vice versa, but that the course is regarded as fulfilling the requirement of the designated university or college course. Prospective transfer students, as well as College advisors may refer to this guide to choose courses appropriate to their major.

Due to changes that occur in the curriculum at the universities each year, students are encouraged to consult with the appropriate transfer institution’s academic department for major course requirements before deciding on current class schedules.

Transferring Credits from CAC
To transfer credits, students may request that an official transcript be sent from CAC to the Records Office at the transfer institution. Students must submit a written request to the Records Office including complete name, student ID number, a complete address of where the transcript is to be sent, along with the appropriate official transcript fee for each
Transferring Credits to CAC

Students may request transfer credits to be evaluated by completing the Transcript Evaluation Request form and submitting the form to the Records and Registration Office.

Transfer courses must have been acquired through a regionally accredited college or university. Military courses and experiences in the Guide to the Evaluation of Educational Experiences in the Armed Services may be transferred if the credits are applicable to the student’s degree objective.

Appropriate credit will be transferred from other institutions upon receipt of an official transcript. Courses in which a grade of less than “C” was earned will not be accepted. Official transcripts must be submitted to the Records Office for evaluation.

Shared Unique Numbering system (SUN)

SUN courses are primarily AGEC or Common Courses at CAC or the partnering public and tribal community colleges and universities. SUN courses transfer to CAC as a direct equivalent course unless CAC does not offer that course. In the case that CAC does not offer the SUN course, the SUN course will be accepted to fulfill comparable CAC requirements based on the course content and student learning outcomes. See the SUN List at: https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/4/wo/RjKK1DvVRg?cejRjezGqvrt0/0.0.11.1.1.

Registration Information

Registration is regarded as a commitment by the student to comply with all regulations of the College. Students may register either in-person or via online services.

Any previous debt owed to the college must be cleared by the Business Office before students can register for classes. Photo identification is required for all transactions.

Tuition and fees must be paid in full by the published payment deadlines. Failure to pay by the deadline will result in the loss of registration. The payment deadline for each academic term can be found in the academic calendar and on CAC’s website at www.centralaz.edu. Please note: If you are unable to pay the required tuition, there are other financial options such as a payment plan, available to you.

Proposition 300 and the Arizona Revised Statutes require that all students must show proof of their citizenship, including employees taking courses. Students only need to provide citizenship proof once, not every time they register. The primary documents that are being requested are a copy of one of the following: a driver’s license, a birth certificate, or a passport.

On Time Registration (OTR)

No student will be permitted to enroll in any class that has already met. The last day to enroll in an online class is the official start date of the semester.

Online Registration

New and continuing students may register via the Internet at www.centralaz.edu by accessing online student services. Most CAC courses have prerequisites. A prerequisite is a course or minimum placement score that you must have successfully completed before you can register in a higher-level course.

Dropping or Adding a Class

Changes may be made to students’ schedules before or during the first week of classes for semester-length classes. Please see refund information on the next page.

Adding Classes

Students add classes via the web or by filling out a Drop/Add form, obtaining the necessary signatures (if required), and submitting the form to the Records and Registration Office for processing.

Dropping Classes

During the first week of the semester, students may drop a class that they no longer want to attend via the web or by completing a Drop/Add form and submitting it to the Records and Registration Office for processing. When the transaction is processed, there will be no record of the class on the college transcript. It is the student’s responsibility to drop the class if they no longer want to attend. Please see the tuition and fee schedule for the appropriate tuition refund.

Withdrawing from Classes/College

Regular/Short Term Courses:

Students can request an official withdrawal during the first two-thirds of the class based on the beginning and end date as listed in the schedule of classes. During this period a student may withdraw regardless of reason and must initiate and complete the withdrawal request through the registration office. Instructor permission is not needed. During the final one-third of the course, if there are extenuating circumstances, a student can request an official withdrawal. The approval of both the instructor and division chair or program director will be required.
Open Entry/Open Exit Courses:
Students can request an official withdrawal during the first two-thirds of the class based on the date of registration and last day of the semester. During this period a student may withdraw regardless of reason and must initiate and complete the withdrawal request through the registration office. Instructor permission is not needed. During the final one-third of the course, if there are extenuating circumstances, a student can request an official withdrawal. The approval of both the instructor and division chair or program director will be required.

Withdrawal Timeline:
<table>
<thead>
<tr>
<th>Length of Class</th>
<th>Must Withdraw by Friday of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Week Course</td>
<td>3rd Week</td>
</tr>
<tr>
<td>8 Week Course</td>
<td>5th Week</td>
</tr>
<tr>
<td>10 Week Course</td>
<td>6th Week</td>
</tr>
<tr>
<td>16 Week Course</td>
<td>10th Week</td>
</tr>
<tr>
<td>Classes less than 5 weeks</td>
<td>Prior to the first day of class</td>
</tr>
</tbody>
</table>

Administrative Withdrawal
The college reserves the right to withdraw students from classes at any time during the semester.

Auditing
Students register to audit classes by indicating on the registration form that the course is to be audited. Auditing students register and pay tuition and fees in the same manner as students registering in courses for credit. No changes in student status from credit to audit or vice versa will be permitted after the student has registered.

Repetition of Courses
Students may repeat courses in order to improve their grades or to update their knowledge of the course material. Unless the course is identified in the College Catalog course description as being repeatable for credit, (such as some physical education, music, or other activity courses) the course only may be counted once for graduation.

When other courses are repeated, or when a repeatable course is taken beyond the number of allowable repeats, credits for those courses will not be applied toward degree or certificate requirements and may not be funded through financial aid. All grades earned will be posted to students’ transcripts, however, only the highest grade will be calculated in the grade point average.

Students should review academic transcripts for including/excluding of repeated courses.

Academic Calendar
The college operates on a semester calendar with two 16-week semesters beginning in August and January and a shorter summer session beginning in May.

Numbering System
All courses carry a three digit number. Levels of instruction are designated by the first digit.
- 070-079 Special Interests (non-degree)
- 080-099 Developmental
- 100-199 First Year Level
- 200-299 Second Year Level

Refunds
Regular semester-length classes: 100% of tuition fees will be refunded for a regular semester-length class if the official withdrawal is made prior to the “Last Day of Semester Registration”. 90% of the tuition fees will be refunded for a regular semester-length class if the official drop is made within the official Drop/Add period (please refer to the academic calendar for specific dates). There are no refunds for classes dropped after the official Drop/Add period ends.

Short-term classes: Any student officially withdrawing before the first day of class will be entitled to a 100% refund. There are no refunds for short-term classes dropped after the class starts.

Students withdrawing for medical reasons or any extenuating circumstance can submit a Tuition Appeal accompanied by adequate supporting documentation to the Registrar. All refunds and deposits that may be due to a student will be first applied to any outstanding debts owed the college. When the college is responsible for a change, i.e., cancelled class, time change, etc., the Business Office will mail the appropriate refund to students within 10 days.

Financial Aid

Financial Aid and Scholarships
Central Arizona College offers a variety of financial aid and scholarship programs to assist students in meeting their educational financial obligations.

The following is a description of the federal financial aid programs and the institutional programs provided by CAC.

Federal Financial Aid Programs
The federal government places the primary responsibility of educational costs on the student and the student’s family. The student and the student’s family are expected to contribute financially toward the student’s cost of attendance. The Expected Family Contribution (EFC) is based on the family’s income and assets. It is not uncommon for the EFC to be zero. Costs in excess of the expected contribution are considered financial need.
The federal government offers grant, work-study and loan programs to assist students in meeting their financial need. Generally, grant programs are offered only to students with a very low Expected Family Contribution (EFC). Student employment and loans are available to all students who have need. Some loan programs are not need-based.

Central Arizona College presently offers the following federal financial aid programs:

**Title IV Programs**

**Grants**
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant

**Work-study**
- Federal Work-study

**Loans**
- Federal Direct Stafford Student Loan
- Federal Direct PLUS Loan (Parent Loan for Undergraduate Dependent Students)

**State Programs**
- Leveraging Educational Assistance Partnership

**Student Eligibility for Federal Financial Aid Programs**
To be eligible for federal financial aid, the student must:
- Be a degree seeking student in an Associate degree program or an eligible certificate program.
- Have financial need, except for some loan programs.
- Have a high school diploma, General Education Development (GED) Certificate, or have completed a secondary school education in a home school setting as defined under State law.
- Be admitted to the college as a “regular” student (see admission information).
- Be a U.S. citizen or eligible non-citizen.
- Have a valid social security number.
- Make satisfactory academic progress for financial aid purposes;
- Be enrolled in courses required for declared degree or certificate program;
- Sign a statement of educational purpose and a certificate statement on overpayment and default (on the Free Application for Federal Student Aid).
- Register with the Selective Service, if required.
- Not be in default on a federal student loan or not owe a repayment or overpayment to a federal grant program;
- Not have been convicted for sale or possession of illegal drugs while receiving Title IV Funds.

**How to Apply for Federal Financial Aid**
The first step in applying for federal financial aid is completing the Free Application for Federal Student Aid (FAFSA); CAC’s Title IV school code is 007283. Students who applied in the previous year should be able to complete a renewal/partially pre-filled application. Be sure your application is complete and accurate. Incomplete or incorrect information will delay your application and your financial aid. Students must apply each academic year.

**Satisfactory Academic Process for Federal Financial Aid Recipients**
In accordance with federal regulations, CAC must develop and apply a consistent and reasonable standard of academic progress. The satisfactory progress policy is established to carry out the statutory requirement that a student must be making satisfactory progress to be eligible for funding under the Federal Student Financial Assistance (SFA) programs.

**Measurement of Satisfactory Academic Process**

**Qualitative Measure**
- Students must maintain at least a 2.0 cumulative grade point average (GPA).

**Quantitative Measure**
- Maximum Time Frame

All hours attempted are considered when determining financial aid eligibility, whether or not financial aid was received. Regardless of where the hours were attempted, Central Arizona College’s Satisfactory Academic Progress policy will apply.

The general rule is 150 percent of the hours required for the program of study in which you are currently enrolled. Students lose eligibility for future awards after the semester in which they exceed the maximum hours. To determine the maximum allowable hours for a specific program of study (major), refer to the degrees and certificates section of the College Catalog, note the total hours required for the program and multiply the figure by 1.5.

**Incremental Assessment**
Satisfactory academic progress is determined at the end of the semester. Earned credit hours must be at least 67 percent of attempted credit hours each academic year or semester, as applicable.

**Return of Title IV Funds**
If a student withdraws completely, Central Arizona College is required to follow specific guidelines as directed by the U.S. Department of Education. The guidelines are used to calculate the amount of federal aid that will be returned to the various financial aid programs.

When a student withdraws, any loan a student received will enter the grace period (as provided by the terms of that loan).
and Central Arizona College will notify the lender(s) of the current status through the National Student Clearinghouse.

It is important to understand that the published Institutional tuition/fee refund schedule should not be confused with the calculation for returning federal student aid funds to the federal government. Each one is a separate calculation and they do not directly complement each other.

Contact the Financial Aid Office for details on CAC’s refund schedule and how the return of federal student aid is calculated.

**Definition and/or Treatment of Terms**

**Incomplete Courses**
Incomplete courses will increase attempted credit hours but not earned credit hours. There is no impact on cumulative grade point average (GPA). An incomplete may affect your Satisfactory Academic Progress status.

**Course Withdrawal**
Courses with grades of W will increase attempted credit hours but not earned credit hours and may affect your Satisfactory Academic Progress status.

**Repeat Courses**
The credit hours earned for a repeated course may only be counted once and will be considered accordingly in maximum time frame and incremental requirements. The grade for the repeated courses counted will have an effect on cumulative and semester GPA.

**Change of Program of Study- Degree or Certificate**
A student may be considered not making satisfactory academic progress when a change in a program of study is made prior to completion of that program.

**Complete Withdrawal**
A student is considered not making satisfactory academic progress when the student completely withdraws from school, whether official or unofficial.

**Appealing a Decision**
If a determination is made that a student is not making satisfactory academic progress, a student may appeal that decision based on mitigating circumstances. Procedures and forms for the appeal process and the reinstatement of federal financial aid are available online at [www.centralaz.edu/finaid](http://www.centralaz.edu/finaid) or by contacting the Financial Aid Office.

**Payment of Financial Aid**
A student’s financial aid payment is based on the number of credits in which the student is enrolled that apply toward his or her declared degree or certificate program.

Financial aid awards may be adjusted based on the student’s enrollment status as determined after the Drop/Add period, or in the case of late awards, at the time the award is approved.

Each student must be meeting all of the eligibility requirements at the time payment is issued.

Financial aid will not be disbursed until after the Drop/Add period. Only courses required for the declared degree or certificate will be included in enrollment status for payment of financial aid. If a course is not required for the declared degree or certificate, it will not be considered in the calculation of the financial aid award.

**Institutional Scholarship Programs**

Central Arizona College offers a variety of scholarship programs to recognize students for their academic performance as well as for participation in athletics and other activities.

A student may receive one or more of the following types of scholarships, not to exceed the cost of in-state tuition, registration and fees. To receive a scholarship, the student must meet the following conditions:

- Must complete the Free Application for Federal Student Aid (FAFSA);
- Must be pursuing a degree or certificate;
- Must be enrolled in an on-campus program.

New students are first priority. All scholarships must be coordinated with federal financial aid, and the total of all awards may not exceed the student’s need as determined by the Financial Aid Office. All scholarships have minimum academic progress requirements. Students may not appeal these requirements.

The Financial Aid Office has information and applications for institutional scholarship programs as well as other non-institutional programs. Students interested should visit one of the Central Arizona College campuses or contact the Financial Aid Office.

**GED 1-Semester Scholarship**

**Target:** Students who pass the GED examination taken through the Central Arizona College GED testing program.

**Enrollment Requirements:** Must enroll in a minimum of 1 credit hour with a maximum of 12 credit hours in the semester immediately following notification from CAC of scholarship eligibility. Must enroll in the CPD101 class.

**Renewal Requirements:** This scholarship is non-renewable.

**Value:** The amount is equivalent to in-state tuition up to 12 credit hours. Award amounts will vary.
CAC Incentive Scholarship

**Target:** New and continuing students up to 22 years of age, primarily first generation college students (first generation defined as first member of family to attend college).

**Eligibility Requirements:** Must enroll in a minimum of 6 credit hours per semester. Have a 2.5 cumulative grade point average.

**Application Process:** A completed institutional scholarship application is required with a 300-word essay.

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Scholarship work group. The work group will select and approve recipient(s).

**Renewal Requirements:** Must complete a minimum of 6 credit hours each semester, must earn and maintain a 2.5 cumulative grade point average, must be continuously enrolled and limited to four consecutive semesters.

**Value:** The amount covers a portion of in-state tuition and is based on financial need. The amount is prorated for enrollment less than full-time.

Non-Traditional Student Scholarship

**Target:** Primarily re-entry students 23 years of age or older. Open to new and continuing students.

**Eligibility Requirements:** Must enroll in a minimum of 6 credit hours per semester. Have a 2.5 cumulative grade point average.

**Application Process:** A completed institutional scholarship application is required with a 300-word essay.

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Scholarship Committee. The committee will select and approve recipient(s).

**Renewal Requirements:** Must complete an application form each year, must complete a minimum of 6 credit hours each semester, must earn and maintain a 2.5 cumulative grade point average. Enrollment must be continuous and limited to four consecutive semesters.

**Value:** The amount covers a portion of in-state tuition and is based on financial need. Amount is prorated for enrollment less than full-time.

Co-curricular Scholarship Programs

Central Arizona College offers scholarships for a number of co-curricular programs. These programs are awarded at the discretion of the coach(s)/coordinator(s) of the program.

Honors Scholarship

**Target:** New and returning students who participate in Honors Program.

**Eligibility Requirements:** Must enroll in a minimum of 12 credit hours per semester. Must meet program specific requirements.

**Renewal Requirements:** Must have received a grade of “B” or better in all previous honors courses. Must complete a minimum of 12 credit hours each semester. Must earn and maintain a 3.5 cumulative grade point average. Limited to four semesters. Must meet program specific requirements.

**Value:** The amount is equivalent to in-state tuition up to 3 credit hours.

AcES Scholarship

**Target:** Continuing students who participate in the AcES program.

**Eligibility Requirements:** Must have already completed 6 transferable credit hours at CAC. Must have and maintain a 3.0 cumulative grade point average. Must be enrolled in at least 6 transferable credit hours at CAC.

**Renewal Requirements:** Must meet program specific requirements. Limited to four semesters.

**Value:** The amount is equivalent to in-state tuition up to 3 credit hours.

Athletic Scholarship

(Signal Peak Campus Only)

**Target:** Students playing in Central Arizona College intercollegiate athletics.

**Eligibility Requirements:** Must meet NJCAA requirements.

**Renewal Requirements:** Must meet NJCAA requirements and contingent upon coach’s recommendation.

**Value:** Amount varies by athletic program and student athlete.
STUDENT SERVICES

Activity Scholarship
Target: Students must participate in established college activities.

Eligibility Requirements: Must enroll in a minimum of 6 credit hours each semester. Must meet program specific requirements. Must compete or perform in the name of the college.

Renewal Requirements: Must meet program specific requirements. Students must maintain a 2.5 cumulative grade point average. Must apply each year.

Value: Amount varies by activity.

Performing Arts Scholarship
(Signal Peak Campus Only)
Target: Students participating in band, drama or choir at Central Arizona College.

Eligibility Requirements: Must enroll in a minimum of 6 credit hours each semester. Must meet program specific requirements. Must compete or perform in the name of the college. Audition requirement.

Renewal Requirements: Must meet program specific requirements. Students must maintain a 2.5 cumulative grade point average.

Value: Amount varies by activity. The award value is at the discretion of the vocal, instrumental music ensemble, and/or drama director.

CAC Academic Scholarship
Target: Students who graduate in the top 10% of their high school graduating class at participating high schools.

Eligibility Requirements: Must enroll in a minimum of 12 credit hours in the semester immediately following high school graduation. Must enroll in the CPD101 class.

Renewal Requirements: Must complete a minimum of 9 credit hours each semester. Must earn and maintain a 3.0 cumulative grade point average. Enrollment must be continuous, and limited to four consecutive semesters.

Value: The amount is equivalent to in-state tuition up to 18 credit hours.

Central Arizona College Foundation Scholarships
The Central Arizona College Foundation serves and supports the college as a two-year institution of higher education with the primary role of providing student scholarships. The Foundation receives financial gifts and real property from individuals and organizations to fund these scholarships.

The purpose of Central Arizona College Foundation Scholarships is to assist students enrolled at Central Arizona College in achieving their educational goals.

To receive a Central Arizona College Foundation Scholarship, the student must meet the following minimum qualifications:
- Complete the Free Application for Federal Student Aid (FAFSA);
- Pursue a degree or certificate;
- Coordinate with federal financial aid. The total of all awards may not exceed the student’s need as determined by the Financial Aid Office;
- Enroll in a minimum of 6 credits per semester;
- Earn and maintain a 2.5 cumulative grade point average;
- Meet all other specific criteria as identified by each foundation scholarship.

Central Arizona College Foundation Promise for the Future Scholarship
The following endowed scholarships sponsors have been established within the Promise for the Future Scholarship Fund:
A. M. & Pearl Clark, J. R. & Lola Waddle Scholarship
ASML Trust Scholarship
Zhe (Joe) Fang Memorial Scholarship
Claude and Isabell W. Gipson Scholarship
Kemper & Ethel Marley Foundation Scholarship
Stephen P. Terry Scholarship
Fred & Eunice Wuertz Scholarship

Target: High school graduates of Pinal County that have signed and submitted a Promise for the Future contract to the Central Arizona College Foundation during their 8th grade year. Students must graduate high school with at least a 2.75 GPA.

Enrollment Requirements: Must enroll in a minimum of 12 credit hours and must enroll in the fall semester immediately following May graduation or in the spring semester for December graduates.

Renewal Requirements: Must complete a minimum of 9 credit hours each semester. Must earn and maintain a 2.5 cumulative grade point average. Enrollment must be continuous and limited to four consecutive semesters.

Value: The amount is equivalent to in-state tuition up to 18 credits.
**JUDGE ROBERT R. BEAN MEMORIAL SCHOLARSHIP**

**Eligibility Requirements:** Must be a Coolidge or Florence High School graduate.

**Renewal Requirements:** Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

**Application Process:** A completed Central Arizona College Scholarship Application packet.

**Scholarship Amount:** Varies

**Selection Process:** The Central Arizona College Financial Aid Office will select and present application(s) to the Financial Aid Scholarship work group. The work group will select and approve recipient(s).

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**BOSWELL SCHOLARSHIP**

**Eligibility Requirements:** Must be a Coolidge High School graduate.

**Renewal Requirements:** Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

**Application Process:** A completed institutional scholarship application is required with a 300-word essay.

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**GREAT WOMEN OF CAC/PINAL COUNTY**

**Target:** Pinal County residents who are seeking a degree at Central Arizona College. May be a new, continuing, re-entry student.

**Eligibility Requirements:** Pinal County student; academic achievement (2.5 GPA or higher); participation in community service; demonstrate leadership qualities; must demonstrate financial need; may be a re-entry student; may have endured/overcome hardships.

**Application Process:** A completed institutional scholarship application is required with a 300-word essay. Must include documentation of community service.

**Selection Process:** The Financial Aid Office will present applicants to the designated scholarship committee who will select recipients.

**Value:** Varies

**Renewal Requirements:** None

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**CASA GRANDE JR. CHAMBER OF COMMERCE SCHOLARSHIP**

**Eligibility Requirements:** Must be a graduate of Casa Grande, Maricopa, or Stanfield high schools and have been active in high school activities.

**Renewal Requirements:** Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

**Application Process:** A completed institutional scholarship application is required with a 300-word essay and a letter from a high school representative verifying participation in high school activities.

**Scholarship Amount:** Varies

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Scholarship work group. The work group will select and approve recipient(s).

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**CENTRAL ARIZONA COLLEGE FOUNDATION SCHOLARSHIP ARAVAIPA CAMPUS**

**Selection Process:** Awarded to outstanding “Freshman of the Year” at the Aravaipa Campus.

**Scholarship Amount:** Varies

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**MICHAEL CEPELLO SCHOLARSHIP**

**Eligibility Requirements:**
- Must be a Pinal County resident;
- Minimum cumulative GPA of 2.50;
- Must be enrolled in a minimum of 6 credit hours per semester;
- Program of study in behavioral health sciences.

**Renewal Requirements:** Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

**Application Process:** A completed institutional scholarship application is required with a 300-word essay.

**Scholarship Amount:** Varies
STUDENT SERVICES

Selection Process: The Central Arizona College Financial Aid Office will select and present applicant(s) to the Horizon Human Services Board members for selection of a recipient.

**THOMAS COLE ART SCHOLARSHIP**
Eligibility Requirements: Program of study in creative arts.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Scholarship Amount: Varies

Selection Process: Central Arizona College Creative Arts faculty will select the recipient(s) with concurrence from Tom Cole.

**COOLIDGE MOUNTED SHERIFF’S POSSE SCHOLARSHIP**
Eligibility Requirements:
- First priority – Direct descendants of Sheriff’s Posse members for any certificate or degree program.
- High school graduates participating in the CAC Rodeo Program pursuing a two-year certificate or degree, or;
- Pinal County graduates pursuing a degree or certificate in agriculture.

Renewal Requirement: Must maintain a minimum cumulative GPA of 2.0 after one semester of attendance at Central Arizona College.


Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present application(s) to the Financial Aid Scholarship work group. The work group will select and approve recipient(s).

**GEORGE FRIDELL MEMORIAL SCHOLARSHIP**
Eligibility Requirements: Student should exhibit financial need and promise of success as a student.

Renewal Requirements: Must maintain a minimum cumulative GPA of at least 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: A completed institutional scholarship application is required with a 300-word essay.

Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present an application to the Financial Aid Scholarship work group. The work group will select and approve recipient(s).

**ARTHUR AND MARY FAUL SCHOLARSHIP**
Eligibility Requirements: Program of study in agricultural sciences.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Scholarship Amount: Varies

Selection Process: Central Arizona College agriculture faculty will select the recipients.

**ZELDA (CHRIS) FERRYMAN SCHOLARSHIP**
Eligibility Requirements: Program of study in nursing.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: A completed institutional scholarship application is required with a 300-word essay.

Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present an application to the Financial Aid Scholarship work group. The work group will select and approve recipient(s).

**GUY GILBERT SCHOLARSHIP**
Eligibility Requirements: Casa Grande Union High School graduate. Must have participated in the agriculture program at CGUHS.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Scholarship Amount: Varies

Selection Process: The Casa Grande Union High School faculty in concurrence with CAC agricultural faculty will choose the recipient(s).

**JOANN HARTER MEMORIAL SCHOLARSHIP FOR NURSING**
Eligibility Requirements: Must be a second year nursing student.
Renewal Requirements: Must maintain a cumulative GPA of 3.0 while at Central Arizona College.


Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Scholarship work group. The work group will select an approved recipient(s).

TOM KUNZ VAQUERO SCHOLARSHIP

Eligibility Requirements: Must be a member of a recognized Central Arizona College athletic team. Must be a graduate of a Pinal County high school.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: Head coaches will submit a recommendation to include student’s academic and personal qualifications for this scholarship.

Scholarship Amount: Varies

Selection Process: The Athletic Director and President of the Vaquero Foundation will select recipient.

LIN LAURSEN SCHOLARSHIP

Eligibility Requirements: New and continuing students participating in athletics

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: Qualified students will be notified in writing by the Financial Aid Office of their eligibility and will be asked to complete the appropriate application materials.

Scholarship Amount: Varies

Selection Process: Lin Laursen and the Women’s Basketball Coach will select the recipient.

JAMES LEE MUSIC SCHOLARSHIP

Eligibility Requirements: Must be enrolled in music courses.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: A completed institutional scholarship application is required with a 300-word essay. Applications that include recommendations by former instructors will be given special consideration.

Scholarship Amount: Varies

Selection Process: James Lee and the Creative Arts Faculty will select the recipient.
CLARA LOVETT UNIVERSITY FOUNDATION SCHOLARSHIP

Eligibility Requirements:
• Must be a Pinal County high school graduate. (Excludes the Arizona State Prison Campus).
• Central Arizona College Graduate with a completion of 30 university parallel credits with a cumulative GPA of 3.0 at Central Arizona College and in university parallel courses taken at Central Arizona College.
• Enrollment in a minimum of 9 credits with a declared university major. University must be a regionally accredited institution offering courses at Central Arizona College Campus.

Renewal Requirements: Must maintain a minimum cumulative GPA of 3.0 after one semester of attendance at University. Submission of transcripts may be required.

Application Process: A completed institutional scholarship application is required with a 300-word essay.

Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present applicant(s) to the Pinal County University Foundation Executive Committee. The committee will select and approve recipient(s).

PINAL COUNTY UNIVERSITY FOUNDATION SCHOLARSHIP

Eligibility Requirements:
• Must be a Pinal County high school graduate with a 3.0 cumulative High School GPA. Submission of transcripts may be required. (Excludes the Arizona State Prison Campus).
• Must enroll in 12 credits in a declared major at Central Arizona College.

Renewal Requirements: Must maintain a minimum cumulative GPA of 3.0 after one semester of attendance at Central Arizona College.

Application Process: A completed institutional scholarship application is required with a 300-word essay.

Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present applicant(s) to the Pinal County University Foundation Executive Committee. The committee will select and approve recipient(s).

C.A. & NELLIE POPE SCHOLARSHIP

Eligibility Requirements: Program of study in art.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: A completed institutional scholarship application is required with a 300-word essay.

Scholarship Amount: Varies

Selection Process: Central Arizona College Creative Arts faculty will choose the recipient.
Renewal Requirements: Must maintain a minimum cumulative GPA of at least 2.50 after one semester of attendance at Central Arizona College.

Application Process: Submit a completed Central Arizona College Scholarship packet.

Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present application(s) to the Financial Aid Scholarship work group. The work group will select and approve recipients.

**DR. R.F. SCHOEN SCHOLARSHIP**

Selection Process: Awarded to outstanding “Freshman of the Year” at the Signal Peak Campus.

Scholarship Amount: Varies

**SODEXO SCHOLARSHIP**

Eligibility Requirements: Student(s) enrolled in either the Hospitality and Restaurant Management or Culinary Arts programs.

Renewal Requirements: Must maintain a minimum cumulative GPA of at least 2.50 after one semester of attendance at Central.

Scholarship Amount: Varies

Selection Process: Hospitality and Restaurant Management and/or Culinary Arts Programs will make the final selection.

**KATHLEEN VAN CLEFT INDIAN SCHOLARSHIP FUND**

Eligibility Requirements: Must be a Native American student.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Application Process: A completed institutional scholarship application is required with a 300-word essay.

Scholarship Amount: Varies

Selection Process: The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Scholarship Committee. The committee will select and approve recipient(s).

**ANN WILLIAMS SCHOLARSHIP**

Eligibility Requirements: Must participate in the Rodeo Program.

Renewal Requirements: Must maintain a minimum cumulative GPA of 2.50 after one semester of attendance at Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

Scholarship Amount: Varies

Selection Process: Recipient(s) will be selected by the head rodeo coach.

**Financial Aid Contact Information:**

Central Arizona College
Financial Aid Office
8470 N. Overfield Road
Coolidge, AZ 85228

Aravaipa Campus
520-357-2800

Signal Peak Campus
Student Services Center
520-494-5425
Fax: 520-494-5091

Superstition Mountain Campus
480-677-7708

E-Mail
finaid@centralaz.edu

More Information on Federal Financial Aid Programs:

Federal Student Aid Information Center
1-800-4-FED-AID (1-800-433-3243)
TDD Number 1-800-730-8913

Information on the World Wide Web
For more information on federal financial aid programs:
- [www.centralaz.edu](http://www.centralaz.edu) - Central Arizona College
- [www.fafsa.gov](http://www.fafsa.gov) - FAFSA on the Web
- [www.ed.gov](http://www.ed.gov) - Department of Education
- [www.finaid.org](http://www.finaid.org) - The Financial Aid Information Page
- [www.students.gov](http://www.students.gov) - Student gateway to the U.S. Government
- [www.studentaid.ed.gov](http://www.studentaid.ed.gov) - Federal Student Aid for students
- [www.nslds.gov](http://www.nslds.gov) – National Student Loan –Database System

Veterans Educational Benefits
Central Arizona College is approved for the enrollment of veterans, survivors and dependents. Veterans’ services are provided by the Records and Registration Office.
Students Right to Know

In compliance with federal regulations, Central Arizona College must report the graduation rate for all students, as well as graduation rates for those students who receive athletically-related financial aid by the sport they play. Copies of this information may be obtained in the Records Office or may be viewed on CAC’s website at www.centralaz.edu.

Application for Graduation

Students applying for graduation must file an Application for Graduation with the Records and Registration office. Please see the official Academic Calendar for application deadlines.

To ensure that students satisfy their graduation requirements, it is recommended that students file their application at least two semesters prior to the start of their final semester.

There is no fee to graduate from CAC. If a student wishes to obtain an official diploma and/or certificate they will be charged a fee. Please see the Tuition and Fee schedule for appropriate diploma and certificate fees.

Catalog Under Which a Student Graduates

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

- A semester in which a student earns course credit will be counted toward continuous enrollment. Non-credit courses, audited courses, failed courses, or courses from which the student withdraws do not count toward the determination of continuous enrollment for catalog purposes.
- Students who do not meet the minimum enrollment standard stipulated above during three consecutive semesters (fall/spring), and the intervening summer term at any public Arizona community college or university, are no longer considered continuously enrolled. They must meet requirements of the public Arizona community college or university catalog in effect at the time they are readmitted or of any single catalog in effect during subsequent terms of continuous enrollment after readmission.
- Students are not obligated to enroll and earn course credit during summer terms but summer enrollment may be used to maintain continuous enrollment status.
- Students admitted or readmitted to a public Arizona community college or university during a summer term must follow the requirements of the catalog in effect the

STUDENT RECORDS

Student records are maintained in the Records Office.

Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974 (FERPA) protects the privacy of educational records and gives students the right to review their educational records. In compliance with the Act, Central Arizona College has established policies and procedures for the review and correction of inaccurate or misleading information. Copies of the policies and procedures are available in the Records Office. Questions regarding the Act may be addressed to the Registrar.

Central Arizona College does not release any personally identifiable information about any student to a third party without the student’s written consent. Directory or “public” information may be released at the college’s discretion. Directory information includes name, address, dates of attendance, program of study, classification (first year or sophomore), status (full- or part-time), and participation in officially recognized activities and sports, degrees, awards received, and previous institutions attended by the student.

Currently enrolled students may withhold disclosures of directory information by submitting a written request to the Registrar. Such requests must be renewed on a yearly basis.

Effective March 19, 1997, colleges are required to provide directory information to the Department of Defense. Students may request in writing to withhold the release of this information. Requests should be sent to the Office of the Registrar, 8470 North Overfield Road, Coolidge, AZ 85128.

Veterans must follow the admission policies and procedures as outlined for all students in this catalog. Veterans must pursue an approved degree program or a qualified certificate program in order to be eligible for benefits. Transcripts from other institutions and for previous training must be forwarded to the Records and Registration Office to be evaluated and applied to the students’ programs of study.

Student who is honorably discharged from the armed forces and demonstrated evidence of intent to be a resident of Arizona qualifies for in-state residency for tuition purposes. It is the responsibility of the Veteran to ensure they are classified under the correct residency status.

The number of semester credit hours in which a veteran must enroll (and maintain enrollment) in order to receive benefits is as follows:

- Full-time: 12 or more credits
- 3/4 time: 9-11 credits
- 1/2 time: 6-8 credits
- less than 1/2 time: 1-5 credits

STUDENT SERVICES
Credit by Examination

Students currently or previously enrolled at Central Arizona College may earn a maximum of 30 credit hours through credit by examination. Students cannot receive credit by examination for a course that is equivalent to, or a lower level than, a course in which they are currently enrolled or have previously completed.

Credit by examination is offered on the principle that students may have previously acquired college-level learning in certain areas and that this knowledge may be demonstrated through an examination of course competencies. Instructors are not responsible for helping students develop this knowledge in order to prepare for an examination.

Should a student transfer to another institution, credits earned through credit by examination may be treated differently by that institution. Please refer to the AZ Transfer Examination Equivalency Guide (EEG) for credit by exam scores accepted by CAC and their CAC course equivalencies: [https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/wa/examquery](https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/wa/examquery)

Central Arizona College examinations for credit: With approval, students have the opportunity to earn credit by successfully completing an examination at the beginning of the semester. This option is not available for all courses. Check with the course instructor and division chair as to the availability of credit by exam.

Advanced Placement from High School:
These examinations are administered in various high schools each May and are designed to test competence in specific subject areas at the lower division college level. High school seniors may request the opportunity to participate in advanced placement examinations, in one or more areas of proficiency, through their high school counselor’s office. Credit may be earned for successfully completed exams upon receipt of an official score report.

College Level Examination Program (CLEP):
CLEP examinations are nationally developed and administered and provide an opportunity for students to demonstrate college level learning in a variety of subjects. Two types of examinations are available, general and subject examinations. Central Arizona College does offer these examinations and will award credit for successfully completed exams upon the receipt of an official score report.

Subject/General CLEP Examinations: These exams cover material typical of college level courses. A listing of available examinations, possible credits and passing scores is available in the Office of Academic Advising.

Credit by Evaluation:
With few exceptions, CAC does not evaluate or award credits for non-collegiate training or experience. Those exceptions, listed below, are treated as articulated credit and may be treated differently by another institution should the student transfer.

Military Experience: Credit will be awarded for military experience and training if it has been evaluated by the American Council on Education and published in either the Guide to the Evaluation of Educational Experiences in the Armed Services or an individual’s transcript from either the Community College of the Air Force or on the Army/AARTS transcript.

COTA: Central students completing the Correctional Officers Training Academy may be awarded up to 21.5 credits toward their A.A.S. - Corrections degree requirements.

Tech Prep
Pinal County high school students may complete Tech Prep study in a variety of courses. If the high school student enrolls in Central Arizona College within two years of graduation, s/he may apply for Tech Prep articulated credit. If a student enrolls at CAC more than two years after high school graduation, a competency examination may be needed to receive the Tech Prep credit. Students completing coursework in an approved Tech Prep program will be awarded Central Arizona College articulated course credit for such coursework provided the following guidelines are fulfilled:

- Student enrolls at CAC within two years after high school graduation; and
- Student has the high school send an official high school transcript to CAC to the attention of Records and Admissions.
• Student presents a written request for the articulated course credit to CAC Records and Admissions by either a form/certificate from the high school or a form generated from the Pinal County Tech Prep website.

Should a student transfer to another institution, credits earned for Tech Prep study may be treated differently by that institution. For more information concerning Arizona/Pinal County Tech Prep, please go to: www.pinaltechprep.org.

Conferring a Second Degree
Students who complete an Associate in Arts, Associate in Applied Science, Associate in Business, Associate in Science, or Associate in General Studies degree program at Central Arizona College may earn a second degree. Students who wish to obtain an additional degree must meet the following criteria:
• Students must have completed the requirements for an associate degree.
• Students must meet all the requirements of the second degree as outlined in the catalog in effect at the time of initial enrollment in the second degree program.
• Students must complete a minimum of 16 credits beyond those previously earned in the awarded degree.
• Credits applied to the second degree must be completed with grades of “C” or better.
• Student must apply through the normal graduation application process.
• The Associate of General Studies will not be awarded as a second degree.

ACADEMIC STANDARDS

Plagiarism
Central Arizona College recognizes the seriousness of plagiarism as an ethical issue. Blatant plagiarism results from dishonesty and/or infringement upon the rights of published authors. The first type of blatant plagiarism is turning in writing that is falsely represented as one’s own, including (but not limited to) a roommate or spouse’s writing, essays bought from the Internet, and passages copied from a research source such as a book, magazine, or website. Allowing another student to copy one’s work is a second type of blatant plagiarism. Students also are expected to avoid subtle plagiarism, which includes (1) turning in writing that uses paraphrased information from a source but fails to credit the source and (2) allowing someone else to make significant revision or editing changes to a student’s own writing. Penalties for plagiarism, according to Violations of Code of Conduct, can be severe, including failure of an assignment and failure of a course at discretion of instructor. The underlying message of the Central Arizona College plagiarism policy is that instructors are committed to encouraging writers to develop the confidence to express themselves in their own unique ways.

ATTENDANCE

Absence Policy

Excused Absences
Absences from class due to authorized participation in College sponsored activities will be considered as excused absences. Absences due to student or family member illness, death of family member, or other extenuating circumstances will be considered for excused absences. There will be no institutionally sanctioned penalty associated with excused absences. Designation of excused absences will be made by the Academic Dean.

The faculty or staff sponsoring an activity requiring students’ absence shall provide a written list of students to all faculty at least one (1) week prior to the absence. One list may be distributed to cover absences during an entire semester.

Unexcused Absences
Absences other than excused will be considered unexcused absences. Instructors may recommend to the Division Chair the administrative withdrawal of a student from class for excessive unexcused absences, and no refunds will be authorized. Students may appeal administrative withdrawals to the Academic Dean.

Make-Up Assignments and Exams
The student is responsible to make up any assignments or exams missed because of an excused absence. Arrangements for make-up assignments or exams must be made with the individual instructor prior to the absence. At the discretion of the instructor, a student may be denied the opportunity to make up assignments or exams missed because of an unexcused absence. Make-up assignments or exams for unexcused absences shall not be punitive in nature.

Punctuality
Students are expected to be prompt in attending each of their classes. Instructors are authorized to take appropriate actions, including recommending administrative withdrawal of a student from class because of excessive student tardiness.

Exception to Policy
An instructor wishing to employ a teaching strategy (such as contract learning) in which the attendance records required above are inappropriate, may propose to the Academic Dean a system which deviates from the above guidelines. If the Dean ascertains that the proposed system adequately monitors student activity and progress, or is in compliance with certain professional licensing and/or certification regulations, it may be implemented.

Non-Credit Classes
Attendance requirements in non-credit classes may be established by the instructor. These requirements will not be more stringent than those adopted for credit granting classes.

**Attendance Requirements**

Central Arizona College students are expected to attend all class meetings.

**Grading Information**

Grades are designed to reflect content mastery and the student’s performance in meeting the course objectives.

- A - Excellent Work (4 points)
- B - Good Work (3 points)
- C - Average Work (2 points)
- D - Below Average Work (1 point)
- F - Failing Work (0 points)
- I - Incomplete
- W - Withdrew
- AU - Audit
- CR - Credit (see explanation below)
- NC - No Credit (see explanation below)
- S - Satisfactory (see explanation below)
- U - Unsatisfactory (see explanation below)

**Incomplete (I) Grade**

Students who, because of circumstances beyond their control, cannot complete a course in the time allotted, may be given an extension and temporary grade of Incomplete (I) by the instructor. When electing an Incomplete Grade, the student is forfeiting the option of a withdrawal from the class.

If a grade of Incomplete is given, the instructor shall state in writing on an Incomplete Grade Contract form, the activities necessary to complete the course. The contract will include the time period (not to exceed seven months) allowed for completion of the course, and the letter grade which the incomplete grade will automatically revert if the work is not completed. The contract will be signed by both the instructor and the student. Each will receive a copy. A copy of this contract must be submitted with the final grade roster for that course.

The Incomplete Grade Contract must be completed no later than seven months after the end of the term in which the incomplete grade was given. Students should not re-register for the course to complete the contract.

**Audit (AU) Grade**

Students may register for audit at the time of registration. Auditing students register and pay tuition and fees. No changes from audit to credit (or from credit to audit) are permitted after the student has registered. Students do not receive credit in courses for which they enroll as audit. Audit (AU) grades do not count in the grade point average calculation.

**Credit/No Credit**

Students receive a credit (CR) or no credit (NC) grade for self-interest courses numbered between 70-79. Credit (CR) signifies successful completion of the course, but the credit hours do not count toward completion of any degree or certificate listed in this catalog, nor does the grade count in the grade point average calculation. A grade of NC does not count in GPA calculation.

**Satisfactory/Unsatisfactory**

Satisfactory (S) indicates the student has a “C” or better work in class. The grade is not computed in the GPA.

Unsatisfactory (U) indicates the student has earned a “D” grade or failed the class. The grade is not computed in the GPA.

If a course description in the College Catalog indicates a course may be taken for a satisfactory/unsatisfactory grade, the student may elect the satisfactory/unsatisfactory option. This must be done in writing in the Records and Registration Office no later than the deadline to add classes as published in the appropriate schedule of classes. The deadline to add classes also is the deadline to change from a satisfactory/unsatisfactory to regular A-F grading or audit status.

Students electing the satisfactory/unsatisfactory option should be aware that:

- Once awarded, the satisfactory or unsatisfactory grade may not be changed to a letter grade.
- The satisfactory grade is equivalent to a grade of “C” or better; however, neither the satisfactory nor the unsatisfactory grade is calculated in the GPA.
- The satisfactory grade may carry credit toward graduation or toward meeting professional requirements. A maximum of 12 credit hours of S grades may be applied toward a degree, and a maximum of 25 percent toward a certificate.
- The satisfactory grade shows on the transcripts as credit hours earned for the semester and will be used toward determining financial aid eligibility.
- The unsatisfactory grade shows on the transcript but not as credits earned for the semester; therefore, the unsatisfactory grade does not count toward meeting the hours required of a full-time student or toward determining financial aid eligibility.
- Courses taken for satisfactory/unsatisfactory credit for which a grade of satisfactory is earned will satisfy prerequisites and co-requisites; a grade of unsatisfactory does not fulfill prerequisites and co-requisites.
- It is the student’s responsibility to verify the transferability of satisfactory grades. Students are cautioned that satisfactory grades may not be accepted for transfer credit to other post-secondary institutions; some may translate the unsatisfactory grade as failing.

**Calculation of Grade Point Averages:**

Grade point averages will be calculated for each student at the conclusion of each term. When a course is repeated, the highest grade will be included in the GPA. A “Report Course Form”
Computing Your G.P.A. Worksheet
Use the following formula to compute your grade point average:

Grade points divided by the number of hours equals the grade point average. Grade points can be determined by multiplying the credit hours for a course by the grade as follows:

\[ \text{Grade} \times \text{Credit Hours} = \text{Grade Points} \]

For Each Class

1. Number of Hours for Each Class
2. Number of Points for Each Class
3. Total Points
4. Total Number of Hours
5. GPA

The Formula:

\[ \frac{\text{Total Points}}{\text{Total Number of Hours}} = \text{GPA} \]

Grade Change/Appeal
Grade changes are not allowed except in the case of faculty error in reporting the grade. Such changes must be submitted within eight weeks of the end of the class.

Academic Progress
Academic progress is a system of monitoring students to achieve an educational objective. Academic probation is a process to:

- Identify and alert students who are experiencing difficulty in making satisfactory progress in their coursework.
- Help students reassess their objectives and to consider methods necessary to achieve educational success.

Academic Probation
Students who have accumulated 12 or more semester credit hours and have a cumulative GPA of less than 2.0 will be placed on academic probation. Academic probation students whose following semester grade point average is 2.0 or above, but cumulative grade point average remains below 2.0, will remain on academic probation. Students placed on academic probation status must comply with the recommendations outlined in the Academic Probation Agreement Plan designed in collaboration with a professional academic advisor.

Students placed on academic probation will be notified via postal mail of their standing. It is the responsibility of the student to ensure the institution has updated contact information on file.

Academic Suspension
Students on academic probation status will be suspended from the college when the semester or cumulative GPA is below 2.0 in a subsequent semester. Students who are suspended a first time will be eligible for readmission after one semester has elapsed since the dismissal. Students who are suspended a second time will not be eligible for readmission until one year has elapsed since the suspension. Upon readmission after a suspension, students will be on academic probation until their cumulative GPA is 2.0 or higher.

Students who have been suspended may submit an Academic Suspension Appeal to the Designated Academic Suspension Official to request reinstatement. An appeal for reinstatement may be granted if the action is warranted due to extenuating circumstances beyond the control of the student. Students who have been granted reinstatement will be placed on academic probation status until their cumulative GPA is 2.0 or higher. Students are encouraged to meet with an academic advisor to obtain an Academic Suspension Appeal form, support and guidance to complete the process.

Students placed on academic suspension will be notified via postal mail of their standing. It is the responsibility of the student to ensure the institution has updated contact information on file.

Academic Renewal Guidelines
A student returning to Central Arizona College after an absence of at least 3 years may petition the Registrar to have specific grades excluded from the computation of the cumulative grade point average according to the following guidelines:

- The student must complete 12 or more credits with a grade point average of 2.0 following re-enrollment after the three-year absence.
- Only grades of D, F are eligible for renewal.
- Academic renewal may be granted only once during a student’s enrollment at Central.
- Grades remain on the student’s transcript but are not computed in the cumulative GPA.

Academic Honors Recognition
Dean’s and Honors List
Students will be placed on the Dean’s List with a 3.5 GPA or above. Students will be placed on the Honors List with a GPA of 3.00-3.49. Both lists require:

- Completion of 12 or more credits or;
- Completing 12 credits and enrolled in at least 6 credit hours each term.
Graduation With Honors
Students awarded an associate degree with a cumulative GPA of 3.5 or above will be awarded the distinction of “Graduating with Honors.” An honor seal will be posted to the diploma.

Phi Theta Kappa
Phi Theta Kappa, the international honor society for community college students, is open to students who have a grade point average of 3.50 or better and have completed 12 college-level credit hours at CAC. Through this organization, students have an opportunity to develop leadership skills and to perform service to the college, campus and community.

Honors Program
The honors program is available for academically exceptional students. It encourages students to question, research, discover and debate ideas in various curricular areas. The insight gained through individual probing will be shared with professors and students to broaden the student’s awareness in a variety of areas. The scholarly inquiry in this program will provide a strong base for a lifelong quest for knowledge and excellence.

Goals of the Program
The following goals have been established for the Honors Program:
- To extend the curriculum offering academically talented students intellectual opportunities beyond those found in the normal curriculum;
- To provide recognition for exceptional academic achievement;
- To provide a program to assist honors students in successfully transferring to honors programs at other institutions;
- To provide the greatest efficacy in learning through small classes and individualization;
- To provide a structured setting in which academically talented students can socially interact with one another and faculty.

Scholarships
The honors scholarship may be used to cover registration fees, tuition, books and supplies. The student must maintain a 3.5 cumulative GPA and will receive a similar scholarship the second year of their program.

Admission to the Honors Program
Applicants should meet any one of the following criteria:
- 3.5 grade point average at high school graduation;
- Top 5 percent of high school graduating class;
- 30 on ACT;
- 2000 on SAT;
- 95 percent on GED;
- 3.5 grade point average at Central Arizona College with a minimum of 12 transferable credits.

In addition to the above criteria, prospective applicants must provide:
- Two current letters of recommendation from educators;
- A 250-word statement of the applicant’s goals and his/her expectations of the Honors Program.

Retention in the Honors Program
- Students must maintain a 3.5 GPA for regular status.
- Students may be placed on probation for one semester if grade point average is between 3.25 and 3.5 and may be readmitted to regular status when the GPA returns to 3.5 or above.
- Students must have received a grade of “B” or better in all previous honors courses.

Graduation from the Honors Program
- 3.5 grade point average with a B or better in all honors courses and in each course taken for honors credit;
- 6 hours of completed colloquia;
- 9 hours of courses taken for honors credit (from 3 different divisions);
- 3 hours honors seminar.

Bookstore
The Maricopa, San Tan, Signal Peak and Superstition Mountain campuses provide full-service bookstores to accommodate students with textbooks, supplies and clothing. Evening hours are posted during the first two weeks of class and book buy back week, which is always scheduled during the week of finals.

Bookstore Refund Policy
During the regular semester the refund schedule for textbooks begins the first day of class and extends to the last day of the official drop/add period. If new books are marked with writing or highlighting, the student will be refunded a prorated price. Shrink-wrapped books will also be refunded a prorated price if opened. There will be no refund on books with disks if the seal on the disk is broken. A receipt must accompany all returned items.

SERVICES
Central Arizona College provides equal opportunity in employment and educational programs and activities. Discrimination is prohibited on the basis of race, color, religion, sex, age, disability, national origin, military status or genetic test information.

College & Career Transition Center
The College and Career Transition Center (CCTC) is located in the Gloria R. Sheldon University Center on the Signal Peak Campus. The CCTC provides comprehensive guidance to students as they pursue future college and career aspirations. The CCTC is committed to providing resources, information
and services for students to transition to the workplace and to further their academic studies.

**Career Transitions**

**Career Exploration**
This is an opportunity for students to explore various fields of study and possible career options. Career exploration can be done via the online assessment tool or using the numerous printed resource materials available.

**Internships**
Various internship opportunities are available to gain practical hands-on experience in conjunction with coursework. The internship will give the student an opportunity to research career options. Internship opportunities are available via the web-based job board.

**Student Employment**
Student employment provides equitable hiring practices for all students seeking employment whether on- or off-campus, full-time, part-time, temporary or seasonal. This is an opportunity to gain practical work experience and knowledge in a specific career-related field. All available job opportunities can be viewed via the web-based job posting board, available 24 hours a day, seven days a week.

To view available jobs, students must first register. Registration for the web-based job board is simple, just go to **student resources** and scroll down to **Career and Student Employment Services**. Choose **student employees** then select **student employment process**. Once in the page, click on “**full-time/part-time job posting**” and complete the registration. In order to view the positions, you must provide a valid e-mail address that you check on a regular basis. Just follow the instructions to complete your registration. Should you require more information or assistance, send an e-mail to studentjobs @centralaz.edu or call 520-494-5424 or 1-800-237-9814, ext. 5424.

Additionally, students can attend workshops to assist with the creation of cover letters, resumes and interview skills.

**Employment Eligibility Requirements**
There are three employment options available for students. Each employment option has different eligibility requirements. All students are required to complete the Free Application for Federal Student Aid (FAFSA) prior to seeking employment for an on-campus position.

**College Federal Work Study Program**
The Federal Work-Study Program is a federally funded program designed for students who have demonstrated financial need using the Free Application for Federal Assistance Aid (FAFSA). Students who are employed under this program must meet the additional eligibility requirements:

- Must be enrolled in an eligible program of study.
- Students must be enrolled in at least six (6) credits to qualify.
- Must maintain Satisfactory Academic Progress. More information is available under the Financial Aid section.
- Students who are employed part-time by the department or division within the college and do not have to show financial need. The student must be enrolled in at least six (6) credits to qualify.
- Students seeking employment options that are not available on campus. Off-campus employers post available positions on the web-based job board and students may apply for positions at their discretion. Off-campus job wages may be higher than on-campus positions.

**College Funded Student Employee**
All students can apply for this type of employment option. Students are employed part-time by the department or division within the college and do not have to show financial need. The student must be enrolled in at least six (6) credits to qualify.

**Off-Campus Employment**:
There are no enrollment requirements for positions that are located off-campus. This option is available for students seeking employment options that are not available on campus. Off-campus employers post available positions on the web-based job board and students may apply for positions at their discretion. Off-campus job wages may be higher than on-campus positions.

**Customer Service and Technical Support**
The Customer Service and Technical Support (CSTS/Help Desk) provides a central location for customer and technical support. As the first point of contact for technical support, CSTS offers a wide variety of assistance, which includes resetting passwords, assistance with the use of the Online Student Services, and troubleshooting Blackboard, CAC e-mail, and Internet Explorer. For students using Blackboard, CSTS can provide a copy of the Handbook for Online Learners and information about the Student Hands-On Orientation to Online Learning (SCHOOL). Also, whether you need to find out how to register for classes or where to go for tutoring, CSTS can point you to the right college department.

There are several methods to access assistance:
Phone: 520-494-5111 or 1-800-237-9814, ext. 5111
Email: centralhelpdesk@centralaz.edu, Central Arizona College Website: Help and FAQs provide a list of frequently asked questions. See front page of the CAC website.

**Service Desks**:
- Signal Peak Campus in the M Building (Student Services). Open from 8 a.m. to 8 p.m. Monday through Thursday and Friday from 8 a.m. to 6 p.m.
- Superstition Mountain Campus in the Teaching and Learning Center (TLC). Open from 8 a.m. to 6 p.m. Monday through Friday.
- Aravaipa Campus in the A Building. Open from 8 a.m. to 6 p.m. Monday through Friday.

**Food Services**
The Signal Peak, Superstition Mountain and Aravaipa campuses offer on-campus food service. At the Signal Peak Campus, meals are served seven days per week for residence hall students. The cafeteria, snack bars, and simply to go at
Call

The cost of the GED test is $90. Retests are $15 per subject. Call 520-494-5042 to schedule an appointment.

Meal Plan Options
Living On Campus
Students planning to live on campus must purchase a 19 meal per week meal plan. The fee for this meal plan is included as part of the room and board fees assessed through Residence Life. Prices are listed on the Central Arizona College home page: Home>Admissions>Paying for College.

Catering
Catering service may be arranged by contacting the Catering Manager at 520-494-5034 at the Signal Peak Campus.

SoGo Cash Card
SoGo Cash Cards may be pre-loaded with any amount depending on frequency of use. The SoGo Cash Card can be used at any food service location at both the Signal Peak Campus and Aravaipa Campus.

SoGo Cash Cards may be activated and loaded at the register or online. The minimum amount required to activate at any register is $5.00, the minimum amount required to activate online is $25. The minimum amount required to re-load at any register or online is $25.00. For more information, visit www.sogocashcard.com.

Intercollegiate Athletics
Women’s sports at the Signal Peak Campus include basketball, softball, track & field, cross country, volleyball and rodeo.
Men’s sports at the Signal Peak Campus include basketball, baseball, track & field, cross country, and rodeo.

Central Arizona College is a member of the National Junior College Athletic Association (NJCAA) and the Arizona Community College Athletic Conference (ACCAC). Central Arizona College has one of the most successful athletic programs in the ACCAC and NJCAA. It has posted 36 national championships and numerous second- and third-place finishes over the past four decades.

Individuals desiring information concerning Central Arizona College’s intercollegiate athletic programs under the Equity in Athletics Disclosure Act of 1994, Section 360B of Publication L.103-382, may obtain this information from one of the following offices: Chief Student Affairs Office or the Athletic Department.

Athletic Records
National Championship teams and year:
- Baseball 1976, 2002
- Women’s Cross Country 2005, 2009
- Women’s Rodeo 1978, 1979
- Volleyball 1983

The George Young Activity Center is used for all home basketball games. Outdoor athletic facilities include: an eight-lane all-weather track & field, baseball and softball fields, rodeo arena, tennis courts, and a 50-meter swimming pool. For more information, contact the athletic department at 520-494-5300 or 800-237-9814, ext. 5300.
Learning Support Department

Central Arizona College provides free tutoring for students in most academic areas of study through the Learning Support Department. The tutors work with students individually and/or in small groups to address the various learning needs of students. In addition, tutors use several modalities including, but not limited to, face to face, online, interactive television, email, and phone to assist students in their academic endeavors. The Learning Support Department via the Learning Centers has computerized tutorials for many CAC courses as well as computer-assisted instructional programs for coursework or independent study. For further information, contact the Learning Center at the Superstition Mountain, Aravaipa or Signal Peak campuses.

Library

The library has facilities located at the Maricopa, San Tan, Signal Peak, Superstition Mountain and Aravaipa campuses. Librarians are available for both online and in-person assistance with student research needs. The library also offers research workshops throughout the semester. The library facilities have computer workstations, Wi-Fi, and study areas. Online journal and eBook resources are available to students 24 hours a day. The library’s print book collection contains over 65,000 volumes district-wide, includes government resources, and can be searched through the library’s online catalog or by asking library staff for assistance.

Disability Resource Services

Disability Resource Services is dedicated to supporting and empowering students with disabilities by providing self-advocacy opportunities and independence.

Services may include, but are not limited to:
• Assistive Technology
• Note-taking Services
• Testing Accommodations
• Sign Language interpreting
• Referral to Campus and Community Resources
• Advocacy with Faculty and Staff

Obtaining Services
In order to receive accommodations, students must provide written documentation of their disability to the Disability Resource Services office. Once the documentation has been submitted the student may make an appointment with Disability Resource Services staff. To reach the Disability Resource Services Office please call 520-494-5404, or 800-237-9817 ext 5409, or visit the Signal Peak Campus office in M115.

Concern or Complaint
If you have a concern or complaint about a disability related issue, please contact the Disability Resource Services Coordinator at 520-494-5409. If you need additional assistance please contact the Assistant Dean of Student Affairs at 520-494-5420.

TRIO Student Success Program

The TRIO Student Support Services program, located on the Signal Peak Campus, is designed to assist first generation, low-income students and students with disabilities by providing support and services throughout their academic career and transition to a university. Services include personalized academic advising, peer/faculty mentoring, monitored academic tutoring, cultural events, scholarship opportunities, and much more. The goal of the program is to increase the retention, graduation and transfer rates of TRIO participants. For more information visit the TRIO webpage at www.centralaz.edu/trio or call (520) 494-5060. TRIO is on Facebook and Twitter at CAC TRIO.

TRIO Summer Bridge

The Summer Bridge program is an exciting and valuable week-long college orientation program designed to give you an edge in succeeding at CAC. The program takes place on the Signal Peak Campus and is for recent high school graduates or GED recipients. Students live in the Residence Halls, go through a number of mini classes, participate in discussion groups, join in many activities and explore college life. It is a very full week where you will meet a number of students and interact with many of the faculty and staff at CAC.

For more information please visit the TRIO Summer Bridge website at www.centralaz.edu/summerbridge or call 520-494-5060.

Residence Life

The Signal Peak Campus offers an on-campus living and a learning environment with space for approximately 350 students. The Residence Life Staff provide programs that promote personal growth and development, cultural, diversity, and community responsibility. These programs work towards enhancing the student’s overall college experience.

For more information about Residence Life, and to obtain a copy of the housing application, please visit the Residence Life website at: Home > Student Resources > Residence Life or contact the office directly at 520-494-5470 or via e-mail rlstaff@centralaz.edu. If you wish to live in on-campus housing, you must officially apply to be considered.
STUDENT ENGAGEMENT AND ACTIVITIES

Student Engagement and Activities provide students a variety of involvement opportunities. Co-curricular programs include leadership, clubs and organizations, and student activities.

Student Leadership Organization

Student Leadership at CAC is an important student organization that responds to student needs and issues. The Student Leadership Organization (SLO) develops events and activities to increase student involvement on campus and within the local communities.

Students may participate in SLO as a coordinator or volunteer.

There are many benefits to serving as a student leader:
- Scholarships
- Prescott Leadership Camp
- Leadership Training & National Conferences
- Community Involvement
- Host the Annual Student Awards Ceremony
- National recognition for leadership excellence

Student Activities

Student Leadership and Clubs/Organizations provide on-campus activities. Many activities include social, cultural, service, awareness and academic programs. Student Activities programs are FREE and open to all students, faculty, and staff. Students receive a weekly list of campus programs via The Vaquero Vibe.

Student Clubs and Organizations

Student Clubs and Organizations (SCO) are organized student groups with a common interest and a shared goal. Clubs and Organizations provide students opportunities for social interaction, recreation, leadership training and enhancement of career-academic interests. Each group has a faculty or staff advisor to guide and support the student group. There are a variety of opportunities to be involved in leadership, social, service, religious, educational, ethnic, and cultural clubs and organizations. Not all clubs are available at each campus. For more information, check our webpage at www.centralaz.edu/activities.

Campus Leadership Opportunities
- Art Club
- Central Arizona Student Nurses Association (CASNA)
- Campus Crusades of Christ
- Funny Biz
- Health Occupations Student of America
- Jazz Choir Club
- Phi Theta Kappa International Honor Society
- Business Clubs (Collegiate DECA and PBL)
- The Science Technology Engineering and Math (STEM)
- Superstition Mountain PRIDE: LGBTQ & Straight Alliance
- Students Taking Action Now (STAN)
- TRiO Peer Mentors
- New Student Orientation Leaders
- Resident Student Leaders
- Student Leaders
- Intramurals
Student Handbook
STUDENT COMPLAINT PROCESS

Student Code of Conduct
Central Arizona College (CAC) expects students to follow a code of conduct that emphasizes important values for both the classroom and the workplace.

If you have witnessed an incident on-campus (or off-campus at a College sponsored event) or have been involved in an incident, please use the online Incident Report Form located at www.centralaz.edu/incidentreport. The college provides this form to alert the appropriate office that an incident has occurred and to begin an investigation.

Reports of crimes should always be made directly to law enforcement. The incident report is in addition to, and not in lieu of, a police report.

Student Concern or Complaint with a Specific Office
CAC promotes an open educational environment. The college encourages all students and community members to first direct their complaints and concerns to the faculty, staff, or administrator specifically involved. If the situation cannot be remedied at this level the student should contact the faculty, staff or administrator’s immediate supervisor. Contact the Help Desk at 520-494-5112 for directory information. In addition, the student may complete the concern form at www.centralaz.edu/concern and their concern will be followed up by the appropriate college administrator.

Student Grade or Course Instructor Concern
Students who have a question or concern regarding their grade(s) or the course instructor should first speak to their instructor. If an agreement is not reached between the student and/or instructor, the student may then contact the Academic Chair or Director responsible for that particular course or academic program to share their complaint. If the issue is not resolved at this level, the student may appeal to the appropriate Academic Dean. Contact the Help Desk for directory assistance at 520-494-5112.

Sexual Harassment
Central Arizona College seeks to foster a community environment in which all members respect and trust each other. CAC has a strong policy prohibiting the sexual harassment of one member of the college community by another. Inquiries concerning the application of this policy or the filing of a specific complaint may be referred to CAC’s Title IX Coordinator, Dr. James D. Moore, Vice President of College Affairs, (520) 494-5406, at james.moore7@centralaz.edu.

Concern or Complaint regarding any Disability Accommodation (non-employee related)
If you have a concern about a disability related issue, please contact the Disability Resource Services Coordinator at 520-494-5409 or reference the Discrimination Complaint Process. If you need additional assistance please contact the Dean of Students at 520-494-5341.

An individual may file a discrimination complaint with the Office for Civil Rights, by visiting: http://www2.ed.gov/about/offices/list/ocr/docs/howto.pdf

Title IX Statement
Central Arizona College has policies relative to Title IX that support nondiscrimination and prohibit discriminatory behavior including sexual harassment and sexual violence. Such polices apply to all educational programs, services, activities, and facilities. Inquiries concerning the application of Title IX policies or the filing of a specific complaint may be referred to CAC’s Title IX Coordinator, Dr. James D. Moore, Vice President of College Affairs, (520) 494-5406, at james.moore7@centralaz.edu.

COLLEGE POLICY

STUDENT CODE OF CONDUCT

The Student Code of Conduct (the Code) sets forth standards that are expected of all students and is developed as a means of implementing fair and consistent standards of student conduct. The code outlines students’ rights and responsibilities and the College’s expectations with respect thereto. Every student is expected to be aware of the obligations and responsibilities imposed by the Code and comply with it.

Prohibited conduct includes, but is not limited to the following:

1. Conduct in violation of any offense prohibited by state or federal law. Any attempt to commit one or more acts of prohibited conduct may be sanctioned. Any attempt to conceal an act of prohibited conduct is subject to sanctions to the same extent as completed acts.

2. All forms of student academic dishonesty, including but not limited to, cheating, inventing facts or sources, causing others to be dishonest, or representing another’s words as one’s own.

Cheating is defined as the use or attempted use of information, academic work, research or property of another as one’s own. Cheating includes, but is not limited to, plagiarism, sharing knowledge during an examination, the unauthorized use of notes or other materials in an examination, or the willful disobedience of testing rules.

3. Endangering, threatening, or causing physical harm to any member of the College community or to oneself or causing reasonable fear of such harm.
4. Violating the terms of any disciplinary action imposed for an earlier violation of the student code of conduct or other governing board or College rules.

5. Violation of the Declaration of Civility and other published rules that may be adopted by the governing board or by the College.

6. Furnishing false information, including false identification, or failure to provide information to the College or to any College employee or agent, including campus police officers and other agents, acting in good faith.

7. Initiating, causing or contributing to any false report, warning or threat of fire, explosion or other emergency.

8. Failure to comply with the directions of the College officials or agents, including campus police officers, acting in good faith and in the performance of their duties.

9. Forgery, inventing facts or sources, unauthorized changes to any College document, record, or identification, including but not limited to, electronic software, data and records.

10. Unauthorized presence in or unauthorized use of College property, resources or facilities.

11. Unauthorized access to, disclosure of, or use of any College document, record, or identification, including but not limited to electronic software, data, and records. Misuse of college computing facilities, telecommunications, networking systems, associated facilities, resources or equipment as outlined by College Policies.

12. Interfering with College or College-sponsored activities, including but not limited to classroom-related activities, studying, teaching, research, intellectual or creative endeavor, administration, a service or the provision of communication, computing or emergency services.

13. Misrepresenting oneself or an organization as an agent of the College.

14. Possession of property the student knows or has reason to believe may be stolen.

15. Misuse, theft, misappropriation, destruction, damage, or unauthorized use, access, or reproduction of property, data, records, equipment or services belonging to the College or belonging to another person or entity.

16. Violation of College Policy governing alcohol, including consumption, distribution and/or unauthorized sale or possession of alcoholic beverages. Alcohol is any fermented and/or distilled liquor or substance reasonably believed to be or portrayed by the student as fermented and/or distilled liquor. No alcohol is allowed on campus. This applies to all students, visitors or guests. All students present in an environment where they are aware that alcohol is possessed and/or consumed, are considered to be in violation of the rule. It is not acceptable to be in an area where alcohol is present even if you “are not drinking.”

17. Unauthorized use, transfer or possession of any controlled substance. A controlled substance is:
   a. Alcohol
   b. Any narcotic or dangerous drug
   c. Glue, paint, or any intoxicating substance that may excite or stupefy an individual or diminish the individual’s physical or mental capacity when possessed for such purpose
   d. Any other potential mind-altering substance including marijuana
   e. Drug paraphernalia, as defined by A.R.S. 13-3415
   f. Any other substance enumerated in A.R.S.13-3401, as well as any imitation controlled substance listed in A.R.S. 13-3451. Medication shall not be considered a controlled substance so long as the medication is either (1) prescribed by a physician and used in accordance with the prescription, or (2) a nonprescription drug as defined in A.R.S. 32-1901(49) when used in the manner intended by the medication.

18. Gambling as prohibited by law as defined in A.R.S. §§13-3301 through 13-3312.

19. Offering, soliciting or accepting a bribe to influence the outcome of an athletic event.

20. There shall be no hazing, solicitation to engage in hazing, or aiding and assisting another who is engaged in hazing of any person enrolled, accepted for enrollment, or intending to enroll in the College. For purposes of this section, a person shall be considered a “student” until graduation, transfer or withdrawal from the College.

Hazing means any intentional, knowing or reckless act committed by a student, whether individually or in concert with other persons, against another student, and in which both of the following apply:
   a. The act was committed in connection with an initiation into, an affiliation with, or the maintenance of membership in any organization that is affiliated with an educational institution.
   b. The act contributes to a substantial risk of potential physical injury, mental harm or degradation, or causes physical injury, mental harm or personal degradation.

See A.R.S. 15-2301.

Hazing also includes any action undertaken or situations created by any individual, group of individuals, or organization, in which a student is voluntarily or involuntarily subjected to activities that have the potential to harass, intimidate, impart pain, humiliate, invite ridicule, cause undue mental or physical fatigue or distress, or cause mutilation, laceration or bodily injury. It is no defense to a violation of this policy if the victim consented or acquiesced to hazing.

21. Engaging in harassment or repeated unwanted conduct. Harassment is conduct toward an individual that would disturb or annoy a reasonable person under similar circumstances. This
22. Engaging in conduct intended to, or that results in discrimination based on race, color, religion, sex, age, disability, national origin, military status or genetic test information.

23. Interfering with any campus disciplinary process, including but not limited to tampering with physical evidence or inducing a witness to provide false information or to withhold information.

24. Engaging in any sexual offense, including but not limited to, sexual assault, public sexual indecency or indecent exposure. Sexual assault includes any unwanted sexual contact, and may involve unreasonable coercion, physical violence, or the threat of harm to the victim. Sexual harassment is any unwelcome sexual advance, request for sexual favors or other verbal, written or physical conduct of a sexual nature that substantially interferes with a student’s performance or creates an intimidating or hostile environment.

25. Use, possession, display or storage of any weapon, dangerous instrument, explosive device, fireworks, or dangerous chemical unless specifically authorized by campus police.

26. Attempting to commit an infraction of this policy, regardless of whether or not the attempt is or possibly could have been successful.

27. Associating or participating in any infraction of this policy or the entering into an agreement with one or more individuals to commit an infraction of this policy where the infraction is ultimately committed or attempted by any one or more of the individuals.

28. Inducing or soliciting another to commit an infraction of this Policy or providing assistance to another knowing that it likely will result in an infraction of this Policy.

29. Attempting to commit arson includes attempting to burn any property, to start a fire or explosion, or to promote the continuation of a fire or explosion.

30. Engaging in conduct that is reasonably likely to disrupt, or that does disrupt, any College function, process or activity.

31. Engaging in vulgarity. Vulgarity is the repeated use of offensive or repulsive language that is of such a nature as to create an intimidating, hostile or offensive environment.

32. Threatening an educational institution as set forth in A.R.S. 13-2911 including, but not limited to, disrupting any College class, event or activity.

33. Engaging in gang activity. A gang is a group of three or more people who: (1) interact together to the exclusion of others; (2) claim a territory or area; (3) have a name; (4) have a rival/enemies; and (5) exhibit antisocial behavior often associated with crime or a threat to the community. Gang activity includes, but is not limited to, wearing, carrying or displaying gang paraphernalia, exhibiting behavior or gestures that symbolize gang membership, causing and/or participating in activities that intimidate or adversely affect the educational activities of another student or the orderly operation of the College.

**STUDENT CODE OF CONDUCT**

I. Introduction

A. Purpose of Code

Central Arizona College is an educational institution committed to excellence in learning, student achievement and success, leadership, and service to community, and to providing a quality environment for achieving personal excellence and growth. The Student Code of Conduct (the Code) sets forth standards that are expected of all students and is developed as a means of implementing fair and consistent standards of student conduct and due process procedures. The Code outlines students’ rights and responsibilities and the College’s expectations with respect thereto. Every student is expected to be aware of the obligations and responsibilities imposed by the Code and comply with it.

B. Application of the Code

The Code is intended to regulate the conduct of an individual student or student organization, and/or to provide the ability to discipline a student or student organization. A student is subject to this Code whenever the student (1) is on College premises, (2) at a College-sponsored event, (3) is traveling with a College team or organization or as a representative of the College, or (4) has engaged in misconduct that is in any other manner College-related or affects the order or operation of any College function whether or not such conduct occurs on College property or at a College-sponsored activity. For the purpose of this paragraph, the term “College premises” includes all property owned or controlled by the College.

C. Policy Prohibiting Misconduct

A student shall not commit or attempt to commit, induce or solicit another to commit, or conspire to commit, any of the infractions listed in Policy 589, Student Code of Conduct (Prohibited Conduct). Any attempt, inducement, solicitation or conspiracy to commit any infraction by a student shall be treated, for the purpose of imposing discipline, as if the student actually committed the infraction.

D. Authorized Sanctions

The Chief Student Affairs Officer or designee may impose one or more of the following sanctions for any violation of the Student Code of Conduct:

**Expulsion:** Permanent separation of the student from the College. An indication of expulsion may appear on the student’s transcript. The expelled student will not participate in any College-sponsored activity and will be barred from College property.
Suspension: Temporary separation of the student from the College for a specified period of time or until specific conditions, if imposed, have been met. An indication of suspension may appear on the student’s transcript. Except where prior approval has been granted by the Chief Student Affairs Officer/Designee, a suspended student will not participate in any College-sponsored activity and will be barred from the College campus.

Residence Hall Eviction: The College may revoke the student’s Residence Hall License for conduct code violations by giving not less than one day’s written notice to the student. Notice shall be served personally upon the student or be posted in some suitable place upon the housing facility of the student.

Disciplinary Probation: Removal of the student from good disciplinary standing. Additional restrictions or conditions also may be imposed. Probation will last for a stated period of time and until specific conditions, if imposed, have been met. Any violation of these rules, the conditions of probation or other College rules committed during the probationary period will subject the student to further discipline, including suspension or expulsion.

Warning: A written statement advising the student that a violation of the Student Code of Conduct has been committed and that further misconduct may result in more severe disciplinary action.

Administrative Hold: A status documented in the registrar’s official file which precludes the student from registering, from receiving transcripts, or from graduating until clearance has been received from the Chief Student Affairs Officer/Designee in accordance with College rules.

Restricted Access to College Property: A student’s access to the College property, including but not limited to research, communication and computing resources, may be restricted for a specified period of time or until certain conditions are met.

Organizational Sanctions: Sanctions for organizational misconduct may include revocation of the use of College property or privileges for a definite period of time, revocation or denial of recognition or registration, or suspension of social or athletic activities or events, as well as other appropriate sanctions permitted under the Student Code of Conduct or other rules of the College.

Parental Notification: Parents or legal guardians of dependent students (as defined under Section 99.31 (a) (8) of the Family Educational Rights and Privacy Act of 1974) may be notified for violation of the alcohol and other drug policy.

Behavior Education/Support: A student may be required to complete a Behavior Education Program.

Interim Action: Suspension of a student for an interim period prior to resolution of the disciplinary proceeding.

Refusal to Admit/Enroll: The College may refuse readmission and/or re-enrollment to any student who has committed an infraction. The College also may refuse admission and/or enrollment to any student who has been suspended and/or expelled from another educational institution.

Other sanctions permissible under existing College rules
Pursuant to A.R.S. 15-2301, sanctions for hazing shall include, but are not limited to, the revocation or suspension of an organization’s permission to conduct operations at the College if the organization knowingly permitted, authorized or condoned the hazing activity.

A student who has been suspended or expelled from one Central campus/center will be ineligible for re-enrollment or re-admission to any Central campus/center except as follows:

A student who has been suspended at one campus will not generally be eligible for admission or re-enrollment at another campus until the student has met the conditions for reinstatement at the campus which imposed the suspension.

The conditions for reinstatement may be waived in whole or in part at the discretion of the Chief Student Affairs Officer.

The College has rules and procedures to consider a request for re-admission from a student who has been previously expelled or suspended.

Determining What Sanction to Impose
When determining what sanction to impose, the College may consider:

- The nature and severity of the current infraction committed by the student;
- Whether the infraction committed by the student was in whole or in part intended to frighten, harm, injure, intimidate or harass an individual and was motivated in whole or in part by the offending student’s bias. The offending student’s bias may include, but is not limited to, bias based on race, color, religion, sex, age, disability, national origin, military status or genetic test information, sexual orientation, or gender identity or expression.
- Prior infractions committed by the student at the College or at any other educational institution including, but not limited to:
  a. the nature and severity of the prior infractions;
  b. whether the prior infractions resulted in sanctions;
  c. the sanctions imposed for the prior infractions.
- The student’s disciplinary record at the College or at any other educational institution.
II. Due Process Procedures

Filing Charges
Any CAC student or staff member may complete and submit an Incident Report Form to the Student Affairs Dean, Vice President of Human Resources and/or Campus Police when it appears that a Code of Conduct violation has occurred. The Incident Report Form should, to the extent reasonably possible state facts, including specific names, dates, locations, and descriptions of the allegation to enable the Student Affairs Dean/Designee to determine the nature of the Code of Conduct violation. The referral must be signed or electronically submitted by the complainant.

Removal from Class
An instructor may remove a student from class meetings for disruption of the educational environment or Code of Conduct violations. In such cases, an Incident Report form must be filed and submitted to the Student Affairs Dean, Vice President of Human Resources and Campus Police.

If an instructor removes a student for more than one (1) class period, the instructor shall notify their immediate supervisor and the Academic Dean in writing of the problem, action taken by the instructor, and the instructor’s recommendation.

If a resolution of the problem is not reached, the student may be removed permanently pursuant to appropriate due process procedures. The student will be permitted to attend class pending the outcome under due process policies and procedures.

Interim Action
At any time following the submission of a written referral, the Student Affairs Dean/Designee may suspend a student for an interim period prior to resolution of the disciplinary proceeding if the Student Affairs Dean/Designee believes that the information that supports the allegations of misconduct is reliable, and determines that the continued presence of the student on the College poses a threat to any individual, property or College function.

The decision to suspend a student for an interim period will be communicated in writing to the student, and will become effective immediately as of the date of the written decision.

The interim suspension will remain in effect until a final decision has been made on the pending charges or until the Student Affairs Dean/Designee determines that the reasons for imposing the interim suspension no longer exist.

A student who is suspended for an interim period will be provided an opportunity to respond to the allegations of misconduct as soon as reasonably possible but no later than five (5) business days following the effective date of the interim suspension.

The Student Affairs Dean/Designee may impose other forms of interim action, such as immediate removal from College housing or exclusion from one or more classes or other locations.

Review and Decision
The Student Affairs Dean/Designee will make an initial determination as to whether there is a sufficient basis to believe that a violation of the Student Code of Conduct may have occurred. The Student Affairs Dean/Designee may decide to interview the complainant and/or other witnesses or to request additional information from the complainant.

If the Student Affairs Dean/Designee determines that there is a sufficient basis to believe that a violation of the Student Code of Conduct may have occurred, then the Student Affairs Dean will promptly notify the student in writing of the alleged violation and will gather further information, if needed, by interviewing witnesses and reviewing documents. Members of the College community will be expected to comply with any request or directive issued by the Student Affairs Dean in connection with a disciplinary proceeding, unless compliance would result in significant personal hardship or substantial interference with normal College functions.

A student who is charged in a Student Code of Conduct referral will be provided an opportunity to meet with the Student Affairs Dean/Designee. A student who fails to attend the meeting with the Dean will forfeit his/her right to respond on his/her behalf and to appeal any disciplinary decision regarding the alleged violation, unless the student can demonstrate that an extraordinary circumstance prevented his/her appearance. If the student fails to attend the meeting, the Student Affairs Dean may proceed as described below.

At the meeting the student will be provided with the following:
- An explanation of the charges which have been made;
- A summary of the information gathered;
- A reasonable opportunity for the student to reflect upon and respond on his/her own behalf to the charges; and a summary explanation of the applicable disciplinary procedures, including the student’s right to appeal. This is a written request of a hearing before a Student Conduct Committee if a serious disciplinary sanction (expulsion, suspension or eviction from College housing) is imposed.

If necessary, any further information gathered will be presented to the student and an additional opportunity to respond will be provided.

The Student Affairs Dean/Designee will determine whether it is more likely than not that a violation of the Student Code of Conduct has occurred and, if so, will decide on an appropriate disciplinary sanction to impose.

The Student Affairs Dean/Designee will inform the student of the decision, in writing, within five (5) business days of the
student’s last opportunity to respond. When feasible, this information will also be communicated in a face-to-face meeting.

The written decision will include a statement of the charges, the determination, and the sanction to be imposed, if any. This decision is final, unless the student requests a hearing in a timely manner to review a decision to suspend, expel, or evict from College housing.

If the sanction imposed includes expulsion, suspension or eviction from College housing, the student will be informed of his/her right to request a hearing before a Student Conduct Committee. The student files a written request with the Chief Student Affairs Officer/designee no later than five (5) business days following the date on which the notice was posted or personal delivery of the written decision.

The filing of a timely written request for a hearing will suspend the imposition of the disciplinary sanction, except for interim suspension, pending the outcome of the hearing. If the sanction is suspension, expulsion or College housing eviction and the student requests a hearing, the student will not be permitted to graduate until the hearing process has been concluded. If the student elects not to request a review of the Chief Student Affairs Officer decision and signs a statement to that effect, then that decision is a final decision which becomes effective immediately.

III. The Student Conduct Committee

Purpose of the Committee
The Student Conduct Committee shall serve as a Hearing Board for students’ alleged violations of the Student Code of Conduct and provide recommended course of action. The composition of the committee members will include:

- Three (3) faculty
- Three (3) students
- One (1) support staff
  A non-voting chairperson appointed by the President or designee.

The Chief Student Affairs Officer/Designee will provide orientation for Hearing Board members.

A quorum of five (5) voting members is necessary to conduct a Student Conduct Committee hearing.

Pre-Hearing Procedures
The Hearing Board members will be notified in writing of their selection.

The chairperson will convene the Board no later than twenty (20) business days following receipt of the student’s written request for a hearing.

The chairperson, who may be assisted by the Student Affairs Dean/Designee, will prepare and send a written notice to the student no less than ten (10) business days prior to the date set for the hearing. The notice will be delivered personally or by mail directed to the address furnished by the student on his/her hearing request. The notice will include:

- A statement of the date, time, location and nature of the hearing;
- A written statement of the charges which specifies the allegations of misconduct in sufficient detail to enable the student to respond;
- A copy of this Student Code of Conduct;
- A list of the names of all Hearing Board members;
- The name of a College representative who will be presenting evidence in favor of sustaining the discipline that has been imposed. This may or may not be the Student Affairs Dean.

This individual shall be referenced below as the College Representative. When a reference is made in this portion of the Code to the “parties,” it means the student and the College Representative.

If the student cannot attend the hearing on the date scheduled for the hearing due to extraordinary circumstances, he/she must notify the Chief Student Affairs Officer in writing. He/She will determine whether to approve or deny the request to reschedule the hearing.

No later than five (5) business days prior to the hearing, the parties will exchange the following information in writing:

- A list of the names and addresses of the witnesses who may be called to speak at the hearing;
- The name and title of the person who will present the evidence on behalf of the College, and the name of the advisor, if any, who will be present to assist the student. A student’s advisor may not represent the student during the hearing;
- Please note legal representation is permitted only in cases of on-going civil litigation or criminal prosecution. A student’s legal representative may represent them during the hearing.

A student may challenge the participation of any member of the Hearing Board on the grounds of personal bias by submitting a written statement to the chairperson setting forth the basis for the challenge no later than seven (7) business days prior to the hearing. The chairperson will determine whether to sustain or deny the challenge. If the challenge is sustained, a replacement member will be appointed to serve on the Hearing Board. If a challenge is filed against the chairperson, the Chief Student Affairs Officer/designee will rule on the challenge.

Conduct of the Hearing
The student who is charged with the misconduct may be assisted throughout the proceeding by an advisor. If the student is represented by an attorney, the chairperson/designee and or College Representative also may be assisted by an attorney.
In order to preserve the confidential nature of the disciplinary process, and to protect the privacy interests of the student who is charged with the violation and the witnesses who may be called to testify, the hearing conducted by the Hearing Board will be closed.

During the hearing, the student shall have the right to (1) present favorable evidence and witnesses; and (2) question adverse witnesses.

All witnesses shall be placed under oath before testifying.

The chairperson will preside at the hearing and will rule upon all procedural matters, subject to being overruled by the majority of the Hearing Board members. The formal rules of evidence will not apply, although objections to the introduction of specific statements or documents may be considered by the chairperson. Irrelevant, immaterial, privileged or unduly repetitious information will be excluded. The chair may establish reasonable limits upon the time allotted to the student and the College Representative for oral presentation and examination of witnesses.

The College Representative will present the information which supports the charges, and will have the burden of showing that a violation of the Student Code of Conduct was more likely than not to have been committed by the student.

The student who has requested the hearing will present statements or written information on his/her own behalf. A student who fails to appear at the hearing will be deemed to have abandoned his/her request, unless the student can demonstrate that an extraordinary circumstance prevented his/her appearance.

The hearing will be recorded manually or by a recording device.

Witnesses will be excluded from the hearing except during their own testimony, except that a complaining witness (complainant) who is the alleged injured party may be permitted with the discretion of the chairperson to attend the hearing.

**The order of presentation will be as follows:**

The College Representative will present an opening statement, which summarizes what the information that has been gathered is expected to show.

The student or his/her legal representative may present an opening statement, or may reserve it until the presentation of his/her case.

The College Representative will call witnesses to provide statements under oath. Witnesses will be questioned by means of direct examination with no leading questions permitted. A leading question is one which suggests the desired response.

At the conclusion of each witness’s statements, he or she may be questioned by the student at which time leading questions are permitted.

Following the questioning by the student or his/her legal representative, the College Representative and the members of the Hearing Board may ask further questions of each witness.

Following the testimony of all witnesses called by the College Representative, the student then presents his/her case.

Each witness for the student is called to testify. The pattern remains the same as described above.

Following the close of the student’s presentation, the College Representative may call witnesses to refute statements made by the student or the student’s witnesses. If such witnesses are called, they will be subject to the same procedure outlined above.

Throughout the proceeding, the parties may introduce written documents. All such documents which are admitted will be marked as exhibits, for example, “College’s Exhibit #1” or “Student’s Exhibit #1,” and may be considered by the Hearing Board in reaching its decision.

Following the presentation of witnesses, the parties will be allowed to present closing statements which summarize the information that has been presented. The College Representative presents his/her closing statement first, followed by the student.

**Hearing Board Deliberations and Recommendations**

Following the presentation of information and closing statements, the members of the Hearing Board will discuss the information that has been presented and the reasonable inferences to be drawn from this information prior to reaching their decision. Only the members of the Hearing Board and its legal advisor, if any, may be present during the deliberations.

When determining whether a student committed an infraction, the Hearing Board may consider only the alleged incident that is the subject of the hearing unless there is evidence of a habit or routine practice of the student that is relevant to prove that the conduct of the student on a particular occasion was in conformity with the student’s habit or routine practice. Other than as set forth in the preceding sentence, a student’s prior misconduct at the College or at another educational institution is not relevant to the question of whether the student committed an infraction. Such information, however, can be admitted and is relevant on the topic of what sanction is appropriate if an infraction has been established.

Based solely upon the information presented during the hearing, the Hearing Board will formulate a recommendation, including the appropriate sanction, to the Chief Student Affairs Officer. At least three votes are necessary to make any
recommendation. The College Representative will present any prior misconduct to be considered when imposing the appropriate sanction. The student and the College Representative will be provided the opportunity to present their positions on the appropriate sanction.

The Hearing Board will render its recommendation following the hearing and will communicate that recommendation to the Chief Student Affairs Officer/Designee no later than two (2) business days following the conclusion of the hearing. The written recommendation will include basic findings of fact and will be signed by the chairperson. The decision of the Chief Student Affairs Officer is final.

IV. Miscellaneous

1. Searches
   a. A search of a student or the student’s personal property including a motor vehicle parked on College property may be conducted if the College has a reasonable suspicion that the student possesses or the property contains an item or items, the possession of which violates state, federal or local law, College policy or regulation.

   b. In conducting a search of a student or the student’s personal property, the College must consider the intrusiveness of the proposed search in light of the age and sex of the student and the nature of the suspected infraction.

2. Seizures
   a. Illegal items or other possessions reasonably determined to be a threat to the safety or security of others shall be seized by College personnel and/or legal authorities.

   b. Items which are or may be used to disrupt or interfere with the educational process may be removed from the student’s possession.

   c. Items seized may be held by the College, returned to the student, or turned over to an appropriate law enforcement agency.

3. Warrants
   a. If a search warrant is served, every reasonable effort should be made to cooperate with law enforcement officers.

   b. A student who has been suspended is encouraged to continue his/her education outside of the regular College environment. A student who has been placed on long-term suspension may, upon submission of a written request to the College, be provided with course outlines, course goals and objectives, and an opportunity to take comprehensive examinations after the suspension period has expired.

c. In appropriate situations, this will provide the responsible student with the opportunity to obtain course credit. Any participation on the part of College professional staff is optional, and any financial compensation required for special services rendered by College professional staff at the request of the student is the responsibility of the student.

   If a student does not attend any disciplinary hearing, or if the student withdraws from the College after receiving notice of possible disciplinary action, the discipline procedures may continue and the results of the discipline process may be recorded in the student’s permanent file.

d. A student shall not be disciplined for threatening or using physical force against another when and to the extent a reasonable person would believe such force is necessary to protect that person or a third person against another person’s use or attempted use of unlawful or otherwise inappropriate physical force. Verbal provocation alone does not justify the use of physical force.

e. Technical and/or procedural violations of the Code that are not prejudicial to the student shall not invalidate any imposed discipline.

f. When a student is alleged to have engaged in misconduct that involves the commission of a crime, the student may be disciplined pursuant to the Code in the same manner as if the misconduct was not criminal in nature. The alleged criminal misconduct should be reported to appropriate law enforcement officials.

These policies and procedures supersede all previous statements and policies with respect to student rights, responsibilities and disciplinary procedures including, but not limited to, the policy statement contained within the College Catalog. Disciplinary procedures are designed to allow for fact-finding and decision making with “education” as the primary motive.

CODE OF CONDUCT & STUDENT DISCIPLINE

Three-Tier System
Students documented for policy violations on campus will be referred and accountable to a three-tier system.

Example – a student arrested for MIP (Minor in Possession of Alcohol). The student will be accountable to:

1. Residence Life – code of conduct violation discipline process
2. Campus Police – county court system
3. Student Affairs Dean – student discipline process
Central Arizona College Campus Police Officers patrol the Signal Peak Campus and areas immediately adjacent to the campus in a proactive manner. These patrols may be conducted by vehicle, bicycle, or on foot, and may be conducted in conjunction with other police agencies. The Department’s patrol operations are continuous; a police officer is on duty on the Signal Peak Campus 24 hours a day, 7 days a week, 365 days a year. If you should need help with something, or have a question, please don’t hesitate to contact Campus Police at the 24-hour number, 520-836-9655.

Reporting Crimes and Emergencies
Central Arizona College encourages the reporting of all criminal action and emergencies as soon as possible. To report a crime or emergency on the Signal Peak Campus, the caller should contact the Police Department at 520-836-9655.

To report a crime or emergency occurring at any of the other Central satellite campuses or centers, the caller should contact the local emergency operator by dialing 911. As soon as possible thereafter, the caller should contact the College Police Department. Reports of a non-emergency nature, regardless of campus location, should be made to the Police Department at 520-836-9655.

When reporting a crime or an emergency, try to call from a safe location. Remain calm and be prepared to answer the following questions:

- The location of the emergency, including the campus address and the exact location of the incident on campus.
- The nature of the emergency (fire, medical, hazardous material, etc.).
- How many people are injured and the extent of their injuries?
- How did it happen?
- When did it happen?

Annual Security Report /Clery Act
The Student Right to Know and Campus Security Act of 1990, recently renamed “The Jeanne Clery Disclosure of Campus Security and Crime Statistics Act,” was enacted by Congress and signed into law in November of 1990. In 2000, and most recently in 2008, Congress significantly amended the law, expanding the reporting criteria. In compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, the CAC Police Department issues an annual report to provide an overview of the college’s security resources, policies and procedures, as well as crime statistics. The report is updated annually and is available on our website: http://www.centralaz.edu/Documents/police/ANNUALSECURITYANDFIREREPORTOct2011.pdf or copies are available at the Central Arizona College police department.
Degrees and Certificates
Central Arizona College (CAC) offers students a variety of one- and two-year programs to meet their diverse interests and goals, including 157 degrees and certificates in a variety of disciplines. Many credentials may be completed over an extended period to accommodate the needs of nontraditional students. Four (4) associate degrees transfer directly to all Arizona public universities, specifically: Associate of Arts (A.A.), Associate of Science (A.S.), Associate of Business (A. Bus.), and Associate of Arts in Elementary Education (A.A.E.E.). In addition, many Associate of Applied Science (A.A.S.) degrees now transfer to the three Arizona public universities and other higher education institutions.

CAC associate degrees require 60-64 semester credits and share five basic “blocks” in addition to CAC degree core requirements, specifically: General Education, Common Courses, Special Requirements, Electives and CAC Other Requirements. Students completing these degrees with a minimum cumulative grade point average (CGPA) of 2.0 on a 4.0 scale typically matriculate to an Arizona public university with junior status and only need an additional 56-60 university credits to complete a bachelor’s degree consisting of 120 credits.

Select programs offer a 75 + 45 credit baccalaureate degree program; up to 75 credits may be completed at CAC and directly transferred to the university program. Other special program agreements with partnering higher education institutions build upon the CAC associate’s degree. The A.A.S. Degree plus 15 select General Education credits (A.A.S. to B.A.S.) is another Arizona transfer pathway to the three public universities: Arizona State University (ASU), Northern Arizona University (NAU) and the University of Arizona (UofA). In addition, some transfer pathways accept up to 90 CAC credits towards a baccalaureate degree program; Northern Arizona University (NAU) currently offers a number of 90 + 30 programs. Contact an academic advisor to determine the options available in your chosen field.

Completion of an associate degree does not necessarily guarantee admission to a particular university’s program of study. For assured admission to the Arizona public universities, AGEC completers are required to earn a minimum GPA of 2.5 in all AGEC courses and a degree cumulative grade point average (CGPA) of 2.0. For assured admission to the universities, Associate degree completers are required to earn a minimum CGPA of 2.0. Students are strongly encouraged to consult with both a CAC academic advisor and the target university’s admissions advisor.

Students who are undecided about their academic program should meet with an academic advisor for assistance in exploring career and life goals. Selecting a program that fits talents and interests and planning a timeline to achieve academic goals based on course offerings leads to successful degree/certificate completion.

**Grand Canyon Diploma**

Arizona District and Charter high schools choosing to offer the Grand Canyon Diploma (GCD) to their eligible students may grant the GCD as an alternative to a traditional high school diploma. Eligible high school students must demonstrate readiness for college level mathematics and English according to board standards and demonstrate passing grades on a set of required core courses, including arts, history and science, and economics.

The GCD is awarded at the end of grade 10 or during grades 11 or 12. Students who earn a GCD may enroll in a community college, enroll in a full-time career and technical program, an advanced preparation board examination program at the high school, or return to a traditional high school academic program. The GCD is legislated by House Bill 2731: http://www.azleg.gov/DocumentsForBill.asp?Bill_Number=HB2731.

**Arizona Transfer Degree Information**

Students planning to earn a four-year baccalaureate degree should go to the Arizona Transfer homepage at: http://aztransfer.com/home. For detailed information on the Arizona Transfer Model, go to http://www.aztransfer.com/TransferBasics.

The Arizona Course Equivalency Guide (CEG, college to university transfer), the Transfer Guides, Major Guides and the Reverse CEG (university to college transfer) provide specific course transfer information, see: http://www.aztransfer.com.

To determine Credit by Examination equivalencies for Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate Diploma Program (IB) and DANTES/DSST exams, see the Exam Equivalency Guide (EEG): http://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASSNew.woa/wa/EEG. CAC Credit by Exam equivalencies for the years prior to 2010/11 are available on the CAC Curriculum website under Curriculum Development: Curriculum Tools: Credit by Exam Test Scores. Contact an Academic Advisor for assistance.

The Arizona public and tribal universities and community colleges collaboratively determine transfer articulation policies and procedures to help students easily transfer community
college credits to the universities. These “transfer articulation agreements” apply to all Arizona public and tribal community colleges and universities.

In addition, CAC Articulation Agreements with select four-year colleges/universities provide a wide array of opportunities to students graduating with an associate’s degree. Students are strongly encouraged to discuss Transfer/Articulation Agreement Options with their academic advisor during their first year. Some options require students to sign the agreement and follow a prescribed program course sequencing guide. Contact a CAC academic advisor for assistance and to review other special transfer agreement options and scholarship opportunities.

Arizona Shared Unique Numbering (SUN) System 🌴SUN#: 🌴

Arizona community college students planning a transfer to ASU, NAU or UofA may use the SUN System to identify transferrable courses, however students still need to confirm the course transferability at each of the three Arizona public universities; see the Course Equivalency Guide (CEG): AZTransfer.com. Because each student has a unique academic plan, students are strongly encouraged to seek academic advising prior to enrollment.

The Shared Unique Number (SUN) course numbering system identifies approximately 84 CAC courses that transfer among Arizona’s public community colleges and three state public universities.

SUN courses are identified by a three-letter prefix, four-digit course number and a SUN icon 🌴. SUN courses are labeled in university and community college catalogs, schedules and websites, making it easy for students to find transferrable courses. In the CAC Catalog, students and others will also find the AGEC 🌴 icon next to many SUN courses.

SUN courses are a subset of the multitude of college courses that transfer among Arizona’s colleges and universities. CAC accepts all SUN courses and applies them toward meeting CAC program requirements, provided the student earned a grade of “C” or better in each course.

For more information about the Arizona SUN System, including a list of SUN courses, go to azsunsystem.com.

Arizona General Education Curriculum (AGEC)

Each of the transfer associate degrees (A.A., A.Bus. and A.S) include at least 35 semester credits of general education studies known as the Arizona General Education Curriculum (AGEC). The AGEC fulfills lower-division general education requirements for students planning to transfer to an Arizona public university or community college. The AGEC transfers as a block of 35 credits which meet the target institution’s general education requirements provided students earn a minimum degree cumulative grade point average (CGPA) of 2.0 on a 4.0 scale. For assured admission to the universities, AGEC completers are required to earn a 2.5 in all AGEC courses.

The AGEC provides clear and secure transfer pathways for community college students parallel to the pathways followed by students who began their studies at the university. These transfer pathways help students maximize their experience at the community college, incorporate community college credits and degrees efficiently into university graduation requirements, and complete baccalaureate majors with the minimum number of required credits. AGEC courses are transferable to all three Arizona public universities provided students earn a grade of “C” or better.

Students, depending on their career goals, select the AGEC-Arts, AGEC-Business, or AGEC-Sciences Certificate. Each AGEC has specific minimum mathematics and English coursework. The AGEC-S requires significant coursework in the sciences. For all three AGECs, students are encouraged to choose course work from more than one discipline for both Arts and Humanities and Social and Behavioral Science categories.

In general, most bachelor’s degrees can accommodate an AGEC; however, some majors are structured in such a way that students should or must complete select general education requirements at the university. See the Major Guides: https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/wa/MajorGuideAZ.

Students completing the AGEC also must fulfill university lower division program requirements and prerequisites for their major. Majors in specific professional fields have significant prerequisites that students must complete before admission to upper division coursework. CAC recommends students complete prerequisites at CAC prior to transfer. See the A.A.S. to B.A.S. transfer options in this Catalog for 75 + 45 and 90 + 30 credit baccalaureate degree pathways.

Students who are undecided about their transfer path should consult an academic advisor to explore educational options while completing one of the AGEC Certificates.

The Arizona public universities accept AGEC courses for transfer credit in any of the following categories: equivalent course (specific course and credit value are identified in the CEG), general elective credit (EC), or departmental elective credit (DEC). Access the Course Equivalency Guide (CEG) at https://aztransmac2.asu.edu/cgi-bin/WebObjects/Admin_CEG.
Non-AGEC Institutions
Coursework transferred from regionally accredited non-AGEC granting institutions may be applied to AGEC as follows (i.e. Arizona public universities or out-of-state institutions):

1. Transfer coursework deemed by CAC to be equivalent to a course on CAC’s AGEC list may be used to satisfy AGEC in the same manner as the CAC course.
2. Transfer coursework that is equivalent to a CAC non-AGEC course may not be used to satisfy AGEC.
3. CAC accepts AGEC coursework earned from Arizona tribal and community colleges, provided the student earned a grade of “C” or better.
4. Transfer coursework without a direct CAC course equivalency shall be evaluated by CAC using CAC institutional curricular standards for identifying AGEC courses.

Upper Division Course Transfer
Upper division courses from regionally accredited higher education institutions transfer as a CAC lower division course or as an elective, provided the student earned a grade of “C” or better.

Students completing a CAC degree may find some of their CAC courses may transfer as 300-level courses to select CAC Transfer/Articulation Agreement institutions. Consult a CAC advisor and the program/degree specific Transfer Pathway document on that institution’s website to confirm transferability and applicability of CAC coursework, i.e. the CAC Student Portal. Transfer Pathways are updated annually and Transfer/Articulation Agreements state specific student eligibility requirements, scholarship opportunities and the programs available.

Transfer Agreement Options
The aztransfer.com website offers transfer tips, course equivalency guides (CEG), major guides, examination equivalency guides (EEG) and other valuable transfer tools. Advisors, students and faculty should use the apascaz.org website for additional transfer resources. Consult a CAC academic advisor.

AAS to BAS Transfer Model:
The Arizona University System Model
Students who complete an AAS degree at one of Arizona’s community colleges have two special program options for transferring to a BAS degree program at one of the Arizona public universities.

The 60-60 Credit Hour Model*
In this model, students transfer an A.A.S. degree as a 60 credit hour block toward fulfilling the requirements for the 120 credit B.A.S. degree. Students then complete 60 credit hours of upper division and specific lower division courses at the university granting the B.A.S. degree.

The 75-45 Credit Hour Model **
In this model, students take an additional 15 credit hours at CAC of specified General Studies courses beyond the credit hours required for the A.A.S. degree, for a total of 75 transferable credit hours. Students then complete an additional 45 credit hours of specified courses at the university granting the B.A.S. degree.

Students must complete the additional 15 hours of lower division credits by taking general studies courses that meet Arizona General Education Curriculum (AGEC) criteria. Five courses are selected from six (6) areas of study depending upon the nature of the A.A.S. degree. The six areas are:

1. Mathematics/Computer Science
2. Natural Sciences
3. Humanities Fine Arts
4. Social and Behavioral Sciences
5. Literacy
6. Cultural/Global/Historical Awareness

Students must complete a mathematics course equivalent to or higher than College Mathematics (MAT141). If the math requirement is met by the program requirements of a specific AAS degree, students may take the additional three hours in any one of the five remaining areas. The following table illustrates the relationship between AAS type and the possible distribution of the 15 credit hours.

Students are strongly encouraged to meet with an advisor to plan their course of study and to determine how their A.A.S. degree aligns with a specific university program.

* NAU’s model is based on a 64 credit A.A.S. degree.

**There are A.A.S. to B.A.S. models with more than 75 credits which can be transferred. Consult a CAC academic advisor or an NAU advisor.

See Transfer Agreement options for AAS to BAS degree.
**Albright College (AC)**

Albright is a nationally ranked, private college with a rigorous liberal arts curriculum with an interdisciplinary focus. The college’s distinctive approach connects collaborative teaching and learning with a flexible curriculum that allows students to create an individualized education.

With a commitment to understanding its changing student population, Albright offers its extremely successful and popular accelerated Degree Completion Program (DCP). This unique concept builds on college level work already completed by a student with approximately 2 years of college credit or an Associate’s degree.

DCP courses are condensed into five to seven week sections. Degrees are designed for completion in 22-24 months, meeting the same night, once a week until graduation. Albright uses a small group “cohort” approach where no more than 15 students navigate the curriculum together.

Albright is fully accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, a regional accrediting agency recognized by the U.S. Secretary of Education. In Arizona, Albright is approved by the Arizona State Board for Private Postsecondary Education.

Albright offers bachelor degree programs in the following areas: Applied Psychology, Business Administration, and Information Systems.

**Albright Benefits:**

1. The maximum number of lower-division credits that can be accepted and applied to the degree at AC is 78. This transfer credit limit will be the difference between total credits required for degree completion and college upper-division requirements.

2. The Associate of Arts, Associate of Business, and Associate of Science Degrees transfer as a block.

3. The Associate of Applied Science and Associate of General Studies Degrees’ general education coursework transfers fully as a block with the remaining coursework reviewed on a course-by-course basis.

4. All programs are full-time and consist of 16 courses. Classes meet one night a week for approximately 2 years. All instructional materials including textbooks are included with our comprehensive tuition.

5. A community college transfer scholarship of $2,500 is available to all graduates of CAC. In addition, CAC employees and their spouses or partners will receive a tuition grant of $1,600.

**Arizona Christian University (ACU)**

The Memorandum of Understanding (MOU) between Arizona Christian University (ACU) and CAC was adopted in an effort to provide a seamless transfer for students who wish to pursue a bachelor’s degree at Arizona Christian University. Under the terms of the MOU, participating CAC students will maximize their coursework so that as many credits as possible are transferable to ACU.

**Benefits to CAC Students:**

- A clear pathway to obtaining your bachelors degree at a private, non-profit university!
- Save money by taking general education courses at CAC!
- Save time by ensuring the courses you take now will transfer to ACU!
- Unlimited access to ACU admissions advisors!

**Eligibility Requirements:**

Transferable credits include those taken as part of an approved CAC Associate Degree or CAC’s General Education Curriculum (AGEC). Other General Education coursework will be evaluated on a course-by-course basis.

**Terms of Agreement:**

a. CAC students who meet other ACU admissions requirements and have a minimum cumulative GPA of 2.0 in courses numbered 100 and above are guaranteed admission to ACU.

b. Tuition at ACU is evaluated by the Board of Trustees on an annual basis and currently is $20,952 per year.

c. Miscellaneous fees may apply and vary based on program of study.

d. ACU’s transfer priority deadline is April 1, 2013.

e. Students transferring to ACU as part of this MOU may obtain an application fee waiver code by contacting a member of the ACU admission team.

f. Eligible students will automatically receive an ACU Transfer Scholarship.

**Advising Information/Contact:** Contact the ACU admissions department at 602-386-4100 or by e-mail at admissions@arizonachristian.edu
Arizona State University (ASU)

Transfer Admission Guarantee Programs (TAGs), AAS to BAS, RN to BSN

If you have decided on an ASU bachelor’s degree program, the Central Arizona College-ASU Transfer Admission Guarantee (TAG) has been designed for you. Through this program, you follow a prescribed sequence of coursework that meets the lower-division course requirements for an ASU major. When you complete your TAG, you will have met the requirements for your associate’s degree and be on track towards earning your bachelor’s degree. TAGs include the appropriate AGEC (Arizona General Education Curriculum) and an associate’s degree.

ASU TAG Benefits:
1. Guaranteed admission to the ASU degree program of your TAG.
2. Cost-effective pathway ensuring that all of your courses transfer and apply to your ASU degree.
3. Eligibility for participation in the ASU Tuition Commitment program.
4. Access to ASU transfer advising by phone and occasionally in-person.

ASU TAG Eligibility Requirements:
1. CAC student to sign TAG agreement prior to CAC graduation; Arizona resident to receive TAG ASU Tuition Commitment rate.
2. AGEC completed with 2.5 cumulative GPA.
3. Overall CAC 2.0-2.5 GPA, dependent upon ASU major.

ASU TAG Terms:
1. Work with a CAC and ASU advisor to monitor progress on the TAG prescribed sequence of courses.
2. Complete the TAG with a specified GPA and any special requirements.
3. All credit applied to the TAG must be completed with a grade of “C” or better.
4. Complete the TAG in a period not to exceed three (3) years to receive Guaranteed Admission into the specified ASU degree program. A maximum of 5 years of coursework, including CAC and ASU coursework, is permitted. After that period, the TAG cohort tuition rate no longer applies at ASU.
5. Pathway certification verifying completion of the TAG requirements.
6. Coursework more than 8 years old is subject to approval by the ASU academic department.
7. Use the CEG to determine direct course equivalencies to ASU for the semester and year the CAC course was taken. Excess credit hours for equivalent courses do not apply to the TAG.
8. TAG requirements satisfied by Credit by Exam (AP, IB, CLEP, DSST) must be consistent with ASU’s established equivalencies. See the EEG and submit exam results to ASU for credit to be granted.
9. TAG completed with a 2.0 to 3.0 ASU cumulative transfer GPA, dependent upon major.
10. CAC students participating in the TAG program become eligible for the Tuition Commitment Program at ASU which locks students into a specific tuition cohort while at ASU for a reduced tuition rate. The tuition rate is based on the student’s semester of acceptance in a TAG program and compliance with the TAG requirements. For more information, see: http://students.asu.edu/tuition/commitment .

TAGs have been created for ASU’s highest demand degrees. See ASU/CAC Transfer Agreement website for the current pathways available at: http://transfer.asu.edu/central-az .

To Enroll in an ASU TAG:
Contact your CAC advisor who will explain the TAG terms and requirements, and sign you up for a TAG. The TAG will be part of your academic plan in the student information system. Plan to meet with an advisor at least once a year to check your progress and make sure you are on track. Note, if you change your major while at CAC, you will also need to reset your TAG start date and sign a new TAG form which will affect your tuition cohort and restart your three-year completion period.

AAS to BAS:
As of spring 2012, CAC offers 45 Associates in Applied Science (AAS) degree options that transfer to at least one of ASU’s Bachelor of Applied Science (BAS) degrees designed specifically for students who have earned a CAC Associate of Applied Science. See the list at: http://transfer.asu.edu/central-az .

RN to BSN Pathway Program:
The CAC-ASU RN-BSN Pathway Program is designed for students who are currently pursuing an Associate of Applied Science (AAS) degree in nursing at CAC and who plan to earn a Bachelor of Science in Nursing (BSN) at ASU. Students who intend to transfer to ASU commit to specific terms for program completion.

RN to BSN Benefits:
1. Students may apply up to 75 specified credits hours from CAC towards the ASU BSN (a minimum of 45 credit hours beyond pathway requirements is required to complete the ASU RN-BSN).
2. Guaranteed admission into ASU’s RN-BSN program upon completion of pathway requirements.
3. Eligibility for participation in the ASU Tuition Commitment program.
4. Access to ASU RN-BSN advisors and other pre-enrollment services.
experiential learning. Students will learn how to communicate effectively, think critically, locate and use valid and reputable sources of information to support arguments, analyze situations and create solutions to problems. Regardless of major, the development of these skills will best prepare students for success in the real world.

General Transfer to ASU:
ASU offers bachelor's degrees in more than 250 academic programs. Contact a CAC or ASU advisor for details or use the ASU Degree Search website to learn more about programs, career opportunities and admission requirements: https://webapp4.asu.edu/programs/t5/undergrad?init=false&nopassive=true.

Benedictine University (BU)
For more than 125 years, Benedictine University has provided a renowned liberal arts education. As part of our mission as an academic community committed to liberal arts and professional education—distinguished and guided by our Roman Catholic tradition and Benedictine heritage—we prepare our students for a lifetime of active, informed and responsible citizenship and leadership in the world community. Benedictine University at Mesa, a new branch campus, offers a private, faith-based education grounded in history, Benedictine heritage and Catholic tradition.

A Benedictine education is global with locations in Mesa, Arizona, more than 40 locations in Illinois including its main campus in Lisle and branch campus in Springfield, four locations in China, and two locations in Vietnam. Forbes magazine named Benedictine University among "America's Top Colleges" for 2012. The Chronicle of Higher Education ranked Benedictine University No. 1 for the fastest-growing campuses during 2000-2010 in the category of doctoral research institutions.

Benefits of Attending Benedictine University at Mesa:
The Mesa branch campus provides all students who feel the call of a Benedictine education a way to attend through academic support, financial flexibility, and curriculum counseling and guidance. The goal is to make a private values- and leadership-based education affordable and available, as well as create an inclusive environment where all students flourish. Benedictine graduates are positioned to continue into graduate/professional school and successfully enter the economic stream where they make a positive impact on society by living the Benedictine values of faith, hospitality, community, involvement, balance and stewardship.

Next Generation Learning:
Classes at Benedictine University at Mesa will be “lecture free.” Our “Next Generation Learning” approach will develop students’ abilities for independent learning, collaborative learning, critical thinking, discovery, inquiry, application and experiential learning. Students will learn how to communicate

Service Learning:
Students will experience self-growth and awareness through participation in rewarding service projects. They will develop a sense of togetherness among their peers by giving back to the outside community.

Catholic and Benedictine Values-Based Education:
At Benedictine, we believe in developing the whole person — academically, socially and spiritually. At the same time, our strong Catholic tradition and Benedictine heritage promotes acceptance and understanding of other religions and ethnicities.

BU Scholarships:
We offer a variety of financial assistance packages, including need-based grants, academic scholarships, federal loans and work-study options. Transfer students may qualify for significant merit based scholarships based on their cumulative GPA. Students in Phi Theta Kappa can benefit from additional scholarships.

Small Class Sizes and Individual Attention:
Classes are small and faculty is focused on teaching, not research. Professors create student activities that address real world problems, projects or themes that require critical and creative thinking.

Study at any one of Benedictine University’s three campuses: Students can take courses or pursue an internship in Lisle or Springfield, Illinois or engage in the many study abroad experiences available. Students can have an “away from home” experience without committing to a permanent move.

Academic Programs Offered at Benedictine University at Mesa in Fall 2013:
- Bachelor of Arts in Communication Arts
- Bachelor of Arts in Criminal Justice
- Bachelor of Arts in Psychology
- Bachelor of Arts in Theology
- Bachelor of Business Administration in Management and Organizational Behavior
- Bachelor of Fine Arts
- Bachelor of Science in Nutrition
- Minor in Religious Studies
Admissions Process:
It is strongly recommended that students with interest in transferring schedule a time to meet with a Transfer Admissions Counselor early in their college career. Transfer Counselors will assist students throughout the transfer admission process as well as provide unofficial evaluations of current and future courses.

1. To apply to Benedictine University at Mesa
   a. Download a hard copy at www.ben.edu/mesa
   b. Call (602) 888-5500 to receive an application by mail or via email.

2. Request all official college/university transcripts to be mailed to Benedictine University at Mesa, 51 E. Main St., Suite 105, Mesa, AZ 85201.
   a. If less than 20 transferable credits have been earned, request your official High School Transcripts, and official ACT or SAT scores be sent to Benedictine University at Mesa.
   b. If international credits are earned, order an evaluation from ECE to be sent to Benedictine University at Mesa.

3. Your admissions counselor may request additional materials if you did not meet the minimum admission requirements.
   You may be asked to submit:
   a. Personal statement
   b. Letter of reference by an academic or professional Contact

4. Once your completed application has been received and reviewed, an admission counselor will personally contact you by phone with your admission status.

BU Transfer Admissions Requirements:
Benedictine University at Mesa’s admission philosophy is to select students who will perform successfully in the University's academic programs and actively participate in University life. We offer a rolling admission into all of our traditional undergraduate programs, meaning applications are accepted and admission decisions are made throughout the year without deadline restrictions.

Students transferring into Benedictine University's traditional undergraduate programs must have:

- A minimum of 20 transferable semester hours (If a student has fewer than 20 semester hours of transfer credit, freshman requirements apply)
- A cumulative grade point average (CGPA) of 2.0 on a 4.0 scale or better from all colleges and universities previously attended
- No previous academic probation or academic dismissal

Students who do not meet the above admission requirements are encouraged to contact the Services Center to set up an appointment with one of our Transfer Counselors to discuss the Admission Committee review process.

Contact Information:
Benedictine University at Mesa
51 E. Main St. Suite 105
Mesa, AZ 85201

(602) 888-5500 or Fax: (602) 888-5555
mesa@ben.edu or www.ben.edu/mesa

Brigham Young University (BYU)

BYU Mission Statement
The mission of Brigham Young University--founded, supported, and guided by The Church of Jesus Christ of Latter-day Saints--is to assist individuals in their quest for perfection and eternal life. That assistance should provide a period of intensive learning in a stimulating setting where a commitment to excellence is expected and the full realization of human potential is pursued.

BYU offers courses in 10 colleges, in Continuing Education and Graduate Studies and in three general undergraduate areas of study. Many academic and professional programs are augmented by internships and career-related summer jobs. As of fall semester 2012, bachelor's degrees are offered in 193 academic programs, master's degrees in 62, and doctorates in 26, including a Juris Doctorate degree. In the 2011-2012 academic school year, BYU awarded roughly 8,000 undergraduate and graduate degrees. Daytime enrollment for 2012 was 33,336.

The university admits persons of either sex and of any race, creed, religion or national origin who meet the university's admission requirements and agree to abide by standards of behavior as established by the university. Admission is based on reviews of high school transcripts; American College Test (ACT) scores; ecclesiastical recommendations; student essays; service to community, school and church; seminary and/or institute recommendations; and other application information.
Admission

Apply at besmart.com. Admission Application Deadline: February 1 (for spring, summer, and fall semester) or October 1 (for winter semester). There is a one-time application fee of $35 for undergraduate students.

BYU Admission criteria

Freshmen: High school or home school graduates with no college credit or with college credit completed prior to high school graduation. Students who are high school age and will not be completing high school are also considered new freshmen.

High school transcript and ACT/SAT required. Each applicant must be endorsed by his or her ecclesiastical leaders as one who is worthy to attend BYU and is living in harmony with the Honor Code and the Dress and Grooming Standards (BeSmart.com/honorcode). Applicants who are not members of the LDS Church need to be interviewed by an LDS bishop. Each application is then reviewed and evaluated according to the following elements: seminary attendance, service, leadership, personal essays, individual talents, creativity, AP/IB courses taken, unique or special circumstances, and other factors showing a student’s ability to strengthen the BYU community.

Transfer students: Students who have completed 24 graded college semester hours at the time of application. Each applicant must be endorsed by his or her ecclesiastical leaders as one who is worthy to attend BYU and is living in harmony with the Honor Code and the Dress and Grooming Standards (BeSmart.com/honorcode). Applicants who are not members of the LDS Church need to be interviewed by an LDS bishop. Each student’s academic record—consisting of transfer GPA and quality of coursework—is then considered as the foundation and central focus of admission decisions. However, we are looking for students who are accomplished in a variety of areas—not just academics. Thus, a certain transfer GPA alone does not guarantee admission. Also, transfer students with more than 90 graded semester credit hours are unlikely to be admitted.

Applications are reviewed and evaluated according to the following elements: missionary service, institute of religion involvement, service, leadership, personal essays, individual talents, creativity, number of graded transfer hours, unique or special circumstances, degrees earned, academic goals, and other factors showing a student’s ability to strengthen the BYU community.

BYU Transfer Credit

Credit must be earned at a regionally accredited institution, considered college-level, and academic in nature. BYU does not accept vocational or CLEP credit. Military courses are evaluated using the ACE recommendations in the upper-division baccalaureate category from the Guide to the Evaluation of Educational Experiences in the Armed Services. Students may receive credit for Advanced Placement scores of 3, 4, 5, and for International Baccalaureate scores of 5, 6, or 7. Credit will be awarded according to BYU standards (apib.byu.edu).

Credit earned more than eight years before admission or readmission (including transfer credit) will be accepted to meet general education and university graduation requirements, as well as major requirements at the discretion of the university. Courses should be applicable to BYU general education and university graduation requirements as well as to major requirements. Furthermore, transfer courses with grades below “C-” will not be used to fill BYU general education requirements and in most instances will not fill major requirements.

BYU Scholarships

Prospective new freshmen are eligible to apply for undergraduate scholarships beginning with the term/semester they are admitted.

Transfer students are not eligible for academic scholarships upon initial entrance at BYU, but they can apply for academic scholarships as continuing students after having completed at least one full enrollment (12 credit hours) at BYU by the application deadline. There are a few additional university scholarships and also departmental scholarships for which some transfer students may receive consideration. Completing the online scholarship application allows the student to be considered. Students are also encouraged to contact their major advisor to explore other scholarship opportunities.

B4byu.com or Byu.edu

For transfer information, contact Susan Facer, BYU Transfer Evaluation Coordinator at: 801-422-8566.
Chamberlain College of Nursing

Central Arizona College Nursing students may transfer their associate’s degree to Chamberlain College of Nursing. See details at the CAC portal on Chamberlain’s website: http://www.chamberlain.edu/ or call: 888.556.8226.

Chancellor University (CU)

Central Arizona College students may transfer after completion of their associate’s degree to Chancellor University (CU). For details go to: http://www.chancelloru.edu/ or http://www.chancelloru.edu/college-and-university-partnerships.aspx . Contact an academic advisor for assistance.

Columbia Southern University (CSU)

See Columbia Southern University’s website for transfer pathways to their Fire Science Bachelor of Science Degree program at: http://www.columbiasouthern.edu. Or call: 1-800-977-8449 or 251-981-3771.

Frontier Nursing University (FNU)

Following completion of a CAC Registered Nursing Associate of Applied Science degree program, students transfer to Frontier Nursing University to pursue either a Master of Science in Nursing degree or a Doctor of Nursing Practice degree. This Bridge Program is designed to maximize students’ transfer credit award and enable students to complete a master’s degree within three years. Online coursework complements required on-campus/Kentucky visits; FNU requires two visits per three-year program: at the beginning and after 18 months of didactic.

Programs available include:
- Master of Science in Nursing (MSN) with three tracks: Nurse-Midwifery, Family Nurse Practitioner, Women’s Health Care Nurse Practitioner.
- Bridge Entry Option (for Associate Degree in Nursing graduates with one full year of nursing experience).
- Post-Master’s Doctor of Nursing Practice (DNP) - 33 credits plus 2 FNU campus visits.
- Post-Master’s Certificates

Frontier Nursing University Benefits:
1. Admission fee waived for CAC Nursing A.A.S. degree graduates.
2. No bachelor’s degree is required for Bridge Option students.
3. Access to monthly webinars featuring topics relevant to successfully completing a graduate level program of study.
4. An online Academic Resource Center (ARC) which provides resources related to time management, test preparation, study skills and more.
5. Retention activities including annual on-campus Diversity Impact Weekend.
6. Assistance in locating facilities for clinical practicum.
7. Access to extensive online Library resources.
8. Scholarships: Available to students who have completed one year in the FNU program and completed minimum required credit hours; Scholarships targeted to assist students who plan to work in medically underserved rural areas; Federal Trainee stipend provides supplemental income to qualified applicants while in clinical; Grant Stipends available to qualified students for travel to minority conferences.
9. A FNU PRIDE program coordinator available for students to consult.

Frontier Nursing University Eligibility Requirements:
1. CAC Nursing degree graduates complete degree with a minimum cumulative 3.0 GPA.
2. After degree completion, complete one full year of Registered Nursing experience.
3. Successful application to FNU (PRIDE students given priority admissions status).
4. Secure a clinical site.

Frontier Nursing University Terms:
1. Complete all Frontier Nursing University admissions requirements in force at the time of application.
2. Upon acceptance and signing of the Frontier Nursing University enrollment agreement, transfer students will be subject to all Frontier Nursing University policies, codes of conduct, university procedures and requirements.
3. Fulfill all Frontier Nursing University requirements.

View Frontier Nursing University website at: www.frontier.edu Contact the PRIDE advisor for details at: www.frontier.edu or call 859-352-3637 Ext. 5009.

Grand Canyon University (GCU)

Since 1949, Grand Canyon University (GCU) has been a premier private university in Arizona, helping students find their purpose and achieve their potential in preparing them to land a career in their chosen field, advance in their current career, or change careers. In addition to the traditional campus in the heart of Phoenix, Grand Canyon University offers online programs that allow students to complete their coursework in any location, but remain connected to instructors and classmates. The articulation agreement between Central Arizona College and Grand Canyon University allows students to transition from their 2 year degree seamlessly.

For more information regarding GCU and its programs, please visit http://www.gcu.edu or call us at 1.855.428.8508. Students can also visit GCU’s Transfer Center.

GCU Eligibility Requirements:

- Central Arizona College students must meet the GCU admission criteria, which can be found in the GCU Policy Handbook.
- A maximum of 90 hours of transfer credit, no more than 84 credits of which can be lower division, can be applied to an undergraduate program at GCU.
- A grade of “C” or better must be earned in each transferrable course.
- If the student’s program is not listed on the articulation agreement, the student can submit their transcripts through GCU’s Pre-Evaluation Request process to find out how their CAC courses can apply to their desired program at Grand Canyon University.
- Traditional Campus Scholarship opportunities:
  - President Scholarship: 3.5+ Cumulative GPA: $6000/year
  - Provost Scholarship: 3.25-3.49 Cumulative GPA: $4000/year
  - Dean Scholarship: 3.0-3.24 Cumulative GPA: $3000/year

Traditional Campus Contact Information:
Jarred McDonald at 520-391-0397 or jarred.mcdonald@gcu.edu

Online (Non-Traditional) Campus Contact Information:
Heather Bullis at 520-275-0288 or heather.bullis@gcu.edu for the Bachelor of Science in Nursing (RN to BSN), Master of Science in Nursing, and health care programs

Grantham University

Contact a Grantham University transfer advisor at: grantham.edu or call: 866-827-1340.

Kaplan University (KU)

Following completion of a CAC associates degree program, students transfer to Kaplan University (KU) for baccalaureate degree completion. This Advanced Start Baccalaureate Program is designed to maximize students’ transfer credit award.

KU Benefits:
1. Associate degree completers block transfer up to 60 semester credits (or the equivalent) and acceptance into Kaplan’s Advanced Start Baccalaureate option.
2. Guaranteed admission to KU degree programs.
3. Cost-effective pathway ensuring that all CAC courses transfer and apply to the KU degree.
4. CAC alumni and employees receive a 10% discount on their Kaplan tuition provided student informs Kaplan admissions directors about their affiliation with CAC to receive their discount.
5. Access to Kaplan transfer advising by phone and occasionally in-person.
6. Kaplan Nursing of KTPA discount to CAC members: 20% off retail price of Kaplan Nursing Complete Classroom or online course; KTPA Nursing will provide NCLEX Strategy Seminars at the nursing School to all graduating classes without cost or obligation.
7. Note: Kaplan KTPA discount excludes NCLEX-RN Qbank or NCLEX-PN Qbank products or Integrated Testing programs. Discount may not be combined with any other offer or discount.

KU Eligibility Requirements:
1. CAC degree graduates or students submitting a letter from the CAC Registrar indicating the student is in good standing, the expected graduation date, the associates degree expected to be earned and the program/major. Upon graduation, the student must submit proof of having been awarded an associate’s degree.
2. Both of the above groups of students are reviewed as prequalified applicants for KU degree programs.
3. Kaplan will complete a review of all transfer credits submitted on official transcripts from CAC for students who have completed a certificate or diploma program.
4. Prior Learning Assessment Curriculum Evaluation (PLACE) may be developed to aid in the transfer credit evaluation process.
5. Kaplan reserves the right to make a final determination on all matters related to transferability and course equivalencies.
Kaplan University Terms:
1. Complete all Kaplan University admission requirements in force at the time of application.
2. Upon acceptance and signing of the Kaplan University enrollment agreement, transfer students will be subject to all Kaplan University policies, codes of conduct, college procedures and requirements.
3. CAC students unable to fulfill KU prerequisites at CAC must complete them at KU. Prerequisites vary by catalog and bachelor’s degree program and emphasis chosen.
4. Fulfill all KU requirements, including completion of at least 25% of program requirements at Kaplan.
5. Fulfill at least 50% of the major requirements including the capstone course at Kaplan.
6. Credit earned through any combination of Transfer Credit, Challenge Credit or Experiential Credit will not exceed 75% of total credits required for graduation.

View CAC Welcome to Kaplan University website at: www.cc.kaplan.edu. Contact an Academic Alliance advisor for details at: www.cc.kaplan.edu.

National American University
National American University is working together with Central Arizona College (CAC) to provide you additional bachelor degree options. Transfer approximately 60 semester credits to begin earning your bachelor’s degree.

Bachelor Degrees
- Accounting
- Business Administration (also with emphasis in the following)
  - Accounting
  - Entrepreneurship
  - Financial Management
  - Human Resource Management
  - Information Systems
  - International Business
  - Management
  - Marketing
  - Supply Chain Management
  - Tourism and Hospitality Management
- Criminal Justice
- Healthcare Management
- Information Technology (block transfer)
- Management (block transfer)
- Nursing Online RN to BSN*
- Organizational Leadership

National American U Benefits
We are committed to supporting students from their first contact with NAU until graduation through:
- Guaranteed admission to NAU degree programs
- Dedicated team of admissions, financial services, and academic advisors, student tutoring, counseling services and career services
- Classes offered online, depending on program and availability
- Existing credits and experience will be reviewed for potential transfer credit
- Curriculum designed with access to major courses in the first year

Affordability
Your financial service representative is dedicated to finding a financial plan that works for you based on your eligibility:
- Community College or Technical Training Scholarship of up to $2000 per year (must be a CAC graduate)
- Grants, loans, and work study
- Military benefits
- Tuition reduction for CAC employees

National American U is about personal development and community. When you choose to attend NAU, you don’t just join a group of diverse students and faculty; you join a group of people from all walks of life sharing a unique experience.

Contact: National American University, Online Learning, 877-398-0122, cccadmissions@national.edu.
Northern Arizona University (NAU)

Flagstaff and Extended Campuses
CAC2NAU, AAS to BAS, 90+30 Programs, Graduate Programs

Enhance your competitive advantage and professional possibilities by earning an undergraduate or graduate degree through the Extended Campuses of Northern Arizona University, or by attending the main campus in Flagstaff. Our programs will help you fulfill your potential in fields as diverse as justice, health, business, environmental and sustainable systems, and teaching. For more information, visit www.nau.edu.

Earning a degree can be a challenge to your current lifestyle, so NAU offers a number of degrees at a flexible pace that works around your schedule. NAU-Extended Campuses serve more than 30 communities in Arizona with online and in-person education and a growing number of joint-admission partnerships with community colleges including Central Arizona College. Both graduate degrees and undergraduate degrees are available to you through online, hybrid, or in-person delivery formats. Partnerships allow us to offer you in-person classes and programs locally, while our award-winning technical infrastructure supports the delivery of online programs.

NAU has been a leader in distance learning delivery since the 1970s and offers 14 disciplines (fields of study) in more than 100 program options. Degree programs, accepting up to 90 transfer credits, continue to grow along with the number of students embracing an alternative to the traditional residential university experience. About 35 percent of NAU students earn their degrees online or in local communities in Arizona. Visit nau.edu/extended.

NAU Office at CAC Signal Peak and Other CAC Campuses
NAU-Extended Campus’ Pinal County main office is located on the Central Arizona Campus Signal Peak inside CAC Advising and Testing (M-115). NAU staff is available Monday through Friday, 8 a.m. to 5 p.m., to answer questions about NAU programs. NAU staff is available at SMC, AVC, MC, and STC on specific days each month. Call 520-421-1394 for more information.

CAC2NAU Partnership
CAC and NAU are providing greater access and affordability for students to earn a bachelor’s degree with the award-winning* 2NAU program. CAC2NAU is a joint-admission program. As a participant in the program, you are admitted to Northern Arizona University while you attend your community college. While taking coursework at CAC, you pay the community college tuition rate. When you are ready to transition into NAU coursework, you take advantage of the most affordable university tuition rate in the state. See the tuition comparison at: extended.nau.edu/TuitionComparison.aspx. The unique elements of CAC2NAU help ensure a smooth transition to NAU! *Recipient of Arizona’s Pathways to Postsecondary Education Award

CAC2NAU Eligibility
Any student admitted to CAC is eligible to participate in the 2NAU program.

(Note: Students who have started their last semester at CAC or who have already completed their community college coursework and are ready to apply to NAU as degree-seeking, should apply directly to NAU following the General Transfer process below.)

CAC2NAU Benefits and Features
· Expert guidance to help maximize credits earned at the community college
· Waived NAU admission application fee ($25 savings)
· Access to NAU early enrollment
· Access to library services at both institutions
· NAU email account and ID card (JacksCard fee waived-$25 savings)
· Free admission to NAU athletic events in Flagstaff
· Merit-based NAU scholarship for those who qualify

CAC2NAU Degree Options
· NAU offers many degree programs online and in-person throughout the state. To see a complete list of our statewide programs, visit www.extended.nau.edu.
· For a list of majors available on the Flagstaff campus, visit Undergraduate Admissions at www.nau.edu/admissions.

Getting Started with CAC2NAU
To get started, visit www.nau.edu/cac2nau and follow the steps provided. You may also contact your local CAC2NAU coordinator at cac2nau@nau.edu or by calling 520-421-1394.

CAC2NAU Terms
1. Continued enrollment in at least 6 or more transferable CAC credits each term
2. All CAC2NAU coursework completed with a grade of “C” or better
3. Completion of a CAC degree prior to full transfer to NAU

CAC2NAU Scholarships and Financial Aid
NAU is prepared to support CAC2NAU students through scholarships and other financial support. 2NAU students may be eligible for the Joint Admission Transfer Scholarship and/or a variety of other opportunities; see:
nau.edu/FinAid/Scholarships/Merit/ and extended.nau.edu/FinancialAid.aspx.

General Transfer to NAU
After completing a CAC associate’s degree, students may transfer into select NAU degrees onsite, online, hybrid or in Flagstaff.

Contact a CAC or NAU advisor for details, or use the NAU Degree Search website to learn more about programs, career opportunities, and admission requirements: extended.nau.edu/DegreeSearch.aspx.

AAS to BAS Degrees
AAS degrees allow CAC students to transfer up to 75 credit hours and complete the remaining 45 credit hours toward a BAS through NAU.

90 + 30 Program
The popular NAU 90/30 is an interdisciplinary studies program with specializations that help you advance in your career opportunities. Students develop skills in oral and written communication, technology, and critical thinking while efficiently completing a bachelor’s degree.

Students may transfer up to 90 specific credit hours of community college and/or university credit from regionally accredited institutions and complete the remaining 30 upper division credits with NAU.

Bachelor’s and Beyond
Once you have earned a bachelor’s degree, you can continue your education through NAU’s graduate programs. Our graduate programs will help you fulfill your potential in fields as diverse as biotechnology, health, business, environmental and sustainable systems, and teaching. We know that earning an advanced degree can be a challenge to your current lifestyle, so we offer a number of degrees at a flexible pace that works around your schedule. Go to http://catalog.nau.edu/Catalog/ for information on all master’s and doctoral degrees.

NAU Bachelor’s Programs
Visit the recommended websites for more specific details regarding majors and emphases.

NAU Flagstaff:
http://catalog.nau.edu/Catalog/results?campus=FLGMT.

NAU Extended Campuses-Pinal County:
Visit extended.nau.edu/DegreeSearch.aspx for our most detailed and current list of bachelor’s and master’s programs available through Extended Campuses.
## DEGREES AND CERTIFICATES

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<th>NAU Bachelor’s Programs</th>
<th>Online</th>
<th>In Person</th>
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<td>Administration</td>
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<td>Business Administration</td>
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<td>• Global Business</td>
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<td>Career &amp; Technical Education</td>
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<td>Comparative Cultural Studies</td>
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<td>Criminology &amp; Criminal Justice</td>
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<td>Dental Hygiene-Degree Completion</td>
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<td>• Speech-Language Sciences and Technology</td>
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Ottawa University (OU)

Ottawa University, a private, not-for-profit institution founded in 1865, accepts all coursework credits (100-level and above) earned through the successful completion of any CAC associate degree program. Courses that are developmental or remedial in nature do not transfer. Ottawa University will accept additional semester hours of coursework from CAC for a maximum of 80 credits applicable toward the Bachelor of Arts degree. Of the 128 semester hours of credit required for graduation, 48 or more upper-division semester hours may be completed at Ottawa University, including required major courses and electives.

Programs include:

School of Education:
Bachelor of Arts in Elementary Education, Early Childhood Education, Secondary Education, and Special Education (cross-categorical)
Master of Arts in Education

School of Arts and Sciences:
Bachelor of Arts in Art, Biology (Sec. Ed.), Communication, Dance (Sec. Ed.), English, History, Human Services, Mathematics, Music (Sec. Ed.), Psychology
Bachelor of Science in Nursing

Master of Arts in Counseling

Angell Snyder School of Business:
Bachelor of Arts in Business Administration, Human Resources, Information Technology Systems, Management, Public Administration, Health Care Management
Master of Arts in Human Resources, Master of Business Administration

Ottawa University Benefits

1. Ottawa University students are assigned both Enrollment and Academic Advisors who will guide and assist the student from start to completion in earning the baccalaureate degree.
2. Students can select courses that are offered through a combination of face-to-face, fully online, and blended formats.
3. Students have access to an extensive online Library with access to professional journals and other academic resources.
4. Web based tutoring services in writing, mathematics, accounting and economics is available with one-on-one guidance.
5. Assistance in obtaining internships and practicum’s within certain programs leading toward certification or licensure are provided.

Ottawa University Terms

1. Ottawa will award and transcript college-level credit earned through the successful completion of any associate degree program awarded by CAC. Varsity sports, developmental, remedial, and courses that are not applicable to CAC’s degree will not transfer. Activity courses, such as skill building, physical, and musical activities, will be limited to four credits for each area. Coursework from other institutions accepted toward the CAC associate’s degree will be evaluated and transcripted in compliance with Ottawa’s transfer policy.

2. Ottawa will accept a maximum of 80 credits from CAC toward the Bachelor of Arts degree. Of the 128 semester hours of credit required for graduation, a minimum of 30 hours must be completed at Ottawa University, including a minimum of 12 hours of upper division coursework in the major. The student must also complete a minimum of 48 hours of upper division coursework.

3. Ottawa’s General Education requirements are organized into four areas called Breadth Areas; Art/Expression, Social/Civic Studies, Science/Description and Value/Meaning. Demonstration of competence in the Liberal Arts breadth areas includes completion of a minimum six semester credit hours. A student gaining an associate degree from CAC will typically have fulfilled Ottawa’s breadth area requirements. Should breadth area courses be lacking, these will be available through the student’s regular course of study at Ottawa University. Ottawa recognizes that learning in these four areas may be achieved in varied ways through different classes and/or tests, depending on students’ needs, interests, and educational backgrounds. Students must also successfully complete the LAS sequence of courses at Ottawa, consisting of a minimum of LAS 30012, Creative Writing and Thinking in the Liberal Arts and LAS 45012, Global Issues in the Liberal Arts.

4. Only courses for which students have received a grade of “C” or better (2.0 on a 4.0 scale) can be transferred and applied toward degree requirements to satisfy major and breadth area requirements. Courses with a grade of “D” will be considered for application toward the required 128 credits needed for graduation. Students must have a minimum 2.00 cumulative grade point average or higher to graduate from Ottawa.

The Ottawa University website is found at: www.ottawa.edu
Contact an enrollment advisor by calling 855-392-0002.
Palmer College of Chiropractic (PCC)

As a graduate of Palmer College, you will be educated to be an independent thinker with the skills to promote wellness, assess health and diagnose and manage your patients’ chiropractic health needs.

The curriculum includes extensive coursework in the basic sciences, chiropractic technique, chiropractic philosophy and business management. Students work under the supervision of a doctor to care for patients in a Palmer College outpatient or community outreach clinic.

Palmer College of Chiropractic requires students earn 90 semester credits with a 2.75 cumulative GPA on a 4.0 scale for admission into a Doctor of Chiropractic Program. In addition to adhering to the Council on Chiropractic Education guidelines, Palmer College provides priority consideration to applicants who demonstrate a strong, well-rounded academic record supported by co-curricular learning experiences. Qualified applicants will be invited to interview for placement into the program.

Palmer College encourages students to pursue a well-rounded education with coursework that includes 24 science credits, half with labs, that may include biology (human anatomy and physiology, embryology, genetics, microbiology, immunology, cellular biology, exercise physiology and kinesiology), chemistry (general chemistry, organic chemistry, analytical chemistry, biochemistry, toxicology/pharmacology, and nuclear medicine), and physical sciences (physics, biomechanics and statistics).

Contact the Palmer College Admissions Department for individual guidance at: www.palmer.edu/Admissions/ or review the program at: www.palmer.edu/DC/.

Palmer College Eligibility Requirements:
1. Complete 90 semester credits, including 24 science credits, half with labs.
2. Apply one year in advance of intended start date.
3. Earn a 2.75 cumulative GPA at CAC. Preferences will be given to students earning a 3.0 or better.
4. Complete at least 8 courses at CAC.
5. Satisfy all other requirements as prescribed in the Palmer College of Chiropractic catalog.

Prescott College (PC)

Prescott College ranks near the top in the 2012 edition of Best Colleges in Regional Universities (West), 69. Annual tuition and fees for the on-campus undergraduate programs are $28,069 (2012-13) and $12,732 (2012-13) for the Limited-Residency (distance) undergraduate program.

Prescott College enables CAC students to transfer as much relevant credit as possible to a bachelor’s degree program. Accepted degrees include Associate of Arts, Associate of Applied Science, Associate of Arts in Elementary Education, Associate of Business, Associate of General Studies and Early Childhood Degrees.

Prescott College Benefits:
1. No limit to the number of CAC semester credits accepted in transfer.
2. Secure Transfer Pathway for those who graduate from CAC with an Associate of Arts, Associate of Arts in Elementary Education, Associate of Science or Associate of Business degree and earn a CAC 2.0 CGPA.

Note: Applicants seeking admission with a CAC CGPA of less than 2.0 follow the standard application and evaluation process for admission.

Prescott College Eligibility Requirements:
1. Earned 2.0 CGPA @ CAC.
2. Complete Prescott College transfer process by meeting all applicable requirements and deadlines pertaining to application for admission, orientation residency, registration and payment of tuition and fees.

Prescott College Terms:
1. Students must enroll at Prescott College for a minimum of 8 to 10 upper division courses.
2. Transfer students must enroll at Prescott College for a minimum of 8 to 10 upper division courses and complete a minimum of 120 semester credits before becoming eligible to graduate with a Bachelor of Arts degree from Prescott College.
3. Only college-level courses numbered 100 and above and with a grade of “P”, “C” or better will be accepted for transfer. These credits may be applied as an elective within a competence (major), breadth (minor), general education requirement, or an exemption or replacement for a required course and applied toward a Bachelor of Arts degree.

Prescott College offers minimum residency bachelor’s degrees; see: http://www.prescott.edu/learn/limited-residencyundergraduate/index.html. Contact the Prescott College Admissions Office 877.350.2100 or admissions@prescott.edu for individual guidance.

Potomac College

See the Potomac College website for details: http://www.potomac.edu/ or call: 602-734-4369.
University of Arizona (UA)
Transfer Admission Programs (TAPs), AAS to BAS Paths

This program features Transfer Admission Programs, AAS to BAS program options, and provides seamless transfer opportunities to CAC students to complete a bachelor’s degree in Pinal County or at the UA campus in Tucson. After completing a CAC associate’s degree, students transfer into select articulated UA degree programs. See the UA website for the eligible program list for CAC associate degree completers and UA transfer guides: transferguides.arizona.edu.

UA TAP Benefits:
1. Guaranteed transfer admission to UA TAP degree programs.
2. Cost-effective pathway ensuring that all courses transfer and apply to your UA degree.
3. Access to UA transfer advising by phone and occasionally in-person.

UA TAP Eligibility Requirements:
1. Arizona resident.
2. AGEC completed with 2.5 cumulative GPA.
3. Overall CAC 2.0-2.5 GPA, dependent upon UA major.
4. Sign TAP agreement prior to CAC graduation.

UA TAP Terms:
1. UA advisor available at SPC and by appointment.
2. Upon signing of the UA TAP enrollment agreement, transfer students will be subject to all UA policies, codes of conduct, UA procedures and requirements.

CAC Transfer Admissions Pathways to UA Program Options:
- A.A.S. to B.A.S. Pathways to UA South
  - Diagnostic Medical Sonography A.A.S.
  - Entertainment Industry Technology: 4 Tracks
  - Equine Management A.A.S.
  - Fire Science Technology A.A.S.
  - Manufacturing Engineering A.A.S.
  - Radiologic Technology A.A.S.
  - Renewable Energy Technology A.A.S.
- A.S. with AGEC-S leading to Secondary Education Teacher Certification (3 online semesters +1 semester Student Teaching)
- B.A. Anthropology
- B.A. Communication
- B.A. English
- B.A.S. Supervision
- B.A.S. Network Administration (Coursework at CAC)
  Designed for students with work experience and an A.A.S., this degree meets industry demands, utilizes real-world situations and allows students to use practical knowledge and to advance in their career.

- Human Services
- B.S. Agribusiness Economics and Management
- B.S. Agriculture Technology Management
- B.S. Environmental Science
- B.S. Family Studies and Human Development (FSHD)
- B.S. Molecular and Cellular Biology
- B.S. Nutritional Sciences
- B.S. Science Education – Earth Science Option
- B.S. online leading to Teacher Certification

NEW FOR 2013/2014
- B.A.S. Informatics
- B.A. Psychology
- B.A. Psychology

Contact a TAP CAC advisor for details at: http://admissions.arizona.edu/transfer.
University of Maryland University College (UMUC)

Alliance Program

University of Maryland University College (UMUC) is the largest public university in the United States. As one of the 11 degree granting institutions of the University System of Maryland, this global university specializes in high-quality academic programs tailored to working adults.

UMUC, a regionally accredited institution, has earned a worldwide reputation for excellence as a comprehensive virtual university. Through a combination of classroom and distance-learning formats, UMUC provides educational opportunities to more than 92,000 students. The university is proud to offer highly acclaimed faculty and world-class student services to educate students online, throughout Maryland, across the United States and in 27 countries and territories around the world. UMUC serves its students through undergraduate and graduate programs, noncredit leadership development, and customized programs.

For more information regarding UMUC and its programs, including the customized programs for CAC associate degree graduates, visit www.umuc.edu or http://www.umuc.edu/students/academics/onlinelearning/ugonl ineprograms.cfm. See the articulated programs designed for CAC students at: www.umuc.edu/students/admissions/transfer/ccalliances/ and select CAC.

UMUC Alliance Program Benefits:
1. Guaranteed admission to UMUC with the opportunity to transfer into UMUC identified degree Articulated Programs.
2. Cost-effective pathway ensuring that all CAC courses transfer and apply to chosen UMUC degree.
3. Flexible transfer policy accommodates up to 70 CAC credits applicable toward UMUC articulated degree programs, provided the student earned a grade of “C” or better in each course.
4. Students must complete a minimum of 120 credits to earn the UMUC bachelor’s degree of which at least 30 credits must be taken through UMUC and 45 credits must be upper division level coursework.
5. Access to UMUC transfer advising by phone, webcam, and in-person during regularly scheduled campus visits.
6. Waiver of UMUC $50 admission application fee if student completes the application prior to graduating from CAC.
7. UMUC’s Prior Learning program grants up to 30 college credits for knowledge gained from work, military service, and community and volunteer activities.
8. Eligibility to apply for the UMUC Scholarship program.
9. Scholarship opportunities for community college graduates with a minimum 3.0 GPA.
10. Access to the extensive University System of Maryland library, tutoring, writing assistance, career counseling, computer labs, 24-hour tech support and more.
11. Dual enrollment options at your community college and UMUC.
12. Students can easily apply online: http://www.umuc.edu/

UMUC Alliance Program Eligibility Requirements:
1. CAC student who meets UMUC admission criteria and other applicable requirements for the transfer of Articulated Programs or the transfer of credits. See UMUC catalog at time of transfer for details:
http://www.umuc.edu/students/catalogs/
2. Complete UMUC Articulated Program of study at CAC.
3. Apply to UMUC before CAC graduation to receive UMUC admission fee waiver.
4. Earn a grade of “C” or better in each transferable course.
5. Additional CAC programs and courses not included on the Articulation Program sheet are eligible to transfer to UMUC provided the student earns a grade of “C” or better in each course, the student does not take the equivalent course at UMUC and the course is not being awarded UMUC credits directly.
6. Eligibility to apply for the UMUC Scholarship program.

UMUC Alliance Program Terms:
1. Adhere to UMUC laws, regulations, practices and policies in effect at CAC and UMUC.
2. Work with a CAC and UMUC advisor to monitor progress on the Alliance Program prescribed sequence of courses.

Community College Transfer Scholarship
CAC graduates may apply for the Community College Transfer Scholarship awarded for up to $3,300 per year for full-time study and $1,650 per year for part-time study or other scholarship opportunities as they become available. Students must meet scholarship qualifications:
1. Earn 3.0 GPA at CAC.
2. Complete CAC associate degree.
3. Verify U.S. citizen or permanent resident status.
4. Submit both UMUC admission and scholarship application.

Note: Alliance students who participated in dual enrollment before earning their associates degree are still eligible for the Community College Transfer Scholarship. See: www.umuc.edu/ccsp.

UMUC Scholarship for Alliance Faculty and Staff
Pursue professional development through the Alliance Program. The scholarship program can save you money on any of UMUC’s many award-winning and career-relevant bachelor, master and doctoral degree programs. UMUC provides comprehensive student services to help foster student success. Awards are $500 per fall/spring semester with an opportunity to renew up to three years.

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Eligibility Requirements:
1. Submit verification of current full-time CAC employment
2. Student may not receive 100% tuition remission
3. Verify U.S. citizen or eligible noncitizen
4. Be a new student pursuing a first bachelor, master or doctoral degree from UMUC
5. Enroll for at least 6 credits for consecutive fall and spring UMUC sessions and remain employed at CAC
6. Maintain a minimum 3.0 GPA at UMUC
7. Have a minimum cumulative 3.0 GPA from all previous institutions

UMUC New Doctoral Student Option:
Full-time faculty or staff at CAC may qualify for a discounted tuition rate of 25% off for UMUC doctoral programs including the doctor of management in community college policy and administration.

UMUC offers many financial aid opportunities, in addition to scholarships. Contact a UMUC financial aid advisor at 800-888-UMUC (8682) or email finaid@umuc.edu.

For more information about UMUC programs, call 800-888-UMUC, email communityrelations@umuc.edu, visit with a UMUC representative at CAC or download forms at: www.umuc.edu/ccsp.

University of Phoenix (U of PX)

RN to BSN
The Bachelor of Science in Nursing (BSN), accredited by the Commission on Collegiate Nursing Education (CCNE), is a program designed to develop the professional knowledge and skills of registered nurses. The curriculum builds on a foundation of biological, physical, and social sciences, which contribute to the science of nursing. The liberal arts components enhance the development of the intellectual, social, and cultural aspects of the professional nurse.

This baccalaureate program includes behavioral objectives that concentrate on the development of the nurse’s role as caregiver, teacher, and leader. Utilizing human caring as a framework, registered nurses are prepared as generalists who are able to apply critical thinking, professional skills, and knowledge to client outcomes and health care systems.

The Bachelor of Science in Nursing degree program has a 41-credit required course of study and a 6-credit elective requirement. The required course of study includes a capstone course that synthesizes baccalaureate outcomes. The required course of study fulfills only part of the 120-minimum-credit requirement for degree completion.

*Nursing programs are accredited by the Commission on Collegiate Nursing Education (CCNE), One DuPont Circle, NW, Suite 530, Washington, DC 20036-1120, and 202-887-6791.

Benefits to CAC Students/Employees and Family Members:
From Phoenix.edu:
In health care, the decisions you make are opportunities to improve a life. Empower yourself to make informed choices about the patients you serve and earn an RN to BSN degree. A BSN will allow you to provide more comprehensive patient care — studies prove that BSN-prepared nurses have better patient outcomes — and enable you take on more leadership roles in an array of health care settings.

The University of Phoenix® College of Nursing is committed to helping prepare you to be a more essential part of a health care delivery team:
• Our RN to BSN degree program accredited by the Commission on Collegiate Nursing Education (CCNE).
• Regularly updated curricula that focus on evidence-based practice and stronger decision-making skills you can use now, not just after graduation.
• Faculty members whose average 18 years’ experience bring life to the curricula.
• A flexible course schedule that can accommodate your busy life.
• More individual attention with an average 8-to-1 student-to-faculty ratio.
• Learning teams that reinforce new concepts and build teamwork skills.
DEGREES AND CERTIFICATES

For more information about on-time completion rates, the median debt incurred by students who completed this program, and other important information, please visit phoenix.edu/programs/gainful-employment.html

U of PX Eligibility Requirements:
To enter the RN to Bachelor of Science in Nursing degree program, you must:

a. Have earned an acceptable high school diploma, GED equivalent, California High School Proficiency Examination certificate or foreign secondary school equivalent. If you currently don’t meet this requirement, you can arrange to take the GED through your state’s GED administrator’s office or search for the nearest GED testing center.

b. Have earned an associate degree from a regionally or nationally accredited institution or earned a nursing diploma from a recognized school in the United States.

c. Have a valid, unrestricted, unencumbered RN license from the United States in all states in which you hold an active license.

d. Be a citizen or permanent resident of the United States or hold an approved, valid visa if residing in the United States.

e. Have never been expelled from a previous institution.

f. Complete all required forms for admission and submit official test scores and official transcripts from all colleges or universities attended.

U of PX Terms of Agreement:

a. Transfer courses to satisfy general education or lower division elective requirements must have minimum grade of “C-“, grades of credit, pass, or satisfactory; and must be college-level coursework taken at a regionally or approved nationally accredited institution.

b. A minimum grade of “C” (2.0) is required to waiver any University undergraduate lower division-required course.

c. Students must complete the BSN program with a minimum GPA of 2.00.

d. Tuition cost: To learn more about tuition costs please visit: http://www.phoenix.edu/tuition_and_financial_options/tuition_and_fees.html

e. Fees: To learn more about fees please visit: http://www.phoenix.edu/tuition_and_financial_options/tuition_and_fees.html

d. Deadlines: N/A

e. To learn more about special partner benefits, please visit www.phoenix.edu/centralAZ

f. Credit by Exam options: Available by speaking to an advisor

g. For any transfer credit limitations please refer to an advisor

h. Scholarships available: To learn more about scholarships http://www.phoenix.edu/tuition_and_financial_options/scholarships/institutional-scholarships.html.

Enrollment information: available by speaking with an Enrollment Advisor.

U of PX Special Programs/Cohorts:
List of transfer pathway 4-year degrees at UoPX and master’s programs available to CAC employees and their families:

UOPX CON offers LP/VN to BSN (at four campus locations; online is not an option), RN to BSN Completion Program (campus location or online), MSN (concentrations in Nursing Education and Nursing Administration – onsite or online), and Family Nurse Practitioner (at four campus locations; online is not an option). CON also offers certificate programs in FNP (at four campus locations), Post Master’s Nursing Administration, and Post Master’s Nursing Education.

CAC Student Portal at U of PX URL: www.phoenix.edu/centralAZ

Advising Information/Contact: www.phoenix.edu or contact your local campus.

Upper Iowa University
See the UIU website for details: http://www.uiu.edu. Or call: (563) 425-5200.
Western International University (WIU)

The majority of West students are working adults who thrive on the flexibility and convenience of West course schedules and locations. Students have the opportunity to demonstrate their individual achievements through measures such as quizzes, tests, papers, projects, and presentations, rather than study groups or learning teams.

West faculty includes experienced practitioners who hold advanced degrees in their teaching fields and are highly successful in their areas of professional expertise. While West course schedules are non-traditional in form, we maintain a traditional educational model and teaching style in both our on campus and online degree programs. Our faculty share knowledge through lectures, presentations, class activities and discussions.

West offers associate, bachelor, and master degree programs, as well as a professional certificate in Accountancy. All programs are available online. Campus locations: Chandler, Scottsdale, Phoenix.

WIU Benefits:
1. No limit to the number of CAC semester credits accepted in transfer. 72 lower division credits, 90 total (126 needed to graduation).
2. Secure Transfer Pathway for those who graduate from CAC with an Associate of Arts, Associate of Arts in Elementary Education, Associate of Science or Associate of Business degree and earn a CAC 2.0 cumulative GPA. AAS degrees are transferrable also.
3. Students can enroll at WIU for one class at a time; classes are 8 weeks in length and meet one night per week.

WIU Eligibility Requirements:
1. Earned CAC 2.0 cumulative GPA.
2. Complete WIU transfer process meeting all applicable requirements and deadlines pertaining to application for admission, orientation residency, registration and payment of tuition and fees.

WIU Bachelor Degree Programs:
- Accounting (BS)
- Behavioral Science (BA)
- Business Administration (BS)
- Business (BS), with Minors available in nine areas
- Criminal Behavior (BA)
- Human Resource Management (BA)
- Informatics IT (BS)
- Legal Studies (BA)
- Management (BS)
- Professional Communication (BA)

WIU Master Degree Programs:
- Business Administration (MBA)
- Finance (MBA)
- Information Systems Engineering (MS)
- Innovative Leadership (MA)
- Human Dynamics (MA)
- International Business (MBA)
- Management (MBA)
- Marketing (MBA)
- Public Administration (MPA)
ASSOCIATE OF ARTS (A.A.) DEGREE
(60-64 Credits)

District-Wide


For a list of Common Courses associated with specific programs of study, go to the Common Course Matrix Archives and select the current year or the year the course was completed: http://www.aztransfer.com/MatrixArchives.

AGEC courses are transferable to all three Arizona public universities provided students earn a grade of “C” or better. Contact an academic advisor for assistance.

AGEC-A (35-36 Credits)

The Associate of Arts Degree requires the AGEC-Arts (AGEC-A) general education block of 35-36 credits. The AGEC-A satisfies requirements in many liberal arts programs and other programs that articulate with the A.A. Degree. The AGEC-A requires a minimum of College Mathematics MAT141 plus 32 credits from specific AGEC categories. Refer to the AGEC Course List in this catalog or the AGEC-Web: http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa.

General Education (35-36)

For the five categories below, select the recommended course(s) or an AGEC course from the equivalent category.

Written Communications (6 Credits)
ENG101 English Composition III (3) ☑
ENG102 English Composition IV (3) ☑

Oral Communications (3 Credits)
Select an AGEC Course.

Students must choose course work from more than one discipline for both Arts and Humanities and Social and Behavioral Science categories.

Arts and Humanities (6-9 Credits)
Select a minimum of one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6-9 Credits)
Select AGEC courses from different disciplines.

Physical and Biological Sciences (8 Credits)
Select AGEC courses with a laboratory component.

Mathematics (3-4 Credits)
MAT141 College Mathematics, Standard (4) or higher

Subject Options (0-6)

Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and review Transfer Guides: http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)

Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences or Transfer Electives, may also be used to satisfy the three (3) Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Students may select courses which fulfill multiple categories. For example, a course may fulfill the AGEC Arts, Intensive Writing and a core requirement.

Select approved elective courses which transfer as “Elective or better” to all three Arizona public universities to complete the required A.A. Degree credit requirement. Consult the CEG.
Requirements for A.A. Degree (3)

Reading Competency: RDG094 College Reading \( \mathcal{R} \)

Computer Competency (3):
CIS120  Survey of Computer Information Systems (3) \( \mathcal{R} \)
AGB124  Microcomputers in Agriculture (3)

OR

Transferable Computer Competency course
(Consult the Course Equivalency Guide to determine transferability to the three state public universities.)

Other A.A. Degree Requirements

Some A.A. Degree majors require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degree programs require either a second semester or fourth semester level of a second language. CAC strongly encourages students to complete this requirement at CAC prior to transfer.

Check your university catalog. Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students who are undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in each A.A. Degree required course.
Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

The Associate of Arts Degree requires 60-64 semester credits.
ASSOCIATE OF BUSINESS (A.BUS.) DEGREE (60-64 Credits)

Aravaipa, Maricopa, Signal Peak, Superstition Mountain and SanTan Campuses

The Associate of Business (A. Bus.) Degree suits students who plan to transfer to the university to earn a baccalaureate degree in Business-related areas, such as Accounting, Business Administration, Computer Information Systems, Economics, Finance, Human Relations, Marketing and Public Administration.

For a list of Common Courses associated with specific programs of study, go to the Common Course Matrix Archives and select the current year or the year the course was completed: http://www.aztransfer.com/MatrixArchives.

AGEC courses are transferable to all three Arizona public universities provided students earn a grade of “C” or better. Contact an academic advisor for assistance.

AGEC-B (35-36 Credits)

The Associate of Business Degree requires the AGEC-Business general education block of 35-36 credits. The AGEC-B satisfies requirements in many business programs and other programs that articulate with the A. Bus. Degree. The AGEC-B requires a minimum of Brief Calculus MAT211 plus 32 credits from specific AGEC categories. Refer to the AGEC Course List in this catalog or the AGEC-Web: http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa.

General Education (35-36)

For the five categories directly below, choose from the recommended courses or select AGEC courses from the equivalent category.

Written Communications (6 Credits)
ENG101  English Composition III (3) ☑
ENG102  English Composition IV (3) ☑

Oral Communications (3 Credits)
Select an AGEC course.

Students are encouraged to choose coursework from more than one discipline for both Arts and Humanities and Social and Behavioral Science categories.

Arts and Humanities (6-9 Credits)
Select a minimum of one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6-9 Credits)
Select AGEC courses from different disciplines.

Physical and Biological Sciences (8 Credits)
Select AGEC courses with a laboratory component.

Mathematics (3-4 Credits)
MAT211  Brief Calculus (4) or higher

Computer Competency (3 Credits)
CIS120  Survey of Computer Information Systems (3) ☑

Subject Options (0-3)
Based on your major, review the specific Associate of Business Degree requirements in the CAC Catalog, consult an academic advisor and review the Transfer Guides: http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences or Transfer Electives, may also be used to satisfy the three (3) Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (22-26 Credits)
ACC201  Financial Accounting (3) ☑
ACC202  Managerial Accounting (3) ☑
BUS201  Legal Environment of Business (3)
BUS208  Business Statistics (3) ☑
ECN201  Principles of Microeconomics (3) ☑ ☑ (also fulfills Social/Behavioral Science requirement)
ECN202  Principles of Macroeconomics (3) ☑ ☑ (also fulfills Social/Behavioral Science requirement)
MAT215  Math for Business Analysis (4) ☑

Electives (0-4)
Select approved elective courses which transfer as "Elective or better" to all three Arizona public universities. Consult the CEG. Students must complete a total of 60-64 credits to earn the Associate of Business Degree.
Recommended Business Electives:
ACC121 Income Tax Fundamentals (3)
BUS100 Introduction to Business (3)
BUS260 Applied Business Seminar (3)
CIS123 Introduction to Programming (3)
MAT151 College Algebra, Standard (4)

Requirements for A. Bus. Degree (3)
Reading Competency: RDG094 College Reading \( \textit{R} \)

Computer Competency (3):
CIS120 Survey of Computer Information Systems (3) \( \textit{E} \)
\textit{(Fulfilled by AGEC-B requirement)}

Other A. Bus. Degree Requirements
Some A. Bus. Degree majors require up to 16 credits of a
Second Language to demonstrate proficiency. Many four-year
degree programs require either a second semester or fourth
semester level of a second language. CAC strongly encourages
students to complete this requirement at CAC prior to transfer.

Check your university catalog, Transfer Guides at
http://www.aztransfer.com/TransferGuides, or meet with an
academic advisor. Students may demonstrate proficiency by
completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to
complete a fourth semester of a second language. CAC offers
Spanish, French, Sign Language and other Foreign Languages
and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of "C" or better in each A. Bus.
Degree required course.
Students must earn a minimum of 20 credits from CAC which
includes the AGEC-B requirements.

The Associate of Business Degree requires 60-64 credits.
ASSOCIATE OF SCIENCE DEGREE (A.S.)
(60-64 Credits)

Signal Peak & Superstition Mountain Campuses

The Associate of Science (A.S.) Degree suits students who plan to transfer to the university to earn a baccalaureate degree in Physical and Biological Science areas such as Agricultural Science, Allied Health, Animal Science, Astronomy, Athletic Training, Biology, Botany, Chemistry, Computer Science, Engineering, Microbiology, Physics, Plant and Soil Science, and Veterinary Science.

For a list of Common Courses associated with specific programs of study, go to the Common Course Matrix Archives and select the year you completed the course(s): http://www.aztransfer.com/MatrixArchives. AGEC courses are transferable to all three Arizona public universities provided students earn a grade of “C” or better. Contact an academic advisor for assistance.

AGEC-S (35-37 Credits)
The Associate of Science Degree requires the AGEC-Sciences general education block of 35-37 credits. The AGEC-S satisfies programs with rigorous mathematics and science requirements. The AGEC-S requires a minimum of MAT221 Analytical Geometry and Calculus I (4) or higher Math course, transferable to ASU, NAU and UofA, plus 32 credits from specific AGEC categories. Refer to the AGEC Course List in this catalog or the AGEC-Web: http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa.

General Education (35-37)
Written Communications (6 Credits)
ENG101 English Composition III (3) ☑ ☑
ENG102 English Composition IV (3) ☑ ☑

For the two categories directly below, choose AGEC courses from the equivalent AGEC Category from the AGEC Course List in this catalog. Students are encouraged to choose coursework from more than one discipline for both Arts and Humanities and Social and Behavioral Science categories.

Arts and Humanities (6 Credits)
Select one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6 Credits)
Select AGEC courses from different disciplines.

Physical and Biological Sciences (8 Credits)
Life Science Majors:
CHM151 General Chemistry I (4) ☑ ☑ or higher
CHM152 General Chemistry II (4) ☑ ☑
OR
BIO181 General Biology I (4) ☑ ☑ or higher
BIO182 General Biology II (4) ☑ ☑

Physical Science Majors:
CHM151 General Chemistry I (4) ☑ ☑ or higher
CHM152 General Chemistry II (4) ☑ ☑
OR
PHY121 University Physics I: Mechanics (4) ☑ ☑ or higher
PHY122 University Physics II: Electricity and Magnetism (4) ☑ ☑

Mathematics (3-4 Credits)
MAT221 Analytical Geometry and Calculus I (4) ☑ ☑ or higher

Subject Options (6-8)
Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides. Students may select mathematics or science courses. Select Mathematics courses above the first course in the calculus sequence and/or Science courses from: Agriculture, Astronomy, Biology, Botany, Chemistry (CHM151 or higher), Engineering, Environmental Science, Geology, Nutrition, Physical Geography, Physics or Zoology.

Special Awareness Requirements (0-9)
1. At least three semester credits of coursework in Intensive Writing and Critical Thinking
2. At least three semester credits of coursework in Ethnic/Race/Gender Awareness
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Communications, Arts and Humanities, Social and Behavioral Sciences or Transfer Electives may also be used to satisfy one of the three (3) Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Electives
Select approved elective courses which transfer as "Elective or better" to all three Arizona public universities. Consult the CEG. Students must complete a total of 60-64 credits to earn the Associate of Science Degree.
Requirements for A. S. Degree (3)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3)
CIS120 Survey of Computer Information Systems (3)
OR
Transferable Computer Competency course
(Consult the Course Equivalency Guide to determine transferability to the three state public universities.)

Other A. S. Degree Requirements
Some A.S. Degree majors require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degree programs require either a second semester or fourth semester level of a second language. CAC strongly encourages students to complete this requirement at CAC prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students who are undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in each A.S. Degree required course.
Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

Associate of Science Degree requires 60-64 credits.
ARIZONA GENERAL EDUCATION CURRICULUM (AGEC) 2013-2014

Completion of the AGEC or AGEC Certificate fulfills lower division General Education Requirements and will be fully applicable to the baccalaureate degree upon transfer to an Arizona public university. Three tracks are available: AGEC-Arts, AGEC-Business and AGEC-Science. All require completion of 35-37 transferable credits.

Consult an academic advisor to select courses to meet the AGEC requirements that may also fulfill program requirements in your chosen university major.

Multiple-Use Course Guideline:
Students may use a course to fulfill an AGEC Category, such as the Social and Behavioral Sciences along with an AGEC Special Awareness Requirement Area, such as Intensive Writing. In addition, students may use the same course to fulfill certificate/degree core and/or elective requirements as well as CAC Requirements, i.e. Computer Competency course. Students must earn the minimum credits required for each credential. For example, an A.A. Degree with an AGEC-A requires a minimum of 60-64 credits, including a minimum of 20 credits earned from CAC.

AGEC (35-37 Credits)

General Education
When fulfilling the AGEC requirements, follow the instructions carefully. For example, students selecting the AGEC-A must earn a minimum of one course in the Arts Category and one course in the Humanities Category, i.e. ART 207 or ART 208. Thus, the same Art course may not fulfill both the AGEC Arts and AGEC Humanities Categories (6-9 credit requirements).

Written Communications (6 Credits)
ENG101 English Composition III (3)
ENG102 English Composition IV (3)

Oral Communications (3 Credits)
COM100 Fundamentals of Human Communication (3)
COM101 Interpersonal Communication (3)
COM202 Introduction to Group Communication (3)
COM206 Public Speaking (3)
COM263 Intercultural Communication (3)

Students are encouraged to choose coursework from more than one discipline for both Arts and Humanities and Social and Behavioral Science categories.

Arts and Humanities (6-9 Credits)

Arts (Minimum of 3 credits)
ART100 Art Appreciation (3)
ART101 Two-Dimensional Design (3)
ART102 Three-Dimensional Design (3)
ART103 Beginning Jewelry and Metalwork (3)
ART105 Ceramics I (3)
ART207 Art History I (3)
ART208 Art History II (3)
EIT100 History of Rock n’ Roll (3)
LIT202 American Literature II (3)
MHL100 Music Appreciation (3)
MHL207 Survey of Jazz/Popular Music (3)
THE100 Theater Appreciation (3)
THE115 Introduction to Cinema (3)
THE116 Contemporary Cinema (3)

Humanities (Minimum of 3 credits)
AJS123 Ethics and the Administration of Justice (3)
ART207 Art History I (3)
ART208 History of Rock n’ Roll (3)
EIT100 History of Rock n’ Roll (3)
ENG205 Introduction to the Study of Language (3)
HIS101 U.S. History I (3)
HIS102 U.S. History II (3)
HIS103 History of Western Civilization I (3)
HIS104 History of Western Civilization II (3)
HIS108 Eastern Civilization –Beginnings to 1850 (3)
HIS201 Women in U.S. History (3)
HIS208 Eastern Civilization –1850 to Modern Times (3)
HMC250 Humanities in the Western World I (3)
HMC251 Humanities in the Western World II (3)
HMC252 Humanities in the Western World III (3)
HNR204 Honors Colloquium I (3)
HNR205 Honors Colloquium II (3)
HNR206 Honors Colloquium III (3)
LIT101 Introduction to Literature (3)
LIT201 American Literature I (3)
LIT202 American Literature II (3)
LIT203 English Literature I (3)
LIT204 English Literature II (3)
LIT206 World Literatures (3)
LIT233 American Ethnic Literature (3)
LIT254A Literature and Film (3)
LIT256 Science Fiction Literature and Film (3)
LIT291 Children’s Literature for Educators (3)
PHI101 Introduction to Philosophy (3)
PHI105 Introduction to Ethics (3)
PHI112 World Religions (3)
Social and Behavioral Sciences
(6-9 Credits)
Select courses from at least two disciplines.

AGS122 Natural Resources and Conservation (3)
AJS101 Introduction to Administration of Justice (3)
AJS123 Ethics and the Administration of Justice (3)
AJS225 Criminology (3)
AJS270 Community Relations (3)
ARH200 Principles of Archaeology (3)
ASB101 Physical Anthropology and Archaeology: Bones, Stones, and Human Evolution (3)
ASB102 Cultural Anthropology (3)
ASB201 Indians of the Southwest (3)
BUS190 Principles of Management and Leadership (3)
COM101 Interpersonal Communication (3)
COM263 Intercultural Communication
ECE276 Child Development (3)
ECN201 Principles of Macroeconomics (3)
ECN202 Principles of Microeconomics (3)
EDU221 Introduction to Education (3)
EDU222 Introduction to Special Education (3)
GEO101 Introduction to Cultural and Historical Geography (3)
HIS101 U.S. History I (3)
HIS102 U.S. History II (3)
HIS105 Arizona History (3)
HIS106 Mexican-American History (3)
HIS107 African-American History I (3)
MSC101 Media and Society (3)
PEH101 Personal Health (3)
PHI105 Introduction to Ethics (3)
POS101 American Politics (3)
POS104 Contemporary Issues in World Politics (3)
POS220 U.S. and Arizona Constitutions (3)
PSY101 Introduction to Psychology (3)
PSY200 Social Psychology (3)
PSY203 Developmental Psychology (3)
PSY205 Personality and Social Adjustment (3)
PSY277 Human Sexuality (3) Cross Listed with SOC277
REC101 Recreation, Leisure, and the Quality of Life (3)
SOC100 Introduction to Sociology (3)
SOC102 Contemporary Issues in Society (3)
SOC200 Racial and Ethnic Minorities (3)
SOC203 Marriage and Family (3)
SOC212 Gender in Society (3)
SOC250 Family Violence (3)
SOC277 Human Sexuality (3) Cross Listed with PSY277

Physical and Biological Sciences
(8 Credits)
Associate of Science Degrees have unique Physical or Life Science requirements. Students pursuing an Associate of Science Degree should consult their academic advisor and follow the Arizona Transfer Guide for their major. Refer to the AGEC-S requirements in this catalog.

AGS101 World of Plants (4)
AGS104 Agricultural Environmental Science (4)
AGS106 Entomology (4)
AGS221 Soil Science (4)
AGS240 Plant Biology (4)
AST101 Survey of Astronomy (4)
BIO100 Biology Concepts (4)
BIO109 Natural History of the Southwest (4)
BIO156 Human Biology for Allied Health (4)
BIO160 Introduction to Human Anatomy/Physiology (4)
BIO181 General Biology I (4)
BIO182 General Biology II (4)
BIO201 Human Anatomy – Physiology I (4)
BIO202 Human Anatomy – Physiology II (4)
BIO205 Microbiology (4)
CHM130 Fundamental Chemistry (4)
CHM151 General Chemistry I (4)
CHM152 General Chemistry II (4)
CHM235 General Organic Chemistry I (4)
CHM236 General Organic Chemistry II (4)
ENV101 Environmental Science (4)
GLG101 Physical Geology (4)
GLG102 Historical Geology (4)
GLG110 Environmental Geology (4)
NTR141 Nutrition and Wellness (4)
PHY100 Physical Universe (4)
PHY111 College Physics I (4)
PHY112 College Physics II (4)
PHY121 University Physics: Mechanics (4)
PHY122 University Physics II: Electricity and Magnetism (4)
**DEGREES AND CERTIFICATES**

**Mathematics (3-4 Credits)**

Associate of Business and Associate of Science Degrees have unique Mathematics requirements dependent on the major. Contact an academic advisor and follow the Transfer Guide for your major to determine the required Mathematics sequence. Refer to page xxx for AGEC-B requirements and page xxx for AGEC-S requirements.

MAT141 College Mathematics, Standard (4)
MAT151 College Algebra, Standard (4)
MAT162 Applied Statistics (3)
MAT182 Trigonometry with Algebra Review (4)
MAT187 Pre-Calculus (5)
MAT201 Math for Elementary Teachers I (3)
MAT202 Math for Elementary Teachers II (3)
MAT211 Brief Calculus, Standard (4)
MAT212 Brief Calculus, Accelerated (3)
MAT215 Math for Business Analysis (4)
MAT221 Analytical Geometry and Calculus I (4)
MAT231 Calculus with Analytic Geometry II (4)
MAT241 Analytical Geometry and Calculus III (4)
MAT262 Ordinary Differential Equations (3)
MAT275 Modern Differential Equations (4)

**Subject Options (Varies 0-8)**

See specific AGEC requirements.

**Special Awareness Requirements (0-9 Credits)**

Courses used in general education areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives may also be used to satisfy the three (3) Special Requirements categories. A course may not be used to satisfy more than one Special Requirements category.

**Intensive Writing/Critical Inquiry IW**

AGS122 Natural Resources and Conservation (3) IW
AJS225 Criminology (3) IW
ENG203 Advanced Composition (3) IW
HIS208 Eastern Civilization – 1850 to Modern Times IW
HNR204 Honors Colloquium I (3) AND
HNR205 Honors Colloquium II (3) IW
(Note: Must complete HNR204 and HNR205)
LIT201 American Literature I (3) IW
LIT202 American Literature II (3) IW
LIT203 English Literature I (3) IW
LIT204 English Literature II (3) IW
LIT233 American Ethnic Literature (3) IW
LIT254A Literature and Film (3) IW
LIT256 Science Fiction Literature and Film (3) IW
LIT291 Children’s Literature for Educators (3) IW
PHI105 Introduction to Ethics (3) IW
PSY203 Developmental Psychology (3) IW
PSY205 Personality and Social Adjustment (3) IW
SOC200 Racial and Ethnic Minorities (3) IW

**Cultural Awareness (Ethnic/Race/Gender)**

ART207 Art History I (3)
ART208 Art History II (3)
ASB102 Cultural Anthropology (3)
ASB201 Indians of the Southwest (3)
COM263 Intercultural Communication (3)
EDU230 Cultural Values in Education (3)
ENG205 Introduction to the Study of Language (3)
GEO101 Introduction to Cultural/Historical Geography (3)
HIS105 Arizona History (3)
HIS106 Mexican-American History (3)
HIS107 African-American History I (3)
HIS108 Eastern Civilization – Beginning to 1850 (3)
HIS201 Women in U.S. History (3)
HMC250 Humanities in the Western World I (3)
HMC251 Humanities in the Western World II (3)
HMC252 Humanities in the Western World III (3)
LIT101 Introduction to Literature (3)
LIT201 American Literature I (3)
LIT202 American Literature II (3)
LIT206 World Literatures (3)
LIT233 American Ethnic Literature (3)
LIT291 Children’s Literature for Educators (3)
MHL207 Survey of Jazz/Popular Music (3)
PSY277 Human Sexuality (3) Cross Listed with SOC277
SLG202 American Sign Language IV (4)
SOC200 Racial and Ethnic Minorities (3)
SOC212 Gender in Society (3)
SOC277 Human Sexuality (3) Cross Listed with PSY277

**ICON LEGEND**

AGEC: Dual Enrollment: Programs of Study/Tech Prep: POS
Intensive Writing: IW
Reading Required: RDG094: IW
SUN Course: IW

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Global/International and Historical Awareness (3 Credits)

Global/International Awareness
AGS122 Natural Resources and Conservation (3)
ASB102 Cultural Anthropology (3)
ART207 Art History I (3)
ART208 Art History II (3)
FRE201 Intermediate French I (4)
FRE202 Intermediate French II (4)
HIS103 History of Western Civilization I (3)
HIS104 History of Western Civilization II (3)
HIS107 African-American History I (3)
HIS108 Eastern Civilization—Beginning to 1850 (3)
HIS208 Eastern Civilization—1850 to Modern Times (3)
LIT206 World Literatures (3)
PHI112 World Religions (3)
POS104 Contemporary Issues in World Politics (3)
SPA201 Intermediate Spanish I (4)
SPA202 Intermediate Spanish II (4)
THE100 Theater Appreciation (3)

Historical Awareness
ART207 Art History I (3)
ART208 Art History II (3)
ASB201 Indians of the Southwest (3)
GEO101 Introduction to Cultural/Historical Geography (3)
HIS101 U.S. History I (3)
HIS102 U.S. History II (3)
HIS103 History of Western Civilization I (3)
HIS104 History of Western Civilization II (3)
HIS105 Arizona History (3)
HIS106 Mexican-American History (3)
HIS201 Women in U.S. History (3)
HMC250 Humanities in the Western World I (3)
HMC251 Humanities in the Western World II (3)
HMC252 Humanities in the Western World III (3)
MHL100 Music Appreciation (3)
MHL207 Survey of Jazz/Popular Music (3)

See AGEC-Web for current information:
https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/1/wo/SxbrmcQdxS7r8YMgR8cvbg/0.0.45.2.1.1
## DEGREES AND CERTIFICATES

### AGEC Course Designations 2013-2014 A

† See Code Legend at bottom of page.

See AGEC-Web for current information:
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† AH=Arts/Humanities; AR=Arts; BS=Biological Sciences; CL=Cross Listed; CM=Communications; CU=Cultural Awareness (Ethnic/Race/Gender); GI=Global/International; HI=Historical; HU=Humanities; IW=Intensive Writing; MA=Mathematics; OR=Oral Communications; PBS=Physical/Biological Sciences; PS=Physical Sciences; SB=Social/Behavioral Sciences; WR=Written Communications; * HNR204 + HNR205 earned with grade of "C" or better fulfills IW requirement.
## AGEC Course Designations 2013-2014 B

† See Code Legend

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# DEGREES AND CERTIFICATES

## AGEC Course Designations 2013-2014

See AGEC-Web for current information: [http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa](http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa)

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### AGEC Course Designations Grid 2013-2014 D

† See Code Legend

See AGEC-Web for current information:
http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa

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Other Degree Information for Central Arizona College

CAC offers two other types of associate degrees: Associate of Applied Science (A.A.S.) and the Associate of General Studies (A.G.S.). These degrees prepare students to directly enter the workforce, to pursue a Bachelor of Applied Science Degree, or to select another degree path to a four-year college/university. Students who select a four-year bachelor’s degree goal should earn an AGEC Certificate. The AGEC-Art, AGEC-Business and AGEC-Science Certificates align with many programs of study. Select your target four-year college/university, then consult an academic advisor. See the Transfer Guides: http://www.aztransfer.com/TransferGuides.

ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.) (64 Credits)

Signal Peak Campus

The Associate of Applied Science (A.A.S.) Degree is appropriate for students who plan to directly enter the workforce or to pursue a four-year degree. Arizona and other state universities accept A.A.S. Degrees for transfer, including many or all of the credits. Students may choose to pursue the A.A.S. to Bachelor of Applied Science (B.A.S.) Degree paths. Consult your CAC academic advisor and the Transfer Guides: http://www.aztransfer.com/TransferGuides.

For a list of Arizona Common Courses associated with specific programs of study, go to the Common Course Matrix (CCM) Archives and select the year the course was completed; See: http://www.aztransfer.com/MatrixArchives. Consult the Transfer/Articulation Agreement options in this catalog.

General Education (19-23 Credits)

For the following six categories, choose from the recommended courses or courses from the equivalent category on the AGEC Course List in this catalog or on the AGEC-Web. Students who may decide to pursue a bachelor’s degree are strongly encouraged to select transferrable courses.

Written Communications (3 Credits)
ENG101 English Composition III (3) ☑ ☑

OR

ENG121 Applied Technical Writing (3)

Oral Communications (3 Credits)
Select a COM course, or an AGEC course if you plan to transfer to a bachelor’s degree program.

Arts and Humanities (3 Credits)
Select Art, Humanities, Literature, Music, Philosophy and Theatre courses numbered 100 or above, or Arts and Humanities AGEC courses, especially those areas which suit major or minor areas of study.

Social and Behavioral Sciences (3 Credits)
Select Anthropology, Economics, Geography, History, Political Science, Psychology and Sociology courses numbered 100 or above, or Social and Behavioral Sciences AGEC courses, especially those areas which suit major or minor areas of study.

Physical and Biological Sciences (4 Credits)
Select Biological or Physical Science courses numbered 100 or above, or Physical and Biological Sciences AGEC courses, especially those areas which suit major or minor areas of study.

Mathematics (3-4 Credits)
Select a college-level Mathematics course
MAT101 Essential Mathematics (4) or higher OR
BUS101 Business Mathematics (3)

Core Requirements and Electives (41 or More Credits)
The number of credits required depends on the chosen major. See the specific A.A.S. Degree programs.

Requirements for A.A.S. Degree (4)

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading ☑

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3)
CIS110 Fundamentals of Computer Literacy (3) or higher OR
Transferrable Computer Competency course (Consult the Course Equivalency Guide to determine transferability to Arizona colleges and public universities.) Students intending to transfer to a B.A.S. Degree or other bachelor’s degree are advised to select transferrable courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.
Students must earn a minimum of 20 credits from CAC.

The A.G.S. Degree requires a minimum of 64 credits.
ASSOCIATE OF GENERAL STUDIES DEGREE (A.G.S.) (64 Credits)

Signal Peak Campus
Superstition Mountain Campus

The Associate of General Studies (A.G.S.) Degree is appropriate for students who desire flexibility to select courses to build a degree. A.G.S. students typically complete the A.G.S. required 29-30 general education credits plus additional credits for a total of 64 credits. Some four-year colleges/universities accept the A.G.S. and apply many to all credits toward a bachelor’s degree. Choosing the A.G.S. Degree and fulfilling the Arizona General Education Curriculum (AGEC) requirements, 35 general education credits, provides students the opportunity to attend an Arizona public university and to transfer the 35 credit AGEC Certificate.

Consult your CAC academic advisor and the Transfer Guides for Arizona State University, Northern Arizona University, and the University of Arizona in the major field for the Bachelor of Applied Science Degree. For more information, go to: http://www.aztransfer.com/TransferGuides.

For a list of Common Courses associated with specific programs of study, go to the Common Course Matrix Archives and select the year the course was completed; See http://aztransfer.com/MatrixArchives. Consult the Transfer/Articulation Agreement options in this catalog.

Upon completion of the A.G.S. Degree with an AGEC, students must complete both the A.G.S. Degree completion form and the AGEC Certificate Completion form.

General Education (29-30 Credits)

Written Communications (3 Credits)
ENG101 English Composition III (3)

Note: The AGEC requires 6 credits: ENG101 English Composition III (3) and ENG102 English Composition IV (3).

Oral Communications (3 Credits)
Select a COM course applicable to your designated degree.

Oral Communications (3 Credits)
Composition III (3) and ENG102 English Composition IV (3).

Note: The AGEC requires 6 credits: ENG101 English Composition II (3) and ENG102 English Composition IV (3).

Arts and Humanities (6 Credits)
Select Art, Humanities, Literature, Music, Philosophy and Theatre courses numbered 100 or above, or Arts and Humanities AGEC courses, especially those areas which suit major or minor areas of study.

Social and Behavioral Sciences (6 Credits)
Select Anthropology, Economics, Geography, History, Political Science, Psychology and Sociology courses numbered 100 or above, or Social and Behavioral Sciences AGEC courses, especially those areas which suit major or minor areas of study.

Physical and Biological Sciences (8 Credits)
Select Biological or Physical Science courses numbered 100 or above, or Physical and Biological Sciences AGEC courses, especially those areas which suit major or minor areas of study.

Mathematics (3-4 Credits)
Select a college-level Mathematics course
MAT101 Essential Mathematics (4) or higher OR
BUS101 Business Mathematics (3)

Electives (30-31) Credits
Select college-level courses numbered 100 or above to meet the A.G.S. Degree 64 credit requirement. Students electing to earn the 35 credit AGEC-A Certificate to prepare for transfer to a four-year institution are strongly encouraged to complete additional coursework in the following areas: English and Mathematics. See the AGEC-A Certificate requirements in this catalog.

Requirements for A.G.S. Degree (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3): AGB124 Microcomputers in Agriculture (3)
CIS110 Fundamentals of Computer Literacy (3) or higher OR
Transferable Computer Competency course (Consult the Course Equivalency Guide to determine transferability to the three state public universities.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Associate of General Studies Degree requires 64 credits.
COMMON STUDENT LEARNING OUTCOMES (CSLOs) for Central Arizona College

CAC College Policy 402
Revised 09/18/2012

The College shall strive to improve student success and academic achievement by providing quality education which encompasses continuous improvement in teaching and learning. The primary focus will be on the learning process that adds value to the learners.

Common Student Learning Outcomes indicate the comprehensive skills, abilities, attitudes and knowledge necessary for being a productive and educated citizen in the 21st century. CAC graduates attain these outcomes through cumulative quality learning experiences. The four Common Student Learning Outcomes are:

1. **Cultural and Civic Engagement** – Participate in diverse environments while demonstrating global citizenship and social consciousness

2. **Integrative Knowledge** – Identify, comprehend, apply and synthesize facts, concepts, theories and practices across broad and specialized knowledge areas

3. **Personal and Professional Skills** – Demonstrate skills which enhance personal and professional development

4. **Reasoning Skills** – Inquire and analyze to solve problems, draw logical conclusions, or create innovative ideas

The Governing Board expects the faculty, in conjunction with the instructional administration, to establish Learning Outcomes for assessing student achievement.

1. Learning Outcomes are statements describing essential, measureable learning that students achieve and can reliably demonstrate at the end of a course or program.

2. The Common Student Learning Outcome statements are the basis for student performance criteria used to evaluate the level of student achievement.
CERTIFICATES

Certificate programs prepare students for entry-level employment opportunities and some build toward a state of Arizona General Education Curriculum (AGEC) Certificate or a CAC A.A.S. or A.G.S. Degree. Full-time students can complete most certificate programs in one or two semesters.

In addition to offering advanced training or building foundations for future credentials, many certificates build toward an A.A.S. Degree which transfers to the state universities and other higher education institutions.

In Arizona, the public universities support the AAS to BAS Pathway where students may earn 75 credits at CAC and complete a 120 credit baccalaureate degree by earning the last 45 credits at the university/four-year college.

Certificates require the following:

- Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.
- Students must complete one-third of the certificate credits from CAC.

To view the Certificates and Degrees available at CAC, consult the Program of Study list in this catalog.

ICON LEGEND

AGEC (Arizona General Education): 🔗
Dual Enrollment: 🗓
Intensive Writing: IW
Programs of Study/Tech Prep: POS
Reading Required: RDG094: ♂
SUN System Course: ☮
Arizona General Education Curriculum for Arts (AGEC-A) (35-36 Semester Credits)

District-Wide

The Arizona General Education Curriculum focused on the Arts (AGEC-A) is a 35 semester credit block that fulfills the lower division general education requirements of liberal arts majors (e.g., social science, fine arts, humanities). The AGEC-A requires a minimum of MAT141 or higher plus 32 credits. The AGEC block transfers to any Arizona public or tribal community college and to the three Arizona public universities. Students who intend to transfer into liberal arts majors should select the AGEC-A.

General Education (35-36)

Subject Area Requirements
An approved AGEC-A, together with the number of courses and number of semester credits, must contain the following Subject Areas.

Written Communications (6 credits)
ENG101 English Composition III (3) ENG 1101
ENG102 English Composition IV (3) ENG 1102

Oral Communications (3 credits)
Select an AGEC course.

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Mathematics (3-4)
MAT141 College Mathematics, Standard (4) or higher

For the following two categories, select a total of 15 credits:

Arts and Humanities (6-9 credits)
Select a minimum of one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6-9)
Select AGEC courses from at least two different disciplines.

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9 Credits)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences or Transfer Electives may also be used to satisfy the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts and Humanities or the Social and Behavioral Sciences categories. Refer to the officially published TAG, TAP, CAC2NAU or other articulation pathway document for details and consult an advisor.

Students must earn a grade of "C" or better in each course. Students must earn at least one-third of the AGEC-A Certificate credits from CAC.
Arizona General Education Curriculum for Business (AGEC-B) (35-36 Semester Credits)

Aravaipa, Maricopa, San Tan, Signal Peak and Superstition Mountain Campuses

General Education (35-36)
The Arizona General Education Curriculum focused on Business (AGEC-B) is a 35 semester credit block that fulfills the lower division general education requirements of many business programs and other programs that articulate with the Associate of Business Degree. The block transfers to any Arizona public or tribal community college, to the three Arizona public universities, and other higher education institutions. The AGEC-B requires a minimum of Brief Calculus plus 32 credits from specific AGEC categories.

Subject Area Requirements
An approved AGEC-B, together with the number of courses and number of semester credits, must contain the following Subject Areas.

Written Communications (6)
ENG101 English Composition III (3) ENG 1101
ENG102 English Composition IV (3) ENG 1102

Oral Communications (3)
Select an AGEC course.

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Mathematics (3-4)
MAT211 Brief Calculus (4) or higher

Computer Information Systems (3)
CIS120 Survey of Computer Information Systems (3) CIS 1120

For the following two categories, select a total of 15 credits.

Arts and Humanities (6-9)
Select a minimum of one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6-9)
Select AGEC courses from at least two different disciplines.

Subject Options (0-3)
Based on your major, review the specific Associate of Business Degree requirements in the CAC Catalog, consult an academic advisor and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences or Transfer Electives may also be used to satisfy the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts and Humanities or the Social and Behavioral Sciences categories. Refer to the officially published TAG, TAP, CAC2NAU or other articulation pathway document for details and consult an advisor.

Students must earn a grade of "C" or better in each course. Students must earn at least one-third of the AGEC-B Certificate credits from CAC.
Arizona General Education Curriculum for Science (AGEC-S) (35-37 Semester Credits)

Aravaipa, San Tan, Signal Peak and Superstition Mountain Campuses

General Education

The Arizona General Education Curriculum focused on the Sciences (AGEC-S) is a 35-37 semester credit block that fulfills the lower division general education requirements of many science programs and other programs that articulate with the Associate of Science Degree. The block transfers to any Arizona public or tribal community college, to the three Arizona public universities, and other higher education institutions. The AGEC-S requires a minimum of Analytical Geometry and Calculus I plus 32 credits from specific AGEC categories, including rigorous science requirements.

Subject Area Requirements

An approved AGEC-S, together with the number of courses and number of semester credits, must contain the following Subject Areas.

Written Communications (6)
ENG101 English Composition III (3) ENG 1101
ENG102 English Composition IV (3) ENG 1102

Arts and Humanities (6)
Select one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6)
Select AGEC courses from at least two different disciplines.

Physical and Biological Sciences (8)

Life Science Majors:
CHM151 General Chemistry I (4) CHM 1151 plus
CHM152 General Chemistry II (4) CHM 1152
OR
BIO181 General Biology I (4) BIO 1181 plus
BIO182 General Biology II (4) BIO 1182

Physical Science Majors:
CHM151 General Chemistry I (4) CHM 1151 plus
CHM152 General Chemistry II (4) CHM 1152
OR
PHY121 University Physics I: Mechanics (4) PHY 1121 plus
PHY122 University Physics II: Electricity and Magnetism (4) PHY 1131

Mathematics (3-4)
MAT221 Analytical Geometry and Calculus I (4) or higher MAT 2220

Subject Options (6-8 credits)

Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides and select mathematics courses above the first course in the calculus sequence and/or Science courses from: Agriculture, Astronomy, Biology, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Nutrition, Physics or Zoology. Select CHM151 and higher Chemistry courses.

Special Awareness Requirements (0-9)

Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Communications, Arts and Humanities, Social and Behavioral Sciences or Transfer Electives may also be used to satisfy the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts and Humanities or the Social and Behavioral Sciences categories. Refer to the officially published TAG, TAP, CAC2NAU or other articulation pathway document for details and consult an advisor.

Students must earn a grade of "C" or better in each course. Students must earn at least one-third of the AGEC-S Certificate credits from CAC.
PROGRAMS OF STUDY

Accounting
- Accounting A.A.S. (85)
- Accounting Certificate (86)

Administration of Justice
- Administration of Justice Studies A.A. (87)
- Administration of Justice A.A.S. (88)
- Administration of Justice Certificate (89)

AGEC
- AGEC-Arts Certificate (80)
- AGEC-Business Certificate (81)
- AGEC-Science Certificate (82)

Agriculture
- Agriculture A.A. (90)
- Agriculture A.S. (91)
- Agriculture Business Certificate (92)
- Agriculture General A.A.S. (93)
- Agriculture General Certificate (94)

Animal Science
- Equine Management and Training A.A.S. (95)
- Equine Management and Training Certificate (96)

Biology
- Biotechnology A.S. (97)

Business
- Business A.A.S. (98)
- Business Certificate (99)
- Management Certificate (100)
- Hotel and Restaurant Management A.A.S. (101)
- Hotel and Restaurant Management Certificate (102)
- Recreation and Tourism Management A.A. (161)
  See Sports and Fitness
- Recreation Management Certificate (162)
  See Sports and Fitness

Chemistry
- Chemistry A.S. (103)

Computer
- Application Development and Web Design Certificate (104)
- Computer Aided Design Certificate - See Technology
- Computer Applications for Business Users Certificate (104)
- Computer Programming A.A.S. (105)
- Computer Programming Certificate (106)
- Geographic Information Systems A.A.S. (106)
- GIS Drafting and Mapping Certificate (107)
- Microcomputer Business Applications A.A.S. (108)
- Microcomputer Business Applications Specialist Certificate (109)
- Network Administration Certificate (109)
- Network Systems Administration A.A.S. (110)

Creative Arts
- Artist and Venue Management A.A.S. (111)
- Artist and Venue Management Certificate (112)
- Live Audio and Lighting A.A.S. (112)
- Live Audio and Lighting Certificate (113)
- Popular Music Performance A.A.S. (114)
- Popular Music Performance Certificate (115)
- Recording Engineering A.A.S. (115)
- Recording Engineering Certificate (116)
- Fine Arts A.A. (117)
- Graphic Design A.A.S. (118)

Culinary Arts
- Baking and Pastry Certificate (119)
- Culinary Arts A.A.S. (120)
- Culinary Arts I Certificate (122)
- Culinary Arts II Certificate (122)

Diesel/Heavy Equipment
- Diesel and Heavy Equipment Technology A.A.S. (123)
- Diesel and Heavy Equipment Technology Certificate (124)
- Heavy Equipment Operator A.A.S. (125)
- Heavy Equipment Operator Certificate (126)

Education
- Early Childhood Education – Family Childcare A.A.S. (127)
- Early Childhood Education – Family Childcare Certificate (128)
- Early Childhood Education – Infant/Toddler A.A.S. (128)
- Early Childhood Education – Infant/Toddler Certificate (129)
- Early Childhood Education – Management A.A.S. (130)
- Early Childhood Education – Management Certificate (131)
- Early Childhood Education – Preschool A.A.S. (131)
- Early Childhood Education – Preschool Certificate (132)
- Elementary Education A.A.E.E. (133)

Emergency Medical Services
- Basic EMT Certificate (135)
- Critical Care for Paramedics Certificate (135)
- Paramedicine A.A.S. (136)
**DEGREES AND CERTIFICATES**

**Fire Services**
- Firefighter Operations Certificate (137)
- Fire Science Technology A.A.S. (137)
- Wildland Firefighter I Certificate (138)

**Geographic Information Systems**
See Computer

**Geology and Planetary Science**
- Geology and Planetary Science A.S. (139)

**Health Careers Center**
- Clinical Laboratory Assistant Certificate (140)
- Coding and Reimbursement Certificate (141)
- Community Public Health A.S. (142)
- Health Information Technology A.A.S. (143)
- Massage Therapy A.A.S. (144)
- Massage Therapy Certificate (145)
- Medical Assistant A.A.S. (146)
- Medical Assistant Certificate (147)
- Pharmacy Technician Certificate (148)

**Manufacturing**
- Field Programmable Gate Array (FPGA) Certificate (148)
- LabVIEW Programming Certificate (149)
- Manufacturing Electronics Certificate (149)
- Manufacturing Engineering A.A.S. (150)
- Nanofabrication Technology A.A.S. (151)

**Nutrition and Dietetics**
- Community Nutrition Worker Certificate (152)
- Diabetes Care and Education Certificate (152)
- Dietary Manager Training Program Certificate (153)
- Dietetic Technician A.A.S. (153)
- Nutrition and Health Promotion Certificate (154)

**Renewable Energy Technology**
- Biofuels Technician Certificate (155)
- Renewable Energy Technology A.A.S. (155)
- Solar Photo Voltaic Technician Certificate (156)

**Sports and Fitness**
- Athletic Studies A.A. (157)
- Athletic Training Education Program A.A. (158)
- Group Fitness Instructor Certificate (160)
- Personal Trainer Certificate (160)
- Recreation and Tourism Management A.A. (161)
- Recreation Management Certificate (162)
- Sports Information Certificate (163)
- Sports Management A.A.S. (163)

**Technology**
- Computer Aided Design Certificate (165)
- Welding Certificate (165)

**PROGRAMS WITH SPECIAL REQUIREMENTS**

The following degrees and certificates are also offered at Central Arizona College; however, they have special requirements which must be fulfilled before enrollment. Please see the individual listing for specific information.

**Agriculture**
- Farm Business Management Certificate (166)

**Corrections**
- Advanced Corrections Certificate (166)
- Corrections A.A.S. (167)

**Diesel/Heavy Equipment**
- Heavy Equipment Mechanic’s Apprenticeship Program Certificate (168)
- John Deere Construction and Forestry Equipment Technology A.A.S. (168)
- Operator’s Apprenticeship Program Certificate (169)

**Health Careers**
- Diagnostic Medical Sonography A.A.S. (170)
- Nursing A.A.S. (172)
- Practical Nursing Certificate (173)
- Radiologic Technology A.A.S. (174)
DEGREES AND CERTIFICATES

ACCOUNTING

ACCOUNTING A.A.S.

Aravaipa, Maricopa, Signal Peak and Superstition Mountain Campuses

Total Credits: 65

The Accounting Degree prepares students for entry-level accounting positions. Students interested in pursuing a Baccalaureate Degree may consider the Associate of Business Degree or other Transfer Agreement options.

Recommended Proficiencies

A solid background in reading, math, and analytical skills is recommended.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) (Recommended)
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
ECN200 Contemporary Economic Issues (3)
ECN201 Principles of Macroeconomics (3)
ECN202 Principles of Microeconomics (3) OR
Select a Social and Behavioral Science AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Science course numbered 100 or above, or an AGEC Biological and Physical Lab Science course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) (Recommended) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (39)
ACC121 Income Tax Fundamentals (3)
ACC201 Financial Accounting (3)*
ACC202 Managerial Accounting (3)
ACC222 Payroll Accounting (3)
ACC226 Accounting with QuickBooks Pro (3)
ACC227 Accounting with Peachtree Complete (3)
BUS100 Introduction to Business (3)
BUS123 Business Relations (3)
BUS201 Legal Environment of Business (3)
BUS207 Business Communications (3)
CBA133A Spreadsheet Applications – Excel (3)
CBA133B Advanced Spreadsheet Applications Excel (3)
CIS120 Survey of Computer Information Systems (3)
CIS1120

*Students may be advised to complete ACC100 prior to completing ACC201.

Electives (6)
Select electives from the following areas to total a minimum of 64 credits to complete the degree.
ACC Accounting
AGB Agriculture Business
BUS Business
CBA Computer Business Applications
CIS Computer Information Systems
ECN Economics
HNR Honors
HRM Hospitality Management
REA Real Estate

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading (Fulfilled in Core Requirements)

Computer Competency (3):
CIS120 Survey of Computer Information Systems (3) (Fulfilled in Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must complete at least 20 credits from CAC.

This A.A.S. Degree requires 65 semester credits.
ACCOUNTING CERTIFICATE

District-Wide

Total Credits: 18

The Accounting Certificate prepares individuals for entry-level positions in accounting or bookkeeping.

Recommended Proficiencies
Students should be able to identify and solve basic business problems in operations, finance and accounting, handle business data and human relations.

Core Requirements (18)
ACC121 Income Tax Fundamentals (3)
ACC201 Financial Accounting (3)*
ACC202 Managerial Accounting (3)
ACC226 Accounting with QuickBooks Pro (3)
CIS120 Survey of Computer Information Systems (3)
ACC222 Payroll Accounting (3)

OR

ACC227 Accounting with Peachtree Complete ® (3)

*Students may be advised to complete ACC100 prior to completing ACC201.

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
ADMINISTRATION OF JUSTICE

ADMINISTRATION OF JUSTICE STUDIES A.A.

District-Wide

Total Credits: 60-64

The Administration of Justice Studies A.A. Degree academically prepares students to transfer to an accredited university to pursue a career in local and federal law enforcement, the court system, corrections or probation.

General Education Requirements

AGING-A (35-36)

Written Communications (6)
ENG101 English Composition III (3)IW
ENG102 English Composition IV (3)W

Oral Communications (3)
Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

Arts and Humanities (6-9)
Select an AGEC Art course.
AJS123 Ethics and the Administration of Justice (3)
(Also fulfills Core Requirement)

Social and Behavioral Sciences (6-9)
SOC100 Introduction to Sociology (3)AGEC
PSY101 Introduction to Psychology (3)AGEC
AJS101 Introduction to Administration of Justice (3)AGEC
(Also fulfills Core Requirement)

Or select an AGEC course.

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Mathematics (3-4)
MAT141 College Mathematics, Standard (4)AGEC or higher

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in
   Intensive Writing and Critical Inquiry (Fulfilled by AJS225)
2. At least three semester credits of coursework in
   Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in
   Global/International Awareness or
   Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives may also be used to satisfy requirements in the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (18)
AJS101 Introduction to Administration of Justice (3)AGEC
(Also fulfills Social and Behavioral Sciences requirement)
AJS123 Ethics and the Administration of Justice (3)AGEC
(Also fulfills Humanities requirement)
AJS209 Substantive Criminal Law (3)
AJS225 Criminology (3)IW
AJS230 The Police Function (3)
AJS260 Procedural Criminal Law (3)

Electives (6-9)
Select AJS prefix courses.

Other Requirements (3)
Reading Competency: RDG094 College Reading R

Computer Competency (3):
AGB124 Microcomputer in Agriculture
CIS120 Survey of Computer Information Systems W

Other A.A. Degree Requirements
Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.
DEGREES AND CERTIFICATES

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in each A.A. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

The Administration of Justice Studies A.A. Degree requires 60-64 semester credits.

ADMINISTRATION OF JUSTICE
A.A.S.

Aravaipa, Maricopa, San Tan, Signal Peak & Superstition Mountain Campuses and Casa Grande and Corporate Centers

Total Credits: 65

The Administration of Justice Studies A.A.S. Degree prepares students for professional careers in law enforcement, corrections, parole, probation, the judiciary and juvenile social work.

General Education Requirements (25)

Written Communications (6)
ENGL101 English Composition III (3) (Recommended)
ENGL102 English Composition IV (3) (Recommended) OR
ENGL121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor’s degree.

Arts and Humanities (3)
AJS123 Ethics and the Administration of Justice (3)  
Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an Arts or Humanities AGEC course.

Social Behavioral Sciences (6)
SOC100 Introduction to Sociology (3) (Recommended)
PSY101 Introduction to Psychology (3) (Recommended) OR
select Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology courses numbered 100 or above, or AGEC courses.

Physical and Biological Sciences (4)
Select a Biological or Physical Science course numbered 100 or above, or a Biological and Physical Lab Science AGEC course.

Mathematics (3)
MAT101 Essential Mathematics (4) or higher OR
BUS101 Business Mathematics (3)

Core Requirements (18)
AJS101 Introduction to Administration of Justice (3)  
AJS123 Ethics and the Administration of Justice (3)  
AJS209 Substantive Criminal Law (3)  
AJS225 Criminology (3)  
AJS230 The Police Function (3)  
AJS260 Procedural Criminal Law (3)
**AJS Electives (12)**
Select 12 credits from courses with the AJS prefix.

**General Electives (6)**
Credit may be granted for prior Police training upon departmental approval, including credit for AJS Core and Elective Requirements. See the CEG for University transferability status.

**Other Requirements (4)**
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

**Computer Competency (3):**
AGB124 Microcomputers in Agriculture (3)
CIS110 Fundamentals of Computer Literacy (3) or higher

OR
Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.
Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 semester credits.

**ADMINISTRATION OF JUSTICE CERTIFICATE**

**Signal Peak Campus**

**Total Credits: 33.5**

Central Arizona College offers a full range of courses for regular and reserve officer certification, as well as in-service seminars to law enforcement agencies. The curriculum, offered through the Academy, has been approved by the Arizona Peace Officer Standards and Training Board (AZ POST) and the State Board of Directors for Community Colleges of Arizona. Recruits and reserve officers who complete the basic training program may be eligible to obtain state certification as peace officers. Individuals not sent to the Academy by law enforcement agencies may be eligible to attend at their own expense if they meet the requirements currently established by AZ POST for appointment and certification as a peace officer and successfully complete the required CARLOTA testing and screening process.

The Certificate curriculum also prepares students to pursue the AJS Associate Degree. The AJS Certificate coursework may be applied to fulfill AJS Associate Degree requirements. Consult a CAC advisor.

**Prerequisite**
Meet AZ POST Standards for eligibility.

**Core Requirements (33.5)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJS101</td>
<td>Introduction to Administration of Justice (3)</td>
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<tr>
<td>AJS122</td>
<td>Traffic Control (3)</td>
</tr>
<tr>
<td>AJS124</td>
<td>Defensive Tactics (3)</td>
</tr>
<tr>
<td>AJS130</td>
<td>Firearms (3)</td>
</tr>
<tr>
<td>AJS140</td>
<td>Communications in Law Enforcement (3.5)</td>
</tr>
<tr>
<td>AJS209</td>
<td>Substantive Criminal Law (3)</td>
</tr>
<tr>
<td>AJS230</td>
<td>The Police Function (3)</td>
</tr>
<tr>
<td>AJS270</td>
<td>Community Relations (3)</td>
</tr>
<tr>
<td>AJS275</td>
<td>Criminal Investigations (3)</td>
</tr>
<tr>
<td>EMS123</td>
<td>First Responder (3)</td>
</tr>
<tr>
<td>PAC104</td>
<td>Police Officer Physical Training (3)</td>
</tr>
</tbody>
</table>

**Other Requirements**
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
AGRICULTURE

AGRICULTURE A.A.

Signal Peak Campus

Total Credits: 60-64

Students pursuing this Agriculture A.A. Degree may transfer to a university to pursue a Bachelor of Arts Degree in Agriculture.

General Education Requirements

AGEC-A (35-36)

Written Communications (6)
ENG101 English Composition III (3)
ENG102 English Composition IV (3)

Oral Communications (3)
Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

Arts and Humanities (6-9)
Select one Arts (3) and one Humanities (3) course.

Social and Behavioral Sciences (6-9)
Select AGEC courses from different disciplines.

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Mathematics (3-4)
MAT141 College Mathematics, Standard (4)

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.

1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
   Historical Awareness

2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)

3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives may also be used to satisfy requirements in the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (10)
AGB124 Microcomputers in Agriculture (3)
AGS240 Plant Biology (4)
ANS101 Animal Industry (3)

Electives (12-16)
Select 19 credits from college-level courses numbered 100 or higher to meet the Degree requirement. All electives must transfer to the chosen university or the student will be required to take additional credits at the university. Consult the CEG to determine course equivalency at the university.

Other Requirements (3)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3)
(Fulfilled in Core Requirements)

Other A.A. Degree Requirements
Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in each A.A. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

This A.A. Degree requires 60-64 semester credits.
AGRICULTURE A.S.

Signal Peak Campus

Total Credits: 60-64

Students earning the Agriculture A.S. Degree may transfer to a university to pursue a Bachelor of Science Degree in Agriculture.

General Education Requirements

AGEC-S (35-37)

Written Communications (6)
ENG101  English Composition III (3) ☑ ☑
ENG102  English Composition IV (3) ☑ ☑

For the following two categories, for each category select courses from different disciplines.

Arts and Humanities (6)
Select one Arts (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6)
Select AGEC courses from two different disciplines.

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Life Science Majors:
CHM151  General Chemistry I (4) ☑ ☑ plus
CHM152  General Chemistry II (4) ☑ ☑
OR
BIO181  General Biology I (4) ☑ ☑ plus
BIO182  General Biology II (4) ☑ ☑

Physical Science Majors:
CHM151  General Chemistry I (4) ☑ ☑ plus
CHM152  General Chemistry II (4) ☑ ☑
OR
PHY121  University Physics I: Mechanics (4) ☑ ☑ plus
PHY122  University Physics II: Electricity and Magnetism (4) ☑ ☑

Mathematics (3-4)
MAT221  Analytical Geometry and Calculus I (4) ☑ ☑ or higher

Special Awareness Requirements (0-9)

Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives may also be used to satisfy requirements in the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (10)
AGB124  Microcomputers in Agriculture (3) (Fulfills computer competency requirement)
AGS240  Plant Biology (4) ☑
ANS101  Animal Industry (3)

Agriculture Electives (12-16)
Select elective credits to meet the 60-64 credit Degree requirement. Consult the Course Equivalency Guide to determine how the course transfers to the target university.

AGB121  Resource and Environmental Economics (3)
AGB123  Agriculture Accounting (3)
AGB130  Agricultural Leadership (1)
AGB213  Introduction to Agricultural Commodity and Food Marketing (3)
AGB225  Agriculture Business Analysis (3)
AGB234  Agricultural Leadership Development (3)
AGS101  World of Plants (4) ☑
AGS104  Agricultural Environmental Science (4) ☑
AGS106  Entomology (4) ☑
AGS122  Natural Resources and Conservation (3) ☑
AGS221  Soil Science (4) ☑
AGS235  Principles of Horticulture (3)
ANS111  Horseshoeing I (3)
ANS172  Introduction to Western Horsemanship (3)
ANS200  Introduction to Equine Science (3)
ANS211  Advanced Horseshoeing (3)
ANS213  Animal Genetics (3)
DEGREES AND CERTIFICATES

ANS215  Anatomy and Physiology of Domestic Animals (4)
ANS216  Equine Anatomy and Physiology (3)
ANS220  Artificial Insemination (3)
ANS226  Feeds and Feeding (3)
BIO100  Biology Concepts (4)  
BUS100  Introduction to Business (3)
CHM130  Fundamental Chemistry (4)  
DIE132  Diesel Engines (12)
HEO100  Introduction to Heavy Equipment Operations (5)
MAT121  Intermediate Algebra, Standard (4)
WLD110  Survey of Welding Processes (3)

OR

Select courses from Agriculture, Technology, Business, Math or Science with Agriculture Department approval

Other Requirements (3)
Reading Competency: RDG094 College Reading  

Computer Competency (3):
AGB124  Microcomputers in Agriculture (3)  

(Filled in Core Requirements)

Students must earn a grade of “C” or better in each A.S. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

This A.S. Degree requires 60-64 semester credits.

AGRICULTURE BUSINESS CERTIFICATE

Signal Peak Campus

Total Credits: 27

This Certificate provides students with specialized agricultural workplace skills for entry-level agribusiness positions.

Core Requirements (21)
AGB121  Resource and Environmental Economics (3)
AGB124  Microcomputers in Agriculture (3)
AGB213  Introduction to Agricultural Commodity and Food Marketing (3)
AGB225  Agriculture Business Analysis (3)
BUS100  Introduction to Business (3)
ACC100  Fundamentals of Accounting (3)  
AGB123  Agriculture Accounting (3)  
BUS101  Business Mathematics (3)  
MAT101  Essential Mathematics (4) or higher

Select one of the following courses (3):
ENG101  English Composition III (3)  
ENG121  Applied Technical Writing (3)
COM100  Fundamentals of Human Communication (3)  
COM206  Public Speaking (3)  

Select one of the following courses (3):

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND

AGEC:  
Dual Enrollment:  
Intensive Writing:  
Programs of Study/Tech Prep:  
Reading Required: RDG094:  
SUN Course:  

Visit www.centralaz.edu
AGRICULTURE GENERAL A.A.S.

Signal Peak Campus

Total Credits: 65

The A.A.S. Agriculture General Degree prepares students for entry level careers in agribusiness, agricultural systems management, and agricultural sustainability. This A.A.S. Degree transfers to the Arizona Bachelor of Applied Science (BAS) Degree. Students interested in pursuing a baccalaureate degree should review Transfer Agreement Options and meet with a CAC agriculture advisor.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3)
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course or an AGEC course if you plan to transfer to earn a bachelor’s degree.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre courses numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (4)
Select a biological or physical science course numbered 100 or above, or a Biological and Physical Lab Science AGEC course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (10)
AGB124 Microcomputers in Agriculture (3)
AGS240 Plant Biology (4)
ANS101 Animal Industry (3)

Agriculture Electives (35)
Select from the following courses:
AGB121 Resource and Environmental Economics (3)
AGB123 Agriculture Accounting (3)
AGB130 Agricultural Leadership (1)
AGB213 Introduction to Agricultural Commodity and Food Marketing (3)
AGB225 Agriculture Business Analysis (3)
AGB234 Agricultural Leadership Development (3)
AGS101 World of Plants (4)
AGS104 Agricultural Environmental Science (4)
AGS106 Entomology (4)
AGS122 Natural Resources and Conservation (3)
AGS221 Soil Science (4)
AGS235 Principles of Horticulture (3)
ANS111 Horseshoeing I (3)
ANS172 Introduction to Western Horsemanship (3)
ANS200 Introduction to Equine Science (3)
ANS211 Advanced Horseshoeing (3)
ANS213 Animal Genetics (3)
ANS215 Anatomy and Physiology of Domestic Animals (4)
ANS216 Equine Anatomy and Physiology (3)
ANS220 Artificial Insemination (3)
ANS226 Feeds and Feeding (3)
BIO100 Biology Concepts (4)
BUS100 Introduction to Business (3)
CHM130 Fundamental Chemistry (4)
DIE132 Diesel Engines (12)
HEO100 Introduction to Heavy Equipment Operations (5)
MAT121 Intermediate Algebra, Standard (4)
WLD110 Survey of Welding Processes (3)

OR
Select courses from Agriculture, Technology, Business, Math, or Science with Agriculture Department approval.

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputer in Agriculture (3)
(Fulfilled in Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 semester credits.
AGRICULTURE GENERAL
CERTIFICATE

Signal Peak Campus

Total Credits: 32

This Certificate introduces students to agricultural science and technology by focusing on general academic experiences in agriculture. This Certificate prepares students for entry-level careers in agri-science and agribusiness.

Core Requirements (10)
AGB124 Microcomputers in Agriculture (3)
AGS240 Plant Biology (4)
ANS101 Animal Industry (3)

Written Communications (3)
Select one of the following:
ENG101 English Composition III (3)
ENG121 Applied Technical Writing (3)

Agriculture Electives (19)
Select from the following courses:
AGB121 Resource and Environmental Economics (3)
AGB123 Agriculture Accounting (3)
AGB213 Introduction to Agricultural Commodity and Food Marketing (3)
AGB225 Agriculture Business Analysis (3)
AGS101 World of Plants (4)
AGS104 Agricultural Environmental Science (4)
AGS106 Entomology (4)
AGS110 Agricultural Mechanics I (3)
AGS122 Natural Resources and Conservation (3)
AGS140 Agricultural Mechanics II (3)
AGS221 Soil Science (4)
AGS235 Principles of Horticulture (3)
ANS102 Horsemanship I (3)
ANS111 Horseshoeing I (3)
ANS121 Equine Facilities Management I (1)
ANS122 Equine Facilities Management II (1)
ANS131 Training the Roping Horse I (3)
ANS172 Introduction to Western Horsemanship (3)
ANS195 Careers in Veterinary Science (1)
ANS200 Introduction to Equine Science (3)
ANS211 Advanced Horseshoeing (3)
ANS213 Animal Genetics (3)

ANS215 Anatomy and Physiology of Domestic Animals (4)
ANS220 Artificial Insemination (3)
ANS223 Training for Timed Events (3)
ANS226 Feeds and Feeding (3)
BIO100 Biology Concepts (4)

Select courses from Agriculture, Technology, Business, Math or Science with Agriculture Department approval.

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
ANIMAL SCIENCE

EQUINE MANAGEMENT AND TRAINING A.A.S.

Signal Peak Campus

Total Credits: 64

Equine Management and Training contains two options for the Associate of Applied Science Degree. Students complete a Horse Trainer or an Equine Business Management program of study. The degree prepares students for employment in a variety of areas in the horse industry. Classroom activities and practical laboratory experiences are provided in both options.

General Education Requirements (19)

Written Communications (3)
ENG101 English Composition III (3) ☐ ☐
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course if you plan to transfer to a bachelor's degree program.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (4)
AGS221 Soil Science (4) ☐
NTR141 Nutrition and Wellness (4) ☐

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (26)
ANS102 Horsemanship I (3)
ANS110 Horse Event Production (3)
ANS121 Equine Facility Management I (1)
ANS122 Equine Facility Management II (1)
ANS131 Training the Roping Horse I (3)
ANS200 Introduction to Equine Science (3)
ANS202 Horsemanship II (3)
ANS216 Equine Anatomy and Physiology (3)
ANS223 Training for Timed Events (3)
ANS231 Training the Roping Horse II (3)

Electives (15)
Select 15 credits from the following:
ANS101 Animal Industry (3)
ANS111 Horseshoeing I (3)
ANS211 Advanced Horseshoeing (3)
ANS213 Animal Genetics (3)
ANS226 Feeds and Feeding (3)
BUS100 Introduction to Business (3)
BUS101 Business Mathematics (3)
(Also may fulfill Mathematics Requirement)
HEO100 Introduction to Heavy Equipment Operations (5)
HEO128 Diesel Equipment Service and Repair (4)
WLD Any Welding course (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading ☐

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3)
CIS110 Fundamentals of Computer Literacy (3) or higher

OR
Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 semester credits.
EQUINE MANAGEMENT AND TRAINING CERTIFICATE

Signal Peak Campus

Total Credits: 32

The Equine Management and Training Certificate provides basic skills and information for equine handling. Courses for the certificate apply toward completion of the Equine Management and Training A.A.S Degree.

Core Requirements (26)
- ANS102  Horsemanship I (3)
- ANS110  Horse Event Production (3)
- ANS121  Equine Facility Management I (1)
- ANS122  Equine Facility Management II (1)
- ANS131  Training the Roping Horse I (3)
- ANS200  Introduction to Equine Science (3)
- ANS202  Horsemanship II (3)
- ANS216  Equine Anatomy and Physiology (3)
- ANS223  Training for Timed Events (3)
- ANS231  Training the Roping Horse II (3)

Electives (6)
- ANS101  Animal Industry (3)
- ANS111  Horseshoeing I (3)
- ANS211  Advanced Horseshoeing (3)
- ANS213  Animal Genetics (3)
- ANS226  Feeds and Feeding (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
BIOLOGY

BIOTECHNOLOGY A.S.

Signal Peak Campus

Total Credits: 60-64

The Biotechnology Associate of Science Degree is designed for those interested in career/transfer path degrees in biology, biotechnology, molecular biology, microbiology, genetic engineering and pre-medical or other pre-professional programs. The Degree also provides applied technical training for those interested in laboratory employment in the biotechnology industry, medical or an academic research institution.

General Education Requirements

AGEC-S (35-37)

Written Communications (6)
ENG101   English Composition III (3)  
ENG102   English Composition IV (3)  

For the following two categories, for each category select courses from different disciplines.

Arts and Humanities (6)
Select one Arts (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6)
Select AGEC courses from two different disciplines.

Physical and Biological Sciences (8)
Life Science Majors:
CHM151   General Chemistry I (4)  plus
CHM152   General Chemistry II (4)  

Mathematics (3-4)
MAT221   Analytical Geometry and Calculus I (4)  
or higher

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy one of the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (19)

BIO181   General Biology I (4)  
BIO205   Microbiology (4)  
BIO206   Biotechnology Instrumentation I (4)  
BIO207   Biotechnology Instrumentation II (4)  
BIO240   General Genetics (3)

Electives (9-13)
Select approved elective courses which transfer as "Elective or better" to all three AZ public universities to complete the required A.S. Degree credit requirement.

Students may choose:
BIO109   Natural History of the Southwest (4)  
BIO182   General Biology II (4)  
BIO299   Introduction to Co-Op: Biotechnology Internship (1)  
CHM235   General Organic Chemistry I (4)  
CHM236   General Organic Chemistry II (4)  
PHY111   College Physics I (4)  
PHY112   College Physics II (4)  
PHY121   University Physics I (4)  
PHY122   University Physics II (4)  

Note: Students may use a course to fulfill an AGEC Core Area, such as the Social and Behavioral Sciences, and one Special Awareness Area (Intensive Writing, Cultural,
Global/International, or Historical Awareness). In addition, students may use the same course(s) to fulfill degree core and/or elective requirements. Students should consult a CAC Advisor.

**Other Requirements (3)**
Reading Competency: RDG094 College Reading

**Computer Competency (3):**
AGB124 Microcomputers in Agriculture (3)
OR
CIS120 Survey of Computer Information Systems (3)

Students must earn a grade of “C” or better in each A.S. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

Biotechnology Associate of Science Degree requires 60-64 credits.

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**BUSINESS**

**BUSINESS A.A.S.**

*Aravaipa, Maricopa, Signal Peak & Superstition Mountain Campuses*

**Total Credits: 64**

The Business A.A.S. Degree prepares students for entry-level positions in business and provides skills necessary for helping them begin their own business.

**General Education Requirements (19-23)**

**Written Communications (3)**
ENG101 English Composition III (3) (Recommended) OR
ENG121 Applied Technical Writing (3)

**Oral Communications (3)**
COM100 Fundamentals of Human Communication (3) OR
COM206 Public Speaking (3)
Or select a COM or AGEC course.

**Arts and Humanities (3)**
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

**Social and Behavioral Sciences (3)**
BUS190 Principles of Management and Leadership (3) OR
ECN200 Contemporary Economic Issues (3) OR
ECN201 Principles of Macroeconomics (3) OR
ECN202 Principles of Microeconomics (3) OR
Or select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

**Physical and Biological Sciences (4)**
Select a Biological or Physical Science course numbered 100 or above, or a Biological and Physical Lab Science AGEC course.

**Mathematics (3-4)**
Select a college-level Mathematics course
BUS101 Business Mathematics (3) (Recommended) OR
MAT101 Essential Mathematics (4) or higher

**Core Requirements (30)**
ACC121 Income Tax Fundamentals (3) OR
ACC201 Financial Accounting (3) OR
ACC202 Managerial Accounting (3) OR
BUS100 Introduction to Business (3)
BUS123  Business Relations (3)
BUS201  Legal Environment of Business (3)
BUS207  Business Communications (3)
BUS260  Applied Business Seminar (3)
CBA133A  Spreadsheet Applications in Excel (3)
CIS120  Survey of Computer Information Systems (3)

* Students may be advised to complete ACC100 prior to Enrolling in ACC201.

Electives (14)
Select 14 credits from the following list to total at least 64 credit hours for this degree.
ACC  Accounting
AGB  Agriculture Business
BUS  Business
CBA  Computer Business Applications
CIS  Computer Information Systems
ECN  Economics
HRM  Hospitality Management
REA  Real Estate

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120  Survey of Computer Information Systems (3) (Fulfilled in Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 semester credits.

BUSINESS CERTIFICATE

District-Wide

Total Credits: 24

The Business Certificate prepares individuals for entry-level positions in business, provides skills to help them organize their own business, and leads to the Business A.A.S.

Core Requirements (18)
BUS100  Introduction to Business (3)
BUS101  Business Mathematics (3)
CIS120  Survey of Computer Information Systems (3)

ACC100  Fundamentals of Accounting (3)
OR
ACC201  Financial Accounting (3)

ACC226  Accounting with QuickBooks Pro (3)
OR
ACC227  Accounting with Peachtree Complete ® (3)

Select at least one of the following courses (3):
ECN200  Contemporary Economic Issues (3)
ECN201  Principles of Macroeconomics (3)
ECN202  Principles of Microeconomics (3)

Electives (6)
Select six credits from courses with the following prefixes:
ACC  Accounting
BUS  Business
CBA  Computer Business Applications
CIS  Computer Information Systems
ECN  Economics
HRM  Hospitality Management
REA  Real Estate

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
**MANAGEMENT CERTIFICATE**

**District-Wide**

**Total Credits: 30**

This Management Certificate focuses on communication, finances and legal issues including basic marketing and management principles that develop leadership and supervision skills. This certificate qualifies for sponsorship of the Retail Management Certificate Program with the Western Association of Food Chains (www.WAFC.com) or WAFC national partnership (see Business Division, Management Certificate for company listings and program details).

**Recommended Proficiencies**

RDG094  College Reading R

**Core Requirements (15)**

ACC100  Fundamentals of Accounting (3)  OR  ACC201  Financial Accounting (3)

BUS101  Business Mathematics (3)  BUS123  Business Relations (3)  BUS180  Introduction to Marketing (3)  BUS190  Principles of Management and Leadership (3)

Select one of the following courses (3):

BUS100  Introduction to Business (3)  OR  BUS122  Small Business Management (3)  OR  BUS250  Planning the Entrepreneurial Venture (3)

Select one of the following courses:

BUS201  Legal Environment of Business (3)  OR  HRM208  Hospitality Law (3)

Select three of the following courses (9):

BUS207  Business Communications (3)  CIS110  Fundamentals of Computer Literacy (3)  CIS120  Survey Computer Information Systems (3)  ECN  Select one ECN course (3)  HRM101  Facilities Management (3)  HRM102  Management of Guest Services (3)  HRM103  Managing Food Service Operations (3)  HRM106  Supervision in the Hospitality Industry (3)

**Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
HOTEL AND RESTAURANT
MANAGEMENT A.A.S.

Signal Peak Campus

Total Credits: 66

The Hotel and Restaurant Management A.A.S. Degree includes hospitality industry certified courses, university-level business courses and the Arizona General Education Curriculum (AGEC-A). ASU and UofA accept transfer of the AGEC and the remaining courses on a course-by-course basis. NAU School of Hotel and Restaurant Management accepts the AGEC and all HRM core courses, not to exceed 64 credits. (HRM103 + CUL105 or NTR105 or CUL205 are highly recommended for NAU transfer students). See Transfer Agreement Options and the CEG for details.

General Education Requirements
AGEC-A (35-36)

Written Communications (6)
ENG101  English Composition III (3)
ENG102  English Composition IV (3)

Oral Communications (3)
COM263  Intercultural Communication (3) (Recommended)
Or select an AGEC COM course.

Arts & Humanities (6-9)
Arts (3)
ART208  Art History II (3)
MHL100  Music Appreciation (3)
THE100  Theater Appreciation (3)
Or select an Art AGEC course.

Humanities (3)
LIT201  American Literature I (3)
LIT202  American Literature II (3)
LIT203  English Literature I (3)
LIT204  English Literature II (3)
LIT233  American Ethnic Literature (3)
LIT254A  Literature and Film (3)
PHI105  Introduction to Ethics (3)
Or select a Humanities AGEC course.

Social and Behavioral Sciences (6-9)
ECN201  Principles of Macroeconomics (3)
ECN202  Principles of Microeconomics (3)
Or select AGEC courses.

Select one from the list:
GEO101  Introduction to Cultural and Historical Geography (3)
PSY101  Introduction to Psychology (3)
SOC100  Introduction to Sociology (3)

Physical and Biological Sciences (8)
BIO100  Biology Concepts (4)
CHM130  Fundamental Chemistry (4)
ENV101  Environmental Science (4)
NTR141  Nutrition and Wellness (4)
PHY100  Physical Universe (4)
Or select an AGEC course.

Mathematics (3-4)
MAT141  College Mathematics, Standard (4) or higher

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Note: This A.A.S. Degree requires the AGEC-A. Students must apply for the AGEC-A Certificate.

Core Requirements (30)
CIS120  Survey of Computer Information Systems (3)
CUL170  Dining and Beverage Operations (2)
HRM101  Facilities Management (3)
HRM102  Management of Guest Services (3)
HRM103  Managing Food Service Operations (3)
DEGREES AND CERTIFICATES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM106</td>
<td>Supervision in the Hospitality Industry</td>
<td>3</td>
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<tr>
<td>HRM208</td>
<td>Hospitality Law</td>
<td>3</td>
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<tr>
<td>ACC100</td>
<td>Fundamentals of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC201</td>
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<tr>
<td>CUL130</td>
<td>Culinary Principles &amp; Applications I</td>
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<tr>
<td>CUL160</td>
<td>Baking and Pastry I</td>
<td>3</td>
</tr>
<tr>
<td>HRM100</td>
<td>Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>REC101</td>
<td>Recreation, Leisure and Quality of Life</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following courses:
- CUL105 Food Safety Foundations (1)
- NTR105 ServSafe Certification (1)
- CUL205 HACCP Principles (1)

Select approved elective courses which transfer as “Elective or better” to all three AZ public universities to ensure transferability.

Other Requirements (4)
- PAC or DAN Course (1) *(Recommended: PAC101A)*
- Reading Competency: RDG094 College Reading

Computer Competency (3):
- CIS120 Survey of Computer Information Systems (3) *(Fulfilled in Core Requirements)*

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.
- Students must earn a grade of “C” or better in each AGEC-A course.
- Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

Note: This A.A.S. Degree requires the AGEC-A Certificate. The Hotel and Restaurant Management A.A.S. requires 66 credits.

HOTEL AND RESTAURANT MANAGEMENT CERTIFICATE

**District-Wide**

**Total Credits: 18**

The Hotel and Restaurant Management Certificate provides specialized workplace skill enhancing options for progressive or lateral career options in hotel and lodging or restaurant management. Included are foundation concepts and skills in the hospitality industry, supervision, facilities and hospitality law.

HRM elective courses are highly recommended for hotel and lodging management interests and are certified by the Educational Institute of the American Hotel and Lodging Association.

CUL elective courses are highly recommended for restaurant management interests. All courses apply to the HRM A.A.S. Degree and most are eligible for transfer to universities offering bachelor’s degree programs in Hotel and Restaurant Management.

**Core Requirements (12)**
- HRM100 Introduction to Hospitality (3)
- HRM101 Facilities Management (3)
- HRM106 Supervision in the Hospitality Industry (3)
- HRM208 Hospitality Law (3)

**Electives (6)**
Select six credits from the following list.

**HRM majors take HRM courses:**
- HRM102 Management of Guest Services (3)
- HRM103 Managing Food Service Operations (3)

**CUL majors take CUL courses:**
- CUL170 Dining and Beverage Operations (2)

Select one of the following (1):
- CUL105 Food Safety Foundations (1)
- CUL205 HACCP Principles (1)
- NTR105 ServSafe Certification (1)

**Other Requirements**
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
CHEMISTRY

CHEMISTRY A.S.

Signal Peak Campus

Total Credits: 60-64

The Chemistry A.S. Degree is appropriate for students who plan to transfer to the university to earn a baccalaureate degree in physical science areas such as Chemistry and related pre-professional programs. It is also appropriate for students interested in becoming lab technicians.

General Education Requirements

AGEC-S (35-37)

Written Communications (6)
ENG101 English Composition III (3)
ENG102 English Composition IV (3)

Arts and Humanities (6)
Select one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6)
Select AGEC courses from two different disciplines.

Physical and Biological Sciences (8)
CHM151 General Chemistry I (4)
CHM152 General Chemistry II (4)

Mathematics (3)
MAT221 Analytical Geometry and Calculus I (4)
or higher

Subject Options (6-8)
MAT231 Calculus with Analytical Geometry II (4)
MAT241 Analytical Geometry and Calculus III (4)
MAT262 Ordinary Differential Equations (3)
BIO181 General Biology I (4)
BIO182 General Biology II (4)
BIO205 Microbiology (4)

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework emphasizing Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these the Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (16)
CHM235 Organic Chemistry I (4)
CHM236 Organic Chemistry II (4)
PHY121 University Physics I: Mechanics (4)
PHY122 University Physics II: Electricity and Magnetism (4)

Transferable Electives (0-12)
Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides and select mathematics courses above the second course in the calculus sequence and/or Science courses from: Astronomy, Biology, Chemistry, Engineering, Environmental Science, Geology or Physics.

Select elective credits that transfer to the chosen university. Consult the CEG.

Other Requirements (3)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
OR
CIS120 Survey of Computer Information Systems (3)

Students must earn a grade of “C” or better in each A.S. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

The Chemistry A.S. Degree requires 60-64 credits.
DEGREES AND CERTIFICATES

COMPUTER

APPLICATION DEVELOPMENT AND WEB DESIGN CERTIFICATE

Signal Peak Campus

Total Credits: 29

This Application Development and Web Design Certificate offers students preparation for an entry-level position in application and web development.

Recommended Proficiencies
RDG094  College Reading (3)  R

Core Requirements (29)
CIS111  Introduction to the Internet (2)
CIS112  Web Page Design Fundamentals (3)
CIS120  Survey of Computer Information Systems (3)
CIS214  Application Development in Excel (3)
CIS217  Application Development in Access (3)
CBA133A  Spreadsheet Applications in Excel (3)
CBA134A  Database Management in Access (3)
CBA210  Web Development Tools (3)
CBA211  JavaScript Programming (3)
CBA212  Adobe Flash Animation (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

COMPUTER APPLICATIONS FOR BUSINESS USERS CERTIFICATE

Signal Peak Campus and Casa Grande Center

Total Credits: 29

This Computer Applications for Business Users Certificate prepares students for positions within an office environment and includes specialized training in Microsoft Office programs. An employment readiness component provides instruction and skill building in the "soft skills" required to obtain and maintain employment.

Prerequisite
SKL115  Employment Readiness Program Part I (3)

Corequisite
SKL116  Employment Readiness Program Part II (3)

Recommended Proficiencies
MAT082  Basic Arithmetic (3)
RDG094  College Reading (3)  R

Core Requirements (29)
CBA110A  Computers for Beginners (1)
CBA110C  MS Windows Basics (1)
CBA113A  MS Excel - Basic (1)
CBA113B  MS Excel - Intermediate (1)
CBA114A  MS Access - Basic (1)
CBA116A  MS PowerPoint - Basic (1)
CBA117A  MS Publisher - Basic (1)
CBA118  MS Outlook (1)
CBA122A  MS Word - Module 1 (2)
CBA122B  MS Word - Module 2 (2)
OAS101  Keyboard - Alphabetic (1)
OAS103  Keyboard - Speed/Accuracy (1)
OAS104  Ten-Key Pad (1)
SKL110  Life Math Skills (3)
SKL141  Overview of Office Assistant (2)
SKL142  Green Office Solutions (1)
SKL143  Basic Accounting Concepts (1)
SKL144  Proofreading for Accuracy (1)
SKL145  Communication Skills (3)
SKL149  Practicum for Computer Applications for Business Users (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
COMPUTER PROGRAMMING A.A.S.

**Signal Peak & Superstition Mountain Campuses**

**Total Credits: 65**

The Programming A.A.S. Degree focuses on the analysis, design and programming skills necessary for entry-level programming positions. Successful completion may lead to Certified Software Development Professional and Sun Certified Java Programmer.

**General Education Requirements (19-23)**

**Written Communications (3)**
ENG101 English Composition III (3) (SUN ENG 1101) OR
ENG121 Applied Technical Writing (3)

**Oral Communications (3)**
Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

**Arts and Humanities (3)**
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above or an AGEC course.

**Social and Behavioral Sciences (3)**
ECN201 Principles of Macroeconomics (3) OR
ECN202 Principles of Microeconomics (3) OR
Or select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above or an AGEC course.

**Physical and Biological Sciences (4)**
Select a Biological or Physical Science course numbered 100 or above, or an AGEC course.

**Mathematics (6-7)**
BUS101 Business Mathematics (3) plus
MAT121 Intermediate Algebra, Standard (4) or higher

**Core Requirements (42)**
BUS100 Introduction to Business (3)
BUS207 Business Communications (3)
CIS112 Web Page Design Fundamentals (3)

CIS120 Survey of Computer Information Systems (3)
CIS121 Microcomputer Operating System Fundamentals (3)
CIS123 Introduction to Programming (3)
CIS150 Windows Server (3)
CIS181 C#.Net (4)
CIS214 Application Development in Excel (3)
CIS216 Java Programming (4)
CIS217 Application Development in Access (3)
CIS218 C++ Programming (4)
CIS233 Web Application Development using PHP (3)

**Other Requirements (4)**
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

**Computer Competency (3):**
CIS120 Survey of Computer Information Systems (3) (Fulfilled in the Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.
COMPUTER PROGRAMMING CERTIFICATE

Signal Peak & Superstition Mountain Campuses

Total Credits: 23

The Computer Programming Certificate emphasizes knowledge and skills required to design, develop, test and document structured and object-oriented programs utilizing a variety of programming languages. It prepares students for entry-level positions in computer programming. Successful completion may lead to Certified Software Development Professional and Sun Certified Java Programmer.

Recommended Proficiencies
RDG094 College Reading (3)

Core Requirements (23)
CIS112 Web Design Fundamentals (3)
CIS120 Survey of Computer Information Systems (3)
CIS121 Microcomputer Operating System Fundamentals (3)
CIS123 Introduction to Programming (3)
CIS150 Windows Server (3)
CIS216 JAVA Programming (4)
CIS218 C++ Programming (4)

Other Requirements
Cumulative grade point average of at least a 2.0 on a 4.0 scale. Minimum of one-third of required Certificate credits completed at CAC.

GEOGRAPHIC INFORMATION SYSTEMS (GIS) A.A.S.

Signal Peak Campus

Total Credits: 64-67

Creation, analysis, and mapping of Geographic Information Systems (GIS) data, including environmental transportation systems and or communities applications to prepare students for entry-level positions utilizing GIS, AutoCAD, GPH and GPS technology and/or to progress toward a baccalaureate degree.

Prerequisite:
MAT101 Essential Mathematics (4) or higher

General Education Requirements (20-23)
For the following six categories, choose from the recommended courses or select AGEC courses from the equivalent category.

Written Communications (3)
ENG101 English Composition III (3) or
ENG121 Applied Technical Writing (3)

Oral Communications (3)
COM100 Fundamentals of Human Communication (3) (Recommended)
Or select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
GEO101 Introduction to Cultural and Historical Geography (3) or Select any Social & Behavioral Science course or an AGEC course.

Physical and Biological Sciences (8)
GPH111 Introduction to Physical Geography (4) plus
BIO100 Biology Concepts (4) or
Or select Physical & Biological courses, or AGEC Lab courses.

Mathematics (3-4)
Select a college-level Mathematics course
MAT121 Intermediate Algebra, Standard (4) or
MAT162 Applied Statistics (3) (Recommended) or higher
**Core Courses (15)**

GIS101 Introduction to Geographic Information Technologies (3)
GIS102 Map and Image Interpretation (3)
GIS111 Introduction to GIS (3)
GIS112 Intermediate GIS (3)
GIS113 Advanced GIS (3)

**Course Electives (Select 23-26 credits)**

CET221 Basic Surveying and Grade Staking (4)
DFT127 AutoCAD I (3)
DFT128 AutoCAD II (3)
DFT131 AutoCAD III (3)
GIS150 GIS and Global Positioning Systems (GPS) (3)
GIS196 GIS Internship I (3)
GIS210 GIS Programming (3)
GIS230 Applied GIS: The Environment (3)
GIS231 Applied GIS: Transportation Systems (3)
GIS232 Applied GIS: Communities (3)
GIS250 Remote Sensing I (4)
GIS251 Remote Sensing II (4)
GIS296 GIS Internship II (3)
GIS299 GIS Research Methods (4)

**Other Requirements (4)**

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

**Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)
CIS120 Survey of Computer Information Systems (Recommended)

**Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64-67 credits.

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**GIS DRAFTING AND MAPPING CERTIFICATE**

**Signal Peak Campus**

Creation, analysis, and mapping of Geographic Information Systems (GIS) data to prepare for positions utilizing GIS and GPS technology and/or to progress towards the GIS A.A.S. Degree.

**Total Credits: 30**

**Prerequisite:**

MAT101 Essential Mathematics (4) or higher

**Core Requirements (30)**

GIS101 Introduction to Geographic Information Technologies (3)
GIS102 Map and Image Interpretation (3)
GIS111 Introduction to GIS (3)
GIS112 Intermediate GIS (3)
GIS113 Advanced GIS (3)
GIS150 GIS and Global Positioning Systems (GPS) (3)
GIS196 GIS Internship I (3)

**Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
MICROCOMPUTER
BUSINESS APPLICATIONS A.A.S.

Signal Peak & Superstition Mountain Campuses

Total Credits: 66

The Microcomputer Business Applications A.A.S. Degree prepares students to select and use computer business application tools in a variety of business situations. Students learn basic web page skills for interaction between business application data and web pages. Successful completion may lead to Microsoft Certified Office User and Certified Internet Webmaster.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor’s degree.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological or Physical Science courses numbered 100 or above, or an AGEC Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR MAT101 Essential Mathematics (4) or higher

Core Requirements (46)
ACC100 Fundamentals of Accounting (3)
BUS100 Introduction to Business (3)
BUS123 Business Relations (3)
BUS207 Business Communications (3)
BUS260 Applied Business Seminar (3)
CBA122A MS Word - Module 1 (2)
CBA132A Spreadsheet Applications in Excel (3)
CBA133B Advanced Spreadsheet Applications in Excel (3)
CBA134A Database Management in Access (3)
CBA210 Web Development Tools (3)
CIS111 Introduction to the Internet (2)
CIS112 Web Page Design Fundamentals (3)
CIS120 Survey of Computer Information Systems (3)
CIS121 Microcomputer Operating System Fundamentals (3)
CIS214 Application Development in Excel (3)
CIS217 Application Development in Access (3)

Electives
Select college-level Electives numbered 100 or higher to meet 66-credit requirement.

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120 Survey of Computer Information Systems (3) (Fulfilled in Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 66 credits.
MICROCOMPUTER BUSINESS APPLICATIONS SPECIALIST CERTIFICATE

Aravaipa, Signal Peak & Superstition Mountain Campuses

Total Credits: 20

The Microcomputer Business Applications Specialist Certificate provides students with skills in business application software required for entry-level employment in an office environment.

Core Requirements (18)
BUS101  Business Mathematics (3)
CBA116A MS PowerPoint – Basic (1)
CBA117A MS Publisher – Basic (1)
CBA122A MS Word – Module 1 (2)
CBA122B MS Word – Module 2 (2)
CBA133A Spreadsheet Applications in Excel (3)
CBA134A Database Management in Access (3)
CIS121  Microcomputer Operating System Fundamentals (3)

Select two of the following (2):
OAS101  Keyboard – Alphabetic (1)
OAS103  Keyboard – Speed/Accuracy (1)
OAS104  Ten-Key Pad (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

NETWORK ADMINISTRATION CERTIFICATE

Signal Peak Campus

Total Credits: 27

This Certificate prepares students for an entry-level position as a network administrator. Successful completion may lead to Microsoft Certified System Administration, Network+ certification, and Network Technician Certification.

Recommended Proficiencies
RDG094  College Reading (3) \[\text{RDG094}\]

Core Requirements (27)
CIS120  Survey of Computer Information Systems (3) \[\text{CIS120}\]
CIS121  Microcomputer Operating System Fundamentals (3)
CIS130  Networking Essentials (3)
CIS150  Windows Server (3)
CIS152  Network Infrastructure (3)
CIS153  Network Security (3)
CIS213  Linux Server (3)
CIS215  CISCO Routers (3)
CIS219  Exchange Server (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
DEGREES AND CERTIFICATES

NETWORK SYSTEMS
ADMINISTRATION A.A.S.

Signal Peak Campus

Total Credits: 65

This A.A.S. Degree prepares students for an entry-level position as a network administrator. Graduates may enter a Baccalaureate Degree program and/or sit for Network+ Certification and A+ Network Certification examinations.

General Education Requirements (19-23)

Written Communications (3)
ENG101   English Composition III (3) OR
ENG121   Applied Technical Writing (3)

Oral Communications (3)
COM263   Intercultural Communication (3) (Recommended)

Arts and Humanities (3)
PHI105   Introduction to Ethics (3) (Recommended)
Or select an Art or Humanities course, or an AGEC course.

Social and Behavioral Sciences (3)
ECN201   Principles of Macroeconomics (3)
Or select a Social/Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological or Physical Science courses numbered 100 or above, or an AGEC course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101   Business Mathematics (3) OR
MAT121   Intermediate Algebra, Standard (4) or higher

Core Requirements (45)
BUS100   Introduction to Business (3)
BUS207   Business Communications (3)
CIS120   Survey of Computer Information Systems (3)
(Fulfills Computer Competency requirement)

CIS121   Microcomputer Operating System Fundamentals (3)
CIS123   Introduction to Programming (3)
CIS130   Networking Essentials (3)
CIS135   Principles of Telephony and Telecommunications (3)
CIS150   Windows Server (3)
CIS152   Networking Infrastructure (3)
CIS153   Network Security (3)
CIS213   Linux Server (3)
CIS215   CISCO Routers (3)
CIS219   Exchange Server (3)
CIS220   Security for Wireless Networks (3)
ECN202   Principles of Microeconomics (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information Systems (3)

For students transferring to the University of Arizona B.A.S. Network Administration program, SPA101 and SPA102 are strongly recommended.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.
CREATIVE ARTS

ENTERTAINMENT INDUSTRY TECHNOLOGY

ARTIST AND VENUE MANAGEMENT A.A.S.

Signal Peak Campus

Total Credits: 70

The Artist and Venue Management A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of business, entertainment law, marketing, management and the ability to manage entertainment facilities or performers.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) (Recommended)
OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
COM100 Fundamentals of Human Communication (3)
Or select a COM course, or an AGEC course.

Arts and Humanities (3)
EIT100 History of Rock n' Roll (3) (Recommended)
Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
PSY101 Introduction to Psychology (3) (Recommended)
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUSB101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (47)
ACC100 Fundamentals of Accounting (3)
ACC121 Income Tax Fundamentals (3)
BUS100 Introduction to Business (3)
BUS122 Small Business Management (3)
BUS190 Applied Business Management (3)
CBA210 Web Development Tools (3)
EIT101 Introduction to Entertainment (3)
EIT120 Entertainment Law (3)
EIT130 Live Audio Production I (3)
EIT140 Lighting I (3)
EIT151 Digital Audio Workstation (3)
EIT203 Entertainment Capstone Project (2)
EIT221 Entertainment Marketing and Promotion (3)
EIT222 Artist Management (3)
EIT223 Events and Venue Management (3)
EIT296 Entertainment Internship (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher
OR Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 70 credits.
ARTIST AND VENUE MANAGEMENT
CERTIFICATE

Signal Peak Campus

Total Credits: 35

The Artist and Venue Management Certificate prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of business, entertainment law, marketing, management and the ability to manage entertainment facilities or performers.

**Core Requirements (35)**
- ACC100 Fundamentals of Accounting (3)
- ACC121 Income Tax Fundamentals (3)
- BUS100 Introduction to Business (3)
- BUS122 Small Business Management (3)
- EIT100 History of Rock n’ Roll (3)
- EIT101 Introduction to Entertainment (3)
- EIT120 Entertainment Law (3)
- EIT203 Entertainment Capstone Project (2)
- EIT221 Entertainment Marketing and Promotion (3)
- EIT222 Artist Management (3)
- EIT223 Events and Venue Management (3)
- EIT296 Entertainment Internship (3)

**Other Requirements**
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

LIVE AUDIO AND LIGHTING A.A.S.

Signal Peak Campus

Total Credits: 67

The Live Audio and Lighting A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry. It provides skills necessary to work with touring entertainers and audio/lighting companies in the set up operation of live concert productions.

**General Education Requirements (19-23)**

**Written Communications (3)**
- ENG101 English Composition III (3) (Recommended)
  OR
- ENG121 Applied Technical Writing (3)

**Oral Communications (3)**
- COM100 Fundamentals of Human Communication (3)
  Or select a COM course, or an AGEC course.

**Arts and Humanities (3)**
- EIT100 History of Rock n’ Roll (3) (Recommended)
  Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

**Social and Behavioral Sciences (3)**
- PSY101 Introduction to Psychology (3) (Recommended)
  Or select a Social and Behavioral Science course, or an AGEC course.

**Physical and Biological Sciences (4)**
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

**Mathematics (3-4)**
Select a college-level Mathematics course
- BUS101 Business Mathematics (3) OR
- MAT101 Essential Mathematics (4) or higher

**Core Requirements (44)**
- BUS122 Small Business Management (3)
- CBA210 Web Development Tools (3)
- EIT101 Introduction to Entertainment (3)
- EIT120 Entertainment Law (3)
- EIT130 Live Audio Production I (3)
- EIT140 Lighting I (3)
- EIT151 Digital Audio Workstation (3)
- EIT203 Entertainment Capstone Project (2)
- EIT221 Entertainment Marketing and Promotion (3)
- EIT231 Live Audio Production II (3)
- EIT232 Equipment Maintenance (3)

**ICON LEGEND**
- AGEC: Dual Enrollment: Intensive Writing: Programs of Study/Tech Prep: Reading Required: RDG094: SUN Course:
LIVE AUDIO AND LIGHTING CERTIFICATE

Signal Peak Campus

Total Credits: 35

The Live Audio and Lighting Certificate prepares individuals for entry-level positions in the entertainment industry. It provides skills necessary to work with touring entertainers and audio/lighting companies in the set up operation of live concert productions.

Recommended Proficiencies
RDG094  College Reading (3)  

Core Requirements (35)
EIT100  History of Rock ‘n Roll (3)
EIT101  Introduction to Entertainment (3)
EIT130  Live Audio Production I (3)
EIT140  Introduction to Lighting (3)
EIT203  Entertainment Capstone Project (2)
EIT221  Entertainment Marketing and Promotion (3)
EIT231  Live Audio Production II (3)
EIT232  Equipment Maintenance (3)
EIT241  Concert Lighting (3)
EIT242  Rigging (3)
EIT296  Entertainment Internship (3)
ELC122  Direct Current and Alternating Current Circuit Analysis (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

This A.A.S. Degree requires 67 credits.
DEGREES AND CERTIFICATES

POPULAR MUSIC PERFORMANCE
A.A.S.
Signal Peak Campus

Total Credits: 64
The Popular Music Performance A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of skills needed for live songwriting, all aspects of live pop music performance and recording.

Prerequisite
The soloist or group must perform a live audition for the coordinator of the Entertainment Industry Technology program.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3)  Recommended
OR
ENG121 Applied Technical Writing (3)

Oral Communications (3)
COM100 Fundamentals of Human Communication (3)  Recommended
Or select a COM course, or an AGEC course.

Arts and Humanities (3)
EIT100 History of Rock n’ Roll (3)  Recommended
Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
PSY101 Introduction to Psychology  Recommended
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3)  OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (43.5)
BUS122 Small Business Management (3)
CIS112 Web Page Design Fundamentals (3)
EIT101 Introduction to Entertainment (3)
EIT120 Entertainment Law (3)
EIT130 Live Audio Production I (3)
EIT140 Lighting I (3)
EIT151 Digital Audio Workstation (3)
EIT170 Performance Skills (1)
(Must enroll four (4) times for credit)
EIT171 Songwriting I (2)
EIT203 Entertainment Capstone Project (2)
EIT221 Entertainment Marketing and Promotion (3)
EIT222 Artist Management (3)
EIT272 Songwriting II (2)
ENG200 Creative Writing (3)
MTC100 Fundamentals of Music (3)
MTC101 Aural Fundamentals (.5)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher
CIS112 Web Page Design Fundamentals (3)
(Recommended, also fulfills Core requirement)
OR
Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Popular Music Performance A.A.S. Degree requires 64 credits.
DEGREES AND CERTIFICATES

POPULAR MUSIC PERFORMANCE CERTIFICATE

Signal Peak Campus

Total Credits: 35.5

The Popular Music Performance Certificate prepares individuals for entry-level positions in the music entertainment industry by providing an opportunity to gain a broad knowledge of skills needed for song writing and all aspects of live popular music performance and recording.

Recommended Proficiencies
RDG094  College Reading  R

Core Requirements (35.5)
EIT100  History of Rock n’ Roll (3)  ☑
EIT101  Introduction to Entertainment (3)
EIT120  Entertainment Law (3)
EIT130  Live Audio Production I (3)
EIT140  Introduction to Lighting (3)
EIT151  Digital Audio Workstation (3)
EIT170  Performance Skills (1)  (Must enroll two (2) times for credit)
EIT171  Songwriting I (2)
EIT203  Entertainment Capstone Project (2)
EIT221  Entertainment Marketing and Promotion (3)
EIT222  Artist Management (3)
EIT272  Songwriting II (2)
MTC100  Music Fundamentals (3)
MTC101  Aural Fundamentals (.5)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

RECORDING ENGINEERING A.A.S.

Signal Peak Campus

Total Credits: 67.5

The Recording Engineering A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of creating a home recording studio or a professional multi-track studio. Skills include recording, production, editing, and arranging various types of audio recordings.

General Education Requirements (19-23)

Written Communications (3)
ENG101  English Composition III (3)  ☑ (Recommended)
OR
ENG121  Applied Technical Writing (3)

Or select a COM course, or an AGEC course.

Oral Communications (3)
COM100  Fundamentals of Human Communication (3)  ☑ ☑

Arts and Humanities (3)
EIT100  History of Rock n’ Roll (3)  ☑ (Recommended)
OR
select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
PSY101  Introduction to Psychology (3)  ☑ (Recommended)
OR
select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101  Business Mathematics (3)  OR
MAT101  Essential Mathematics (4) or higher

Core Requirements (44.5)
BUS122  Small Business Management (3)
CBA210  Web Development Tools (3)
EIT101  Introduction to Entertainment (3)
EIT120  Entertainment Law (3)
EIT130  Live Audio Production I (3)
EIT151  Digital Audio Workstation (3)
EIT153  Recording Engineering I (3)
EIT203  Entertainment Capstone Project (2)
DEGREES AND CERTIFICATES

EIT221  Entertainment Marketing and Promotion (3)
EIT231  Live Audio Production II (3)
EIT232  Equipment Maintenance (3)
EIT254  Recording Engineering II (3)
EIT255  Recording Engineering III (3)
EIT296  Entertainment Internship (3)
MTC100  Fundamentals of Music (3)
MTC101  Aural Fundamentals (.5)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124  Microcomputers in Agriculture
CIS110  Fundamentals of Computer Literacy or higher
OR
Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 67.5 credits.

RECORDING ENGINEERING
CERTIFICATE

Signal Peak Campus

Total Credits: 35

The Recording Engineering Certificate prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of creating a home recording studio or a professional multi-track studio. Skills include recording, production, editing and arranging various types of audio recordings.

Recommended Proficiencies
RDG094  College Reading

Core Requirements (35)
EIT100  History of Rock n' Roll (3)
EIT101  Introduction to Entertainment (3)
EIT120  Entertainment Law (3)
EIT130  Live Audio Production I (3)
EIT151  Digital Audio Workstation (3)
EIT153  Recording Engineering I (3)
EIT203  Entertainment Capstone Project (2)
EIT231  Live Audio Production II (3)
EIT232  Equipment Maintenance (3)
EIT254  Recording Engineering II (3)
EIT255  Recording Engineering III (3)
EIT296  Entertainment Internship (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
FINE ARTS A.A.

Signal Peak Campus

Total Credits: 60-64

The Fine Arts A.A. Degree prepares students to transfer to a university B.A., B.F.A. or Bachelors of Teaching in the Arts degree program. Those seeking Art History or Museum Studies as majors may need additional foreign language courses.

General Education Requirements

AGEC-A (35-36)

Written Communications (6)
ENG101  English Composition III (3)  
ENG102  English Composition IV (3)  

Oral Communications (3)
Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

Arts & Humanities (6-9)

Arts (3)
Fulfilled by the Studio Art Core Requirements.

Humanities (3)
Select an AGEC course.

Social and Behavioral Sciences (6-9)
Select AGEC courses from different disciplines.

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Mathematics (3-4)
MAT141  College Mathematics, Standard (4)  
or higher

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select courses from the AGECA list to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender) (Fulfilled by the Core Requirements)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness (Fulfilled by the Core Requirements)

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives may also be used to satisfy requirements in the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (30)

ART101  Two Dimensional Design (3)  
ART102  Three Dimensional Design (3)  
ART107  Drawing I (3)  
ART109  Color Theory (3)  
ART207  Art History I (3)  
ART208  Art History II (3)  
MSC205  Portfolio Preparation (3)  
Transferable Studio Electives (9)

Fulfillment of the Core Requirements may also fulfill the AGECA-A Arts Requirements.

Electives
Select approved elective courses which transfer as “Elective or better” to all three AZ public universities to complete the required A.A. Degree credits.

Other Requirements (3)
Reading Competency: RDG094 College Reading  

Computer Competency (3):
AGB124  Microcomputers in Agriculture  
CIS110  Fundamentals of Computer Literacy or higher  

OR
Transferable Computer Competency course (Consult the CEG.)

Other A.A. Degree Requirements
Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an advisor.

ICON LEGEND

AGEC:  
Intensive Writing:  IW  
Programs of Study/Tech Prep:  POS  
Reading Required: RDG094:  R  
SUN Course:  

Visit www.centralaz.edu
academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language or other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in each A.A. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

This A.A. Degree requires 60-64 semester credits.

**GRAPHIC DESIGN A.A.S.**

**Signal Peak Campus**

**Total Credits: 65**

Hands-on Graphic Design training prepares students for employment in entry-level positions in Advertising, Marketing, Print and Web Design fields.

**Recommended Proficiencies**

RDG094  College Reading (3)  \( R \)

**General Education Requirements (25)**

**Written Communications (6)**

ENG101  English Composition III (3)  \( \) \( \)
ENG102  English Composition IV (3)  \( \) \( \)

**Oral Communications (3)**

Select a COM course, or an AGEC course.

**Arts and Humanities (6)**

*Select two of the following:*

ART100  Art Appreciation (3)  \( \)
ART207  Art History I (3)  \( \) \( \)
ART208  Art History II (3)  \( \) \( \)

*Or select Art, Humanities, Literature, Music, Philosophy or Theatre courses numbered 100 or above, or an AGEC course.*

**Social and Behavioral Sciences (3)**

*Select a Social and Behavioral Science course, or an AGEC course.*

**Physical and Biological Sciences (4)**

*Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.*

**Mathematics (3-4)**

*Select a college-level Mathematics course*

BUS101  Business Mathematics (3)  OR
MAT101  Essential Mathematics (4) or higher

**Core Requirements (36)**

ART101  Two-Dimensional Design (3)  \( \)
ART102  Three-Dimensional Design (3)  \( \) \( \)
ART107  Drawing I (3)
ART109  Color Theory (3)
BUS122  Small Business Management (3)
MSC101  Introduction to Mass Communication (3)
MSC120  Graphic Design and Adobe InDesign (3)
MSC122  Introduction to Web Design (3)
MSC125  Introduction to Illustrator (3)
MSC220  Advanced Graphic Design (3)
MSC130  Digital Photography and Photoshop (3)
MSC230  Advanced Digital Photography and Adobe Photoshop (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124  Microcomputers in Agriculture
CIS110  Fundamentals of Computer Literacy or higher
OR
Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.

CULINARY ARTS

BAKING AND PASTRY CERTIFICATE
Maricopa and Signal Peak Campuses

Total Credits: 18

This Certificate is designed to prepare students for employment in such establishments as retail bakeries, fine dining restaurants and hotels, upscale pastry and bake shops, commercial baking and entrepreneurship. The core courses will help students develop a solid foundation in basic baking skills. The student may tailor the degree to meet individual goals in areas such as bread baking, cake decorating, wedding cake production, and/or chocolate and sugar show pieces. Students pursuing an Associate of Applied Science (AAS) Culinary Arts Degree may specialize in Baking and Pastry. All courses in the Baking and Pastry Certificate are requirements for the Culinary Arts A.A.S. Degree. High school diploma or GED are recommended.

Prerequisites:
RDG094 and MAT082 or equivalent placement test scores.

Recommended Proficiencies:
High school diploma or GED recommended.

Core Requirements (14)
NTR105  ServSafe Certification (1)
OR
CUL105  Food Safety Foundations (1)
CUL160  Baking and Pastry I (3)
CUL260  Baking and Pastry II (3)
NTR223  Food Service Management (3)
OR
HRM103  Managing Food Service Operations (3)
NTR104  Nutrition (3) plus NTR104L Personal Wellness Lab (1)
OR
NTR104  Nutrition (3) plus (1) Culinary Arts elective
OR
CUL268  Nutrition and Special Needs Baking (3) plus CUL (1) elective
OR
NTR141  Nutrition and Wellness (4)
(NTR141 may also fulfill Physical and Biological Sciences Requirement for Culinary A.A.S. Degree)
**Electives: Choose 4 or more**
- CUL161  Cake Decorating (1)
- CUL162  Cake, Fillings and Frostings (1)
- CUL261  Advanced Cake Decorating (1)
- CUL262  Wedding Cakes (1)
- CUL263  Everything Chocolate (1)
- CUL264  Confectionary Show Pieces (1)
- CUL265  Artisan and Specialty Breads (1)
- CUL266  Advanced Pastry (1)

**Other Requirements**
Reading Competency: RDG094 College Reading

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of one-third of required Certificate credits from CAC.

**CULINARY ARTS A.A.S.**

**Maricopa and Signal Peak Campuses**

**Total Credits: 65**

The Culinary Arts Associate of Applied Science (AAS) Degree provides training in basic and advanced culinary skills and includes a practicum experience within a commercial kitchen for application of skills and knowledge. Concentrations include Culinary Arts, Baking and Pastry, Nutrition and Dietetics, and Business/Hospitality specialties. Students are prepared for positions as professional chefs, cooks, pastry chefs, and entry level management or for advancement in the food service industry.

**Recommended Proficiencies**
College level math and English Placement test scores. High school diploma or GED recommended.

**General Education Requirements (19-23)**

**Written Communications (3)**
- ENG101  English Composition III (3)  🗽
- ENG121  Applied Technical Writing (3)

**Oral Communications (3)**
Select a COM course, or an AGEC course.

**Arts and Humanities (3)**
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

**Social and Behavioral Sciences (3)**
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

**Physical and Biological Sciences (4)**
- NTR141  Nutrition and Wellness (4)  ☒ (Recommended)
  Or select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

**Mathematics (3-4)**
Select a college-level Mathematics course
- BUS101  Business Mathematics (3)  OR
- MAT101  Essential Mathematics (4) or higher

**Core Requirements (27)**
- CUL125  Sustainable Food Practices (1)
- CUL130  Culinary Principles and Applications I (3)
- CUL160  Baking and Pastry I (3)
- CUL170  Dining and Beverage Operations (2)
DEGREES AND CERTIFICATES

CUL185 Catering Operations (2)
CUL230 Culinary Principles and Applications II (3)
CUL260 Baking and Pastry II (3)
CUL290 Commercial Cooking Practicum (2)

CUL105 Food Safety Foundations (1)
OR
NTR105 ServSafe Certification (1)

Select one of the following (4):
NTR104 Nutrition (3) plus
NTR104L Personal Wellness Lab (1)
OR
NTR104 Nutrition (3) plus CUL elective (1)
OR
CUL268 Nutrition and Special Needs Baking (3) plus CUL elective (1)
OR
NTR141 Nutrition and Wellness (4) (NTR141 also fulfills Physical and Biological Sciences)

If the Physical and Biological Sciences requirement is fulfilled by NTR141, select four (4) additional credits.

Select one of the following (3):
NTR223 Food Service Management (3)
OR
HRM103 Managing Food Service Operations (3)

Electives (15)
Students may choose electives from all four of the categories listed below. Many of the electives are part of the Baking and Pastry Certificate, the Culinary Arts Certificate, and the Hotel and Restaurant Management Certificate. Careful selection of electives makes it possible for a student to earn multiple certificates while earning an AAS degree.

Culinary Arts Electives
CUL110 Asian Cuisine (1)
CUL112 Italian Cuisine (1)
CUL114 Mexican and Latin American Cuisine (1)
CUL121 Culinary Concepts (1)
CUL205 HACCP Principles (1)
CUL292 Study Abroad: Italian Cuisine and Culture (4)
NTR142 Applied Food Science (3)

Baking and Pastry Electives
CUL161 Cake Decorating (1)
CUL162 Cake, Fillings and Frostings (1)
CUL261 Advanced Cake Decorating (1)
CUL262 Wedding Cakes (1)
CUL263 Everything Chocolate (1)
CUL264 Confectionary Show Pieces (1)
CUL265 Artisan Specialty Breads (1)
CUL266 Advanced Pastry (1)
CUL268 Nutrition and Special Needs Baking (3)

Nutrition and Dietetics Electives
NTR 135 Healthy Weight for Adults (1)
NTR191 Nutrition Counseling Skill Development (3)
NTR232A Food and Culture (1)
NTR240 Clinical Nutrition (3)

Business/Hospitality Electives
ACC100 Fundamentals of Accounting (3)
BUS100 Introduction to Business (3)
BUS122 Small Business Management (3)
BUS123 Business Relations (3)
BUS180 Introduction to Marketing (3)
BUS 201 Legal Environment of Business (3)
BUS250 Business Entrepreneurship (3)
HRM100 Introduction to Hospitality (3)
HRM101 Facilities Management (3)
HRM102 Management of Guest Services (3)
HRM106 Supervision in the Hospitality Industry (3)
HRM208 Hospitality Law (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher
OR
Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.
CULINARY ARTS CERTIFICATE I

Maricopa and Signal Peak Campuses

Total Credits: 16

Culinary Arts Certificate I prepares students to become entry-level culinary professionals within a commercial food service operation. Credits earned may be applied toward the Culinary Arts Certificate II or the Culinary Arts A.A.S. Degree.

Recommended Proficiencies
College level math and English Placement test scores.
High school diploma or GED recommended.

Core Requirements (16)
- CUL130 Culinary Principles and Applications I (3)
- CUL160 Baking and Pastry I (3)
- CUL170 Dining and Beverage Operations (2)
- CUL105 Food Safety Foundations (1)
  OR
- NTR105 ServSafe Certification (1)
- NTR223 Food Service Management (3)
  OR
- HRM103 Managing Food Service Operations (3)

Select one of the following (4):
- NTR104 Nutrition (3) plus
  NTR104L Personal Wellness Lab (1)
  OR
- NTR104 Nutrition (3) plus CUL elective (1)
  OR
- NTR141 Nutrition and Wellness (4)
  OR
- CUL268 Nutrition and Special Needs Baking (3) plus
  CUL elective (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

CULINARY ARTS CERTIFICATE II

Maricopa and Signal Peak Campuses

Total Credits: 25

Culinary Arts Certificate II provides training in basic and advanced culinary skills, including the principles of professional cooking and baking, volume food production, food safety and sanitation, customer service, food service management skills, basic nutrition concepts and menu and facility planning. This Certificate prepares students for entry-level positions as cooks, chefs or food service managers.

Recommended Proficiencies
College level math and English Placement test scores.
High school diploma or GED recommended.

Required Courses (25)
- CUL125 Sustainable Food Practices (1)
- CUL130 Culinary Principles and Applications I (3)
- CUL160 Baking and Pastry I (3)
- CUL170 Dining and Beverage Operations (2)
- CUL185 Catering Operations (2)
- CUL230 Culinary Principles and Applications II (3)
- CUL260 Baking and Pastry II (3)
- CUL105 Food Safety Foundations (1)
  OR
- NTR105 ServSafe Certification (1)
- NTR223 Food Service Management (3)
  OR
- HRM103 Managing Food Service Operations (3)

Select one of the following (4):
- NTR104 Nutrition (3) plus
  NTR104L Personal Wellness Lab (1)
  OR
- NTR104 Nutrition (3) plus CUL elective (1)
  OR
- NTR141 Nutrition and Wellness (4)
  OR
- CUL268 Nutrition and Special Needs Baking (3) plus
  CUL elective (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
DEGREES AND CERTIFICATES

DIESEL/HEAVY EQUIPMENT

DIESEL AND HEAVY EQUIPMENT TECHNOLOGY A.A.S.

Signal Peak Campus

Total Credits: 73

This Degree prepares students for employment as diesel and heavy equipment technicians with an array of career opportunities within the industry. A typical graduate will seek employment with an equipment dealer, equipment rental company, or a heavy highway construction company. Students receive training applicable for serving and repairing all types of diesel equipment.

Prerequisites
Students must be admitted to D&HET Cohort and hold current and valid driver license, or instructor’s consent.

General Education Requirements (19)

Written Communications (3)
ENG101 English Composition III (3)
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (44)
DIE110 Introduction to Diesel Engines and Fuel Systems (3)
DIE111 Introduction to Electricity/Electronics (3)
DIE112 Introduction to Mobile Hydraulics (3)
DIE113 Introduction to Power Trains (3)
DIE114 Introduction to Power Train Repair and Diagnostics (4)
DIE115 Introduction to Diesel Engine Repair and Diagnostics (4)
DIE118 Computer Systems for Equipment Technicians (3)
DIE210 Advanced Diesel Engines and Fuel Systems (5)
DIE211 Advanced Electrical/Electronic Systems (3)
DIE212 Advanced Mobile Hydraulics (3)
DIE214 Advanced Power Train Repair and Diagnostics (5)
HEO121 Heavy Equipment Operations I (5)

Electives: Select three of the following courses (9)
AGB124 Microcomputers in Agriculture (3)
CIS120 Survey of Computer Information Systems (3)
DIE116 Introduction to Diesel Technology (3)
DIE117 Workplace Success Principles, Practices, and Strategies (3)
DIE222 Mobile Refrigeration (3)
WLD Any Welding course (3)
DIE196 Diesel Equipment Technology and HEO Internship I (3) plus
DIE296 Diesel Equipment Technology and HEO Internship II (3)

Other Requirements (1-4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture OR
CIS110 Fundamentals of Computer Literacy or higher (Select CIS120 from Electives)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 73 credits.
DEGREES AND CERTIFICATES

DIESEL AND HEAVY EQUIPMENT TECHNOLOGY CERTIFICATE

Signal Peak Campus

Total Credits: 53

The Diesel and Heavy Equipment Technology Certificate prepares students for employment as diesel and heavy equipment technicians with an array of career opportunities within the industry. A typical graduate will seek employment with an equipment dealer, equipment rental company, or a highway heavy construction company. Students receive training applicable for servicing and repairing all types of diesel equipment.

Prerequisites
Students must be admitted to D&HET Cohort; current and valid driver license; or instructor consent.

Core Requirements (44)
DIE110 Introduction to Diesel Engines & Fuel Systems (3)
DIE111 Introduction to Electricity/Electronics (3)
DIE112 Introduction to Mobile Hydraulics (3)
DIE113 Introduction to Power Trains (3)
DIE114 Introduction to Power Train Repair & Diagnostics (4)
DIE115 Introduction to Diesel Engine Repair and Diagnostics (4)
DIE116 Computer Systems for Equipment Technicians (3)
DIE210 Advanced Diesel Engines and Fuel Systems (5)
DIE211 Advanced Electrical/Electronic Systems (3)
DIE212 Advanced Mobile Hydraulics (3)
DIE214 Advanced Power Train Repair and Diagnostics (5)
HEO121 Heavy Equipment Operations I (5)

Electives: Select three courses (9)
AGB124 Microcomputers in Agriculture (3)
CIS120 Survey of Computer Information Systems (3)
DIE116 Introduction to Diesel Technology (3)
DIE117 Workplace Success Principles, Practices, and Strategies (3)
DIE222 Mobile Refrigeration (3)
ENG121 Applied Technical Writing (3)
WLD Any Welding course (3)

Other Requirements
Reading Competency: RDG094 College Reading

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
HEAVY EQUIPMENT OPERATOR
A.A.S.

Signal Peak Campus

Total Credits: 68

The Heavy Equipment Operator A.A.S. degree prepares students to operate, maintain and service heavy equipment and layout construction projects.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) (SUN ENG 1101) OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
AGS221 Soil Science (4) OR GLG Any Geology course (4) PHY100 Physical Universe (4) OR Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR MAT101 Essential Mathematics (4) or higher

Core Requirements (37)
CET125 Introduction to Earthmoving Methods and Operations (3)
CET221 Basic Surveying and Grade Staking (4)
DIE225 Preventive Maintenance (2)

Electives: Select from the following courses (8)
HEO100 Intro to Heavy Equipment (5) HEO223 Commercial Driver License Preparation (3) BUS Any Business course (3) PEH102 First Aid/CPR (2) WLD Any Welding course (3) DIE222 Mobile Refrigeration (3) COM202 Introduction to Group Communication (3) DIE196 Diesel Equipment Technology and HEO Internship I (3) DIE296 Diesel Equipment Technology and HEO Internship II (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3) CIS110 Fundamentals of Computer Literacy (3) or higher OR Transferable Computer Competency course
(Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 68 credits.
DEGREES AND CERTIFICATES

HEAVY EQUIPMENT OPERATOR CERTIFICATE

Signal Peak Campus

Total Credits: 40

The Heavy Equipment Operator Certificate focuses on the operation, maintenance and service of heavy equipment, layout of construction projects, and supervisory duties in the field of Heavy Equipment Operators.

General Education Requirements (6)

Communications (3)
Select a COM course, or an AGEC course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101  Business Mathematics (3) OR
MAT101  Essential Mathematics (4) or higher

Core Requirements (23)
CET125  Intro to Earthmoving Methods & Operations (3)
CET221  Basic Surveying and Grade Staking (4)
DIE225  Preventive Maintenance (2)
HEO121  Heavy Equipment Operations I (5)
HEO122  Heavy Equipment Operations II (5)

Choose one of the following courses (4):
HEO127  Heavy Equipment Reconditioning (4)
HEO128  Diesel Equipment Service and Repair (4)

Computer Competency (3)
Select one:
TEC129  Computer Skills for Technicians (3)
CIS  Any Computer Literacy course (3)
AGB124  Microcomputers in Agriculture (3)

Electives (8)
AGS221  Soil Science (4)
GLG  Any Geology course (4)
HEO100  Intro to Heavy Equipment (5)
HEO223  Commercial Driver License Preparation (3)
HEO127  Heavy Equipment Reconditioning (4)
HEO128  Diesel Equipment Service and Repair (4)

Other CAC Requirements
Reading Competency: RDG094 College Reading R

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND
AGEC: Dual Enrollment: POS
Intensive Writing: Programs of Study/Tech Prep: SUN Course:
Reading Required: RDG094:  

HEO221  Advanced Heavy Equipment Operations III (5)
HEO222  Applied Heavy Equipment Construction (5)
MAT121  Intermediate Algebra, Standard (4) or higher
PHY100  Physical Universe (4)
BUS  Any Business course (3)
PEH102  First Aid/CPR (2)
WLD  Any Welding course (3)
DIE222  Mobile Refrigeration (3)
COM202  Introduction to Group Communication (3)
DIE196  Diesel Equipment Technology & HEO Internship I (3)
DIE296  Diesel Equipment Technology & HEO Internship II (3)
EDUCATION

EARLY CHILDHOOD EDUCATION
FAMILY CHILDCARE A.A.S.
Signal Peak Campus

Total Credits: 64

The Early Care and Education Program provides coursework to fulfill the education/training requirements for an A.A.S. Degree in the Family Childcare specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. The Degree program prepares individuals to operate a Childcare business in their home.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) ✅
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (24)
ECE117 Guidance for Family Childcare (3)
ECE121 Health for Family Childcare (1)
ECE122 Safety for Family Childcare (1)
ECE123 Nutrition for Family Childcare (1)
ECE177 Ages and Stages of Children 0-12 (3)
ECE229 Professional Portfolio Preparation (3)
ECE255 Communications for Family Childcare (3)
ECE257 The Business of Family Childcare (3)
ECE272 Family Childcare Environments (3)
ECE279 Curriculum for Family Childcare (3)

Electives (17)
Select college-level electives to meet the 64 credit requirement.

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading ✅

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher

OR
Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.
### EARLY CHILDHOOD EDUCATION

#### FAMILY CHILDCARE CERTIFICATE

**Signal Peak Campus**

**Total Credits: 24**

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in the Family Childcare specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. The Certificate program prepares individuals to operate a home Childcare business.

**Core Requirements (24)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE117</td>
<td>Guidance for Family Childcare</td>
<td>3</td>
</tr>
<tr>
<td>ECE121</td>
<td>Health for Family Childcare</td>
<td>1</td>
</tr>
<tr>
<td>ECE122</td>
<td>Safety for Family Childcare</td>
<td>1</td>
</tr>
<tr>
<td>ECE123</td>
<td>Nutrition for Family Childcare</td>
<td>1</td>
</tr>
<tr>
<td>ECE177</td>
<td>Ages and Stages of Children 0-12</td>
<td>3</td>
</tr>
<tr>
<td>ECE229</td>
<td>Professional Portfolio Preparation</td>
<td></td>
</tr>
<tr>
<td>ECE255</td>
<td>Communications for Family Childcare</td>
<td></td>
</tr>
<tr>
<td>ECE257</td>
<td>The Business of Family Childcare</td>
<td></td>
</tr>
<tr>
<td>ECE272</td>
<td>Family Childcare Environments</td>
<td></td>
</tr>
<tr>
<td>ECE279</td>
<td>Curriculum for Family Childcare</td>
<td></td>
</tr>
</tbody>
</table>

**Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### EARLY CHILDHOOD EDUCATION

#### INFANT-TODDLER A.A.S.

**Aravaipa, Maricopa, San Tan, Signal Peak & Superstition Mountain Campuses and Casa Grande and Corporate Centers**

**Total Credits: 64**

The Early Care and Education Program’s Associate of Applied Science Degree (A.A.S.) provides solid foundational knowledge, field experiences and common skills and strategies that prepare students for multiple roles in the Infant-Toddler field.

**General Education Requirements (19-23)**

**Written Communications (3)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101</td>
<td>English Composition III</td>
<td></td>
</tr>
<tr>
<td>ENG121</td>
<td>Applied Technical Writing</td>
<td></td>
</tr>
</tbody>
</table>

**Oral Communications (3)**

Select a COM course, or an AGEC course.

**Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

**Social and Behavioral Sciences (3)**

Select a Social and Behavioral Science course, or an AGEC course.

**Physical and Biological Sciences (4)**

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

**Mathematics (3-4)**

Select a college-level Mathematics course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS101</td>
<td>Business Mathematics</td>
<td></td>
</tr>
<tr>
<td>MAT101</td>
<td>Essential Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

**Core Requirements (10)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE120B</td>
<td>Providing a Healthy Environment</td>
<td></td>
</tr>
<tr>
<td>ECE120D</td>
<td>Ensuring a Safe Environment</td>
<td></td>
</tr>
<tr>
<td>ECE125A</td>
<td>Nutrition</td>
<td></td>
</tr>
<tr>
<td>ECE250</td>
<td>Professionalism</td>
<td></td>
</tr>
<tr>
<td>ECE280</td>
<td>Inclusion of Children with Special Needs</td>
<td></td>
</tr>
<tr>
<td>ECE283</td>
<td>Valuing Families and Diversity</td>
<td></td>
</tr>
</tbody>
</table>
Specialization Requirements (16)
ECE128A Environments for Infants and Toddlers (1)
ECE129B Observation Skills in the Infant and Toddler Program (1)
ECE129C Record Keeping Skills: Infant and Toddler Programs (1)
ECE176 Early Childhood Development and Theories (3)
ECE183 Curriculum and Learning Materials for Infants (1)
ECE184 Curriculum and Learning Materials for Toddlers (1)
ECE226A Cognitive Development of Infants and Toddlers (1)
ECE226C Language Development of Infants and Toddlers (1)
ECE227B Guidance and Discipline of Infants and Toddlers (1)
ECE227C Enhancing Social Competency of Infants and Toddlers (1)
ECE228B Physical Development in Infancy and Toddlerhood (1)
ECE271 Creating Early Childhood Environments (3)

Electives (15)
Select college-level electives to meet the 64 credit requirement.

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
OR
CIS110 Fundamentals of Computer Literacy or higher
(CIS120 is recommended for students planning to transfer and complete a bachelor’s degree.)

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.

EARLY CHILDHOOD EDUCATION
INFANT–TODDLER CERTIFICATE

Signal Peak Campus

Total Credits: 29

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in the Infant-Toddler specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential.

Core Requirements (13)
ECE120B Providing a Healthy Environment (1)
ECE120D Ensuring a Safe Environment for Children (1)
ECE125A Nutrition (1)
ECE229 Professional Portfolio Preparation (3)
ECE250 Professionalism (1)
ECE280 Inclusion of Children with Special Needs (3)
ECE283 Valuing Families and Diversity (3)

Specialization Requirements for Infant-Toddler (16)
ECE128A Environments for Infants and Toddlers (1)
ECE129B Observation Skills in the Infant and Toddler Program (1)
ECE129C Record Keeping Skills: Infant and Toddler Programs (1)
ECE176 Early Childhood Development and Theories (3)
ECE183 Curriculum and Learning Materials for Infants (1)
ECE184 Curriculum and Learning Materials for Toddlers (1)
ECE226A Cognitive Development of Infants and Toddlers (1)
ECE226C Language Development of Infants and Toddlers (1)
ECE227B Guidance and Discipline of Infants and Toddlers (1)
ECE227C Enhancing Social Competency of Infants and Toddlers (1)
ECE228B Physical Development in Infancy and Toddlerhood (1)
ECE271 Creating Early Childhood Environments (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND
AGEC: Dual Enrollment: Intensive Writing: Programs of Study/Tech Prep: Reading Required: RDG094: SUN Course:
EARLY CHILDHOOD EDUCATION MANAGEME NT A.A.S.

Aravaipa, Maricopa, Signal Peak & Superstition Mountain Campuses and Casa Grande, Corporate, San Tan Center

Total Credits: 64

The Early Childhood Education Management A.A.S. Degree program provides for the development of skills and competencies in operating a Childcare program. The degree program prepares individuals to supervise, market and manage a Childcare program.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3)  
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
ECE276 Child Development (3)  (Also fulfills Core Requirement)
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (28)
ECE220 Managing Food, Health, and Safety in Childcare Programs (3)
ECE221 ECE Program Financial Management (3)
ECE222 Managing and Evaluating ECE Programs (3)
ECE223 Planning and Promoting an ECE Program (3)
ECE224 Supervision in Early Childhood Programs (3)
ECE229 Professional Portfolio Preparation (3)
ECE248 Early Childhood Program Philosophies (1)
ECE276 Child Development (3)  (Also fulfills Social and Behavioral Requirement)
ECE280 Inclusion of Children with Special Needs (3)
ECE283 Valuing Families and Diversity (3)

Electives (13)
Select college-level electives to meet the 64 credit requirement.

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading  

Computer Competency (3):
AGB124 Microcomputers in Agriculture  OR
CIS110 Fundamentals of Computer Literacy or higher  (CIS120 is recommended for students planning to transfer and complete a bachelor’s degree.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.
DEGREES AND CERTIFICATES

EARLY CHILDHOOD EDUCATION MANAGEMENT CERTIFICATE

Signal Peak Campus

Total Credits: 31

The Early Childhood Education Management Certificate program provides for the development of skills and competencies in managing a Childcare program.

Recommended Proficiencies
RDG094 College Reading (3) R

Core Requirements (31)
ECE220 Managing Food, Health, and Safety in Childcare Programs (3)
ECE221 ECE Program Financial Management (3)
ECE222 Managing and Evaluating ECE Programs (3)
ECE223 Planning and Promoting an ECE Program (3)
ECE224 Supervision in Early Childhood Programs (3)
ECE229 Professional Portfolio Preparation (3)
ECE248 Early Childhood Program Philosophies (1)
ECE276 Child Development (3) ☐
ECE280 Inclusion of Children with Special Needs (3)
ECE283 Valuing Families and Diversity (3)
CIS120 Survey of Computer Information Systems (3) ☐
(Recommended for students planning to transfer)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

EARLY CHILDHOOD EDUCATION PRESCHOOL A.A.S.

Aravaipa, Maricopa, San Tan, Signal Peak & Superstition Mountain Campuses and Casa Grande and Corporate Centers

Total Credits: 64

The Early Care and Education Program provides coursework to fulfill the education/training requirements for an AAS Degree with a Preschool specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. Graduates will be prepared to function as a teacher or aide in an Early Childhood program setting.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) OR
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
ECE276 Child Development (3) ☐
(Also fulfills Core Requirement)
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (35)
ECE116 Guiding and Observing Children (3)
ECE120B Providing a Healthy Environment (1)
ECE120D Ensuring a Safe Environment for Children (1)
ECE125A Nutrition (1)
DEGREES AND CERTIFICATES

EARLY CHILDHOOD EDUCATION

PRESCHOOL CERTIFICATE

Signal Peak Campus

Total Credits: 28

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in the Preschool specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential.

Core Requirements (25)

ECE116 Guiding and Observing Children (3)
ECE120B Providing a Healthy Environment (1)
ECE120D Ensuring a Safe Environment for Children (1)
ECE125A Nutrition (1)
ECE176 Early Childhood Development and Theories (3)
ECE229 Professional Portfolio Preparation (3)
ECE250 Professionalism (1)
ECE271 Creating Early Childhood Environments (3)
ECE276 Child Development (3)
ECE278 Effective Curriculum Design for Teachers of Young Children (3)
ECE283 Valuing Families and Diversity (3)

Electives (9)

Select electives from the AGEC list to meet the 64 credit requirement.

Other Requirements (3)

Computer Competency (3):
AGB124 Microcomputers in Agriculture
OR
CIS110 Fundamentals of Computer Literacy or higher
(CIS120 is recommended for students planning to transfer and complete a bachelor’s degree.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.

Other Requirements (4)

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
OR
CIS110 Fundamentals of Computer Literacy or higher
(CIS120 is recommended for students planning to transfer and complete a bachelor’s degree.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.

ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: Programs of Study/Tech Prep: SUN Course:
Reading Required: RDG094:
ELEMENTARY EDUCATION
A.A.E.E.

District-Wide

Total Credits: 60-64

The Associate of Arts in Elementary Education (A.A.E.E.) Degree is appropriate for students who require practical and professional skills and knowledge that can lead to upper division programs in elementary and special education, and prepares para-educators.

For a list of Common Courses associated with specific programs of study, go to the Common Course Matrix Archives and select the current year or the year you completed the course(s): www.aztransfer.com/MatrixArchives.

AGEC courses are transferable to all three Arizona public universities provided students earn a grade of “C” or better. Contact an academic advisor for assistance.

Recommended Proficiencies
College level English, math and reading courses or placement test scores to demonstrate proficiency

AGEC-A (35-36 Credits)
The Arizona General Education Curriculum focused on the Arts (AGEC-A) is a 35 semester credit block that fulfills the lower division general education requirements of liberal arts majors (e.g., social science, fine arts, humanities). The AGEC-A requires a minimum of MAT141 or higher plus 32 credits. The AGEC block transfers to any Arizona public or tribal community college and to the three Arizona public universities.

General Education Requirements
For the following eight categories select the recommended AGEC course, or an AGEC course from the equivalent AGEC category.

Written Communications (6)
ENG101 English Composition III (3) □ □
ENG102 English Composition IV (3) □ □

Oral Communications (3)
Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

Arts & Humanities (6-9)

Arts (6)
Select 3 AGEC courses.

Humanities (3)
LIT291 Children’s Literature for Educators (3) □
(Also fulfills AGEC Intensive Writing Requirement)
Or select a Humanities AGEC course.

Social and Behavioral Sciences (6-9)
HIS101 United States History I (3) □ (Also fulfills AGEC Global Awareness Requirement)
ECE276 Child Development (3) □

Biological/Life Lab Sciences (4)
Select one AGEC course:
AGS101 World of Plants (4)
AGS104 Agricultural Environmental Science (4)
AGS106 Entomology (4)
AGS221 Soil Science (4)
AGS240 Plant Biology (4)
BIO100 Biology Concepts (4)
BIO156 Human Biology for Allied Health (4)
BIO160 Introduction to Human Anatomy/Physiology (4)
BIO181 General Biology I (4) □□
BIO182 General Biology II (4) □□
BIO201 Human Anatomy & Physiology I (4) □□
BIO202 Human Anatomy & Physiology II (4) □□
BIO205 Microbiology (4) □□
NTR141 Nutrition and Wellness (4) □ (Consult the CEG.)

Physical Lab Sciences (4)
Select one AGEC course:
AST101 Survey of Astronomy (4)
CHM130 Fundamental Chemistry (4)
CHM151 General Chemistry I (4)
CHM152 General Chemistry II (4)
CHM235 General Organic Chemistry I (4)
CHM236 General Organic Chemistry II (4)
ENV101 Environmental Science (4) □ (Consult the CEG.)
GLG101 Physical Geology (4)
GLG102 Historical Geology (4)
GLG110 Environmental Geology (4)
PHY100 Physical Universe (4)
PHY111 College Physics I (4)
PHY112 College Physics II (4)
PHY121 University Physics I: Mechanics (4)
PHY122 University Physics II: Electricity and Magnetism (4) □□
DEGREES AND CERTIFICATES

Mathematics (3-4 Credits)
MAT141  College Mathematics, Standard (4) or higher

Subject Options (0-6)
Select one of the three specialty tracks below or select a combination of the courses below to total the number of credits required to earn this A.A. Degree.

Upper Elementary majors select two of the following courses:
ENG205  Introduction to the Study of Language (3)  
EDU225  Relationships in the Classroom (3)
EDU228  Behavior Management (3)
OR
Early Childhood K-3 Teaching majors:
ECE176  Early Childhood Development and Theories (3)
ECE271  Creating Early Childhood Environments (3)
OR
Special Education majors:
EDU225  Relationships in the Classroom (3)
EDU228  Behavior Management (3)

Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.

1. Intensive Writing/Critical Inquiry (3)
LIT291  Children’s Literature for Educators (3)  
(Also fulfills AGEC Humanities Requirement)
2. Cultural Awareness (Ethnic/Race/Gender) (3)
EDU230  Cultural Values in Education (3)  
(Also fulfills Core Requirement)
3. Global/International/Historical Awareness (3)
HIS101  United States History I (3)  
(Also fulfills AGEC Social/Behavioral Sciences Requirement)

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy the three (3) Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (18)
EDU221  Introduction to Education (3)  
EDU222  Introduction to Special Education (3)  
EDU230  Cultural Values in Education (3)  
(Also fulfills AGEC Cultural Awareness Requirement)
EDU240  Provisional Structured English Immersion (SEI) (3)
MAT201  Math for Elementary Teachers I (3)
MAT202  Math for Elementary Teachers II (3)

Other Requirements (3)
Reading Competency: RDG094 College Reading  
Computer Competency (3):
AGB124  Microcomputers in Agriculture (3)
OR
CIS120  Survey of Computer Information Systems (3)  
(Also fulfills Core Requirement)

Additional transferable electives to achieve a minimum of 60-64 credit hours for the A.A.E.E. Degree.

Other A.A.E.E. Degree Requirements
For students who plan to transfer to a four-year baccalaureate degree program, some programs require demonstrated proficiency in a Second Language, i.e. up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor regarding your major’s second language requirement. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to complete a fourth semester of a Second Language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts & Humanities or the Social and Behavioral Sciences AGEC categories. Refer to the official published TAG, TAP, CAC2NAU or other articulation pathway documents for details and consult an advisor.

Students must earn a grade of “C” or better in each A.A.E.E. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

The A.A.E.E. Degree requires a minimum of 60-64 credits.
EMERGENCY MEDICAL SERVICES

BASIC EMT CERTIFICATE

Aravaipa & Superstition Mountain Campuses and Corporate Center

Total Credits: 8.5

Emergency Medical Technician Certificate of Completion for students who successfully complete EMS100 (CPR for Professionals) and EMS125 (Basic EMT).

Prerequisites
Ninth grade reading level, immunizations, CPR Certification-Healthcare Provider or Professional Rescuer

Core Requirements (8.5)
EMS100 CPR for Professionals (.5)
EMS125 Emergency Medical Technician (8)

Other Requirements
Students must receive a course completion card and be scheduled to take the National Registry of EMT exam.

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

CRITICAL CARE FOR PARAMEDICS CERTIFICATE

Superstition Mountain Campus

Total Credits: 6.25

Advanced level education and training in Emergency Medical Services with specific training in Critical Care for nurses, physicians, and paramedics. The EMS275 course prepares students to function as a member of the critical care transport team. Students gain a higher level of understanding of patient care in the pre-hospital setting. EMS275 combined with Advanced Cardiac Life Support (ACLS) and the course prerequisites prepares student to apply for a completion certificate.

Prerequisites
EMS272A Advanced Emergency Medical Technology/Paramedic, Module I (17.5)
EMS272B Advanced Emergency Medical Technology/Paramedic Module II (8.5)
EMS272C Advanced Emergency Medical Technology/Paramedic, Module III (8.5)
EMS272D Advanced Emergency Medical Technology/Paramedic Practicum I (6)
EMS272E Advanced Emergency Medical Technology/Paramedic Practicum II (6)
OR
Certified Paramedic or Registered Nurse, or Physician or equivalent
AND all of the following
1. EMS100 CPR for Professionals (.5) or current Cardio Pulmonary Resuscitation (CPR) certification per American Heart Association standards or equivalent
2. Current Advanced Cardiac Life Support (ACLS) certification per American Heart Association standards, BTLS or PHTLS, PALS or PEPP;
3. Current ARC Certification or AHA BLS Health Care Provider, or NSC Green Cross Professional Rescuer or Division Chair consent.

Core Requirements (6.25)
EMS275 Critical Care for Paramedics (CCEMTP) (5.25)
EMS240 Advanced Cardiac Life Support (ACLS) (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
DEGREES AND CERTIFICATES

PARAMEDICINE A.A.S.

Superstition Mountain Campus

Total Credits: 69.5

The Paramedicine A.A.S. Degree prepares students to work as paramedics with knowledge and skills required for emergency care, stabilization and immobilization of victims of illness and injury.

Prerequisites

- EMS100  CPR for Professionals (CPR at the Professional Rescuer level or Health Care Professional level or equivalent) (.5)
- EMS125  Emergency Medical Technician (certified in the State of Arizona) (8)
- FSC129  Hazardous Materials First Responder Operations (or equivalent) (3)

The above three courses and their respective credits are not calculated into the total number of credits required for the A.A.S. Degree.

Recommended Proficiencies

If students are enrolled at CAC for the EMS272A, B, C, D and E courses, students must advance through each section (A, B, C, D and E) successfully with a grade of “C” or higher. Also, students must meet eligibility requirements established by Arizona Department of Health Services, Bureau of EMS.

General Education Requirements (19-23)

Written Communications (3)
- ENG101  English Composition III (3) OR
- ENG121  Applied Technical Writing (3) (Recommended)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
- PSY101  Introduction to Psychology (3)
- SOC100  Introduction to Sociology (3) (Recommended)
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
- BIO160  Introduction to Human Anatomy and Physiology (4) (Recommended)
Or select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
- BUS101  Business Mathematics (3) OR
- MAT101  Essential Mathematics (4) or higher

Core Requirements (46.5)
- EMS272A  Advanced Emergency Medical Technology/Paramedic, Module I (17.5)
- EMS272B  Advanced Emergency Medical Technology/Paramedic, Module II (8.5)
- EMS272C  Advanced Emergency Medical Technology/Paramedic, Module III (8.5)
- EMS272D  Advanced Emergency Medical Technology/Paramedic Practicum I (6)
- EMS272E  Advanced Emergency Medical Technology/Paramedic Practicum II (6)

Other Requirements (4)
- PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
- AGB124  Microcomputers in Agriculture
- CIS110  Fundamentals of Computer Literacy or higher
OR
Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 69.5 credits.
FIRE SERVICES

FIREFIGHTER OPERATIONS CERTIFICATE

Total Credits: 19

The Firefighter Operations Certificate of Completion is designed to prepare future firefighters for a career in the fire service. The program curriculum and course of instruction will provide the student with the knowledge and skills to effectively perform the essential functions of an entry level firefighter.

Recommendations
1. If pursuing the bachelor’s degree program, contact department advisor
2. Some courses require
   a. State of Arizona Fire Marshal Certification(s)
   b. State of Arizona Department of Health Services Certification(s)
   c. American Heart, Red Cross, or other certifying agency course completion in CPR
   d. International Fire Service Accreditation Council (IFSAC) Certification

Prerequisites
EMS125     Emergency Medical Technician (8)
FSC129      Hazardous Materials First Responder Operations (3)
FSC134      Fitness and Conditioning for Firefighters (3)

Core Requirements (19)
FSC106     Introduction to Emergency Services (3)
FSC140     Firefighter I & II (13)
FSC180     Wildland Fire, Module I (3)

Other Requirements
Students must earn a grade of “C” or better in all courses within the Certificate. Cumulative grade point average of at least a 2.0 on a 4.0 scale. Minimum of one-third of required Certificate credits completed at CAC.

Upon successful completion of the fire academy (FSC 140), students sit for the State proctored examinations; successful students will be awarded State of Arizona certification through the Arizona Center for Fire Service Excellence Fire Service Accreditation.

FIRE SCIENCE TECHNOLOGY A.A.S.

Signal Peak Campus

Total Credits: 65

The Fire Science Technology A.A.S. Degree offers advanced training for professional firefighters, including practical firefighting, hazardous materials, related operations, history and theory and fire service management.

Recommendations
1. Students should use the Major Map when they consult their Academic Advisor.
2. Some courses require:
   a. State of Arizona, (AZCFSE) Certification(s)
   b. State of Arizona Fire Marshal Certification(s)
   c. State of Arizona Department of Health Services Certification(s)
   d. American Heart, Red Cross, or other certifying agency course completion in CPR
   e. IFSAC (International Fire Service Accreditation Council) certification

Prerequisites
EMS125     Emergency Medical Technician (8) or equivalent, IEMT or Paramedic

General Education Requirements (19-23)

Written Communications (3)
ENG101     English Composition III (3) ⚫
ENG121     Applied Technical Writing (3) (Recommended)

Oral Communications (3)
COM206     Public Speaking (3) (Recommended) Or select a COM or AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above or an AGEC course.

Social and Behavioral Sciences (3)
SOC100     Introduction to Sociology (3) (Recommended) Or select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

ICON LEGEND

AGEC: ☐ Dual Enrollment: ☐
Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ☐ SUN Course: ☐
DEGREES AND CERTIFICATES

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (37)
FSC106 Introduction to Emergency Services (3)
FSC108 Fundamentals of Fire Prevention (3)
FSC117 Fire Apparatus and Equipment (3)
FSC119 Fire Service Ethics (3)
FSC129 Hazardous Materials First Responder Operations (3)
FSC134 Fitness Conditioning for Firefighters (3)
FSC140 Firefighter I & II (13)
FSC180 Wildland Fire, Module I (3)
FSC208 Firefighter Safety/Building Construction (3)

Electives (6)
Choose FSC or EMS related courses, except EMS100 and EMS125:
FSC118 Fire Hydraulics (3)
FSC202 Supervisory Training for Firefighters (3)
FSC204 Firefighter Tactics and Strategy (3)
FSC205 Command Strategies for Major Emergencies (4)
FSC209 Fire Cause and Determination (3)
FSC250 Ladder Company Officer (3)
FSC252 Engine Company Officer (3)

Other Requirements (4)
PAC or DAN (1) (Fulfilled by FSC134) Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher

OR
Transferable Computer Competency course (Consult the CEG.)

Students must earn a minimum grade of "C" or better in all course work, including the prerequisites.

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

*Note: Requirements for Basic EMT (EMS125), IEMT (EMS208) and Paramedic (EMS272) are regulated by the Arizona Department of Health Services and are not negotiable.

This A.A.S. Degree requires 65 credits.

WILDLAND FIREFIGHTER I CERTIFICATE

Signal Peak Campus

Total Credits: 13

Advanced training in Wildfire Firefighting per the requirements established by the National Wildfire Coordinating Group (NWCG). This certification is designed for the professional firefighter currently employed with an agency that responds to Wildland fire incidents. This certificate of completion course of instruction will provide the student the (NWCG) educational requirements that lead up to the level of Single Resource Boss.

In order to qualify and complete the certificate, students must acquire a minimum of 120 hours total, half of those hours (60 hours) must be hotline.

Prerequisites:
FSC129 Hazardous Materials First Responder Operations (S-110 and I-100) (3) plus
FSC180 Wildland Fire, Module I (S-130/190, S-133, S-134, L-180) (3)

Complete the above OR Program Director consent

Core Requirements (13)
FSC181 NWCG Advanced Firefighter Training (S-131) (.5)
FSC182 NWCG Portable Pumps and Water Use (S-211) (1)
FSC186 NWCG Crew Boss (Single Resource) (S-230) (1.5)
FSC187 NWCG Engine Boss (Single Resource) (S-231) (.5)
FSC189 NWCG Interagency Incident Business Management (S-260) (2)
FSC190 NWCG Basic Air Operations (S-270) (1.5)
FSC191 NWCG Intermediate Wildland Fire Behavior (S-290) (2)
FSC192 Initial Attack Incident Commander (S-200) (1)
FSC193 Followership to Leadership (L-280) (1)
FSC203 Fire Operations in the Wildland/Urban Interface (S-215) (2)

Other Requirements
Students must earn a grade of "C" or better in all courses within the Certificate, including the prerequisites.

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
GEOLOGY AND PLANETARY SCIENCE

GEOLOGY AND PLANETARY SCIENCE A.S.

Signal Peak Campus

Total Credits: 60-64

The Associate of Science in Geology and Planetary Science Degree prepares students to transfer to a university to earn a baccalaureate degree in Geology or a related field.

General Education Requirements AGEC-S (35-37)

Written Communications (6)
ENG101 English Composition III (3)  
ENG102 English Composition IV (3)  

Arts and Humanities (6)
Select one Art (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6)
Select AGEC courses from two different disciplines.

Physical and Biological Sciences (8)
AST101 Astronomy (4)  
GLG101 Physical Geology (4)  

Mathematics (3-4)
MAT221 Analytical Geometry and Calculus I (4) or higher

Subject Options (6-8)
ENV101 Environmental Science (4)  
GLG102 Historical Geology (4)  
GLG110 Environmental Geology (4)  

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy the three (3) Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (20)
CHM151 General Chemistry I (4)  
CHM152 General Chemistry II (4)  
MAT231 Calculus with Analytical Geometry II (4)  
PHY121 University Physics I: Mechanics (4)  
PHY122 University Physics II: Electricity and Magnetism (4)  

Transferable Electives (0-8)
Based on your major, consult the Transfer Guide at www.aztransfer.com/TransferGuides and select mathematics courses above the second course in the calculus sequence and/or Science courses from: Astronomy, Biology, Chemistry, Engineering, Environmental Science, Geology or Physics.

Select elective credits that transfer to the chosen university to meet 60-64 credit A.S. Degree requirement.

Other Requirements (3)
Reading Competency: RDG094 College Reading  

Computer Competency (3):
AGB124 Microcomputers in Agriculture  
OR  
CIS120 Survey of Computer Information Systems (3)

Students must earn a grade of “C” or better in each A.S. degree required course. Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

This A.S. Degree requires 60-64 credits.
HEALTH CAREERS

CLINICAL LABORATORY ASSISTANT CERTIFICATE

Signal Peak Campus

Total Credits: 27

The Clinical Laboratory Assistant Certificate prepares entry-level clinical laboratory assistants to perform various laboratory procedures including phlebotomy, specimen processing and quality control procedures under the supervision of physicians, laboratory scientists or technologists in a clinical laboratory setting.

Prerequisites:
High School Diploma or GED; MAT082, RDG094

Pre-Program Requirements:
Pass the required HESI tests with a score of 70 or above on each test AND apply for admission to the Certificate program with the HCC Division Chair before enrollment in the program Specialty courses.

Co-requisite:
Certified Phlebotomist (Recommended)
OR complete
HKS155 Introduction to Phlebotomy (3) plus
HKS255 Phlebotomy Practicum (3)

Pre-Program Requirements (8)
HCC111 Healthcare Law and Ethics (2)
HCC112 Interpersonal Skills (2)
HCC113 Math andDosage Calculations for Health Occupations (1)
HCC116 Medical Terminology Accelerated (3)

Specialty Requirements (19)
BIO160 Introduction to Human Anatomy and Physiology (4) □
HPM169 Clinical Laboratory Assistant Basics I (4)
HPM170 Clinical Laboratory Assistant Basics II (4)
HPM171 Administrative Medical Procedures (4)
HPM175P Clinical Laboratory Assistant Practicum (3)

Other Requirements
Students must earn a grade of “C” or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

All program courses must be successfully completed before enrolling in HPM175P AND mandatory requirements must be met.

CPR Certification must be current for at least 6 months at the start of Practicum.
CODING AND REIMBURSEMENT CERTIFICATE

District-Wide

Total Credits: 34

The Coding and Reimbursement Certificate prepares entry-level medical coders and reimbursement specialists. The competencies covered in this program include revised coding standards, health records, data content, accreditation standards, reimbursement methodologies, privacy, confidentiality, legal and ethical issues.

The Certificate prepares students to sit for the Certified Coding Associate (CCA) credentialing exam from AHIMA at the national level as well as the AMBA Certified Medical Reimbursement Specialist (CMRS).

Prerequisite:
High School Diploma or GED; MAT082, RDG094 \(R\)
CIS120 Survey of Computer Information Systems (3) \(R\)

Core Requirements (5)
HCC111 Healthcare Law and Ethics (2)
HCC116 Medical Terminology Accelerated (3)

Specialty Requirements (29)
BIO160 Introduction to Human Anatomy and Physiology (4) \(R\)
HIM115 Health Information Technology I (3)
HIM131 Introduction to Insurance and Insurance Billing I (3)
HIM138 ICD Coding (3)
HIM158 CPT Coding (3)
HIM161 Introduction to Insurance and Insurance Billing II (3)
HPM162 Basic Pharmacology for Health Occupations (3)
HPM173 Pathophysiology (3)
HIM175I Practicum Coding and Reimbursement (4)

Optional Added Elective
HIM208 Advanced Coding (2)

Other Requirements
Students must earn a grade of “C” or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
COMMUNITY PUBLIC HEALTH A.S.

Signal Peak Campus

Total Credits: 61-64

The Community Public Health Associate of Science degree establishes a foundational understanding of health and disease factors based on community public health principles. The degree prepares graduates for professional positions in community public health focused on improving the quality of life of individuals and communities.

Prerequisites:
High School Diploma or GED
MAT121 Intermediate Algebra, Standard
RDG094 College Reading
ENG101 English Composition III

General Education Requirements AGEC-S (35-37)

Written Communications (6)
ENG101 English Composition III (3)
ENG102 English Composition IV (3)

Arts and Humanities (6)
Select one Art and one Humanities AGEC course:
PHI105 Introduction to Ethics (3)
(Recommended, also fulfills Core Requirement and Intensive Writing
Intensive Writing requirement

Social and Behavioral Sciences (6)
Select AGEC courses from two different disciplines.
Recommended:
PSY101 Introduction to Psychology (3)
SOC100 Introduction to Sociology (3)

Physical and Biological Sciences (8)
BIO181 General Biology I (4)
BIO182 General Biology II (4)

Mathematics (3-4)
MAT221 Analytical Geometry and Calculus I (4)
or higher

Subject Options (6-8)
CHM151 General Chemistry I (4)
Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides and select mathematics courses above the first course in the calculus sequence and/or Science courses from Biology, Chemistry, Environmental Science, Nutrition and Dietetics or Physics. Select CHM151 and higher Chemistry courses.

Special Requirements (0-9 Credits)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
   (Fulfilled by PHI105 Introduction to Ethics)
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
   (Fulfilled by COM263 Intercultural Communications)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Science, or Transfer Electives, may also be used to satisfy the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (28)
BIO201 Human Anatomy and Physiology I (4)
BIO202 Human Anatomy and Physiology II (4)
COM263 Intercultural Communications (3)
CPH100 Introduction to Public Health (3)
CPH178 Personal Health and Community Wellness (3)
CPH296 Community Public Health Internship (2)
MAT162 Applied Statistics (3)
NTR200 Human Nutrition (3)
PHI105 Introduction to Ethics (3)
(Also fulfills Intensive Writing requirement)

Other Requirements (3)
Reading Competency: RDG094

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3) OR
CIS120 Survey of Computer Information Systems (3)
(Recommended)

Students must earn a grade of "C" or better in each Associate of Science degree required course.
Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.
For transfer into the School of Public Health at the University of Arizona, a grade of "B" or better is required for ENG102. This A.S. Degree requires 61-64 credits.
HEALTH INFORMATION TECHNOLOGY A.A.S.

District-Wide

Total Credits: 71

The Health Information Technology (HIT) A.A.S. Degree program prepares students with the knowledge and technical skills necessary for managing and improving the quality of information within the healthcare delivery system. This Degree’s focal points are the American Health Information Management Association (AHIMA) entry-level competencies.

The Health Information Technology Degree is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM); Graduates from this program are eligible to sit for the Registered Health Information Technician (RHIT) credentialing exam.

Prerequisites
High School Diploma or GED; MAT082, RDG094

Pre-Program Requirements
Students must apply to the Health Information Director for admission to the HIT Degree after earning a score of 70 or above on the HESI test. Accepted HIT students may then request permission from the Director to enroll in the Degree Specialty courses.

General Education Requirements (23)

Written Communications (3)
ENG101  English Composition III (3) OR
ENG121  Applied Technical Writing (3)

Oral Communications (3)
COM100  Fundamentals of Human Communication (3)
COM206  Public Speaking (3)
Or select a COM course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (8)
BIO201  Human Anatomy - Physiology I (4) plus
BIO202  Human Anatomy - Physiology II (4)

Mathematics (3-4)
Select a college-level Mathematics course
BUS101  Business Mathematics (3) OR
MAT101  Essential Mathematics (4) or higher

Core Requirements (44)
CBA113A  MS Excel Basic (1)
CBA114A  MS Access Basic (1)
HCC111  Healthcare Law and Ethics (2)
HCC116  Medical Terminology Accelerated (3)
HIM115  Health Information Technology I (3)
HIM117  Health Information Technology II (3)
HIM121  Legal Aspects of Health Information (2)
HIM138  ICD Coding (3)
HIM158  CPT Coding (3)
HIM160  Health Information Technology Seminar (2)
HIM 200  Healthcare Reimbursement (2)
HIM 205  Healthcare Statistics and Research (2)
HIM 208  Advanced Coding (2)
HIM 210  Supervision and Quality (2)
HIM 215  Health Information Systems (3)
HIM 275Q  Health Information Technology Practicum (4)
HPM162  Basic Pharmacology for Health Occupations (3)
HPM173  Pathophysiology (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120  Survey of Computer Information Systems (3)

Students must earn a grade of “C” or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Health Information Technology A.A.S. Degree requires 71 credits.
### MASSAGE THERAPY A.A.S.

**Signal Peak and Superstition Mountain Campuses**

**Total Credits: 64**

The 700 hour Massage Therapy A.A.S. Degree prepares individuals for entry-level positions in medical settings performing massage therapy using a thorough knowledge of medical terminology, anatomy and physiology, pathophysiology, proper body mechanics and legal and ethical issues. The Degree also includes instruction in relaxation massage, therapeutic massage, massage therapy for special populations and spa treatments and hydrotherapy.

**Prerequisites**

High School Diploma or GED; MAT082, RDG094

**Pre-Program Requirements:**

Students must apply for admission to the degree program with the Massage Therapy Director before enrolling in the degree specially courses.

**General Education Requirements (19-23)**

**Written Communications (3)**

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<th>Title</th>
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</thead>
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<td>ENG101</td>
<td>English Composition III (3)</td>
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<tr>
<td>OR</td>
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<tr>
<td>ENG121</td>
<td>Applied Technical Writing (3)</td>
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**Oral Communications (3)**

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<tr>
<td>COM100</td>
<td>Fundamentals of Human Communication (3)</td>
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<td>OR</td>
<td></td>
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<tr>
<td>COM101</td>
<td>Interpersonal Communication (3)</td>
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<tr>
<td>COM263</td>
<td>Intercultural Communication (3)</td>
</tr>
</tbody>
</table>

Or select a COM course.

**Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

**Social and Behavioral Sciences (3)**

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<tr>
<th>Course</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>PSY101</td>
<td>Introduction to Psychology (3)</td>
</tr>
</tbody>
</table>

Or select Social/Behavioral Science course, or AGEC course.

**Physical and Biological Sciences (4)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO160</td>
<td>Introduction to Human Anatomy and Physiology (4)</td>
</tr>
</tbody>
</table>

**Core Requirements (8)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCC100</td>
<td>Introduction to Health Care (3)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HCC111</td>
<td>Health Care Law and Ethics (2)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HCC116</td>
<td>Medical Terminology Accelerated (3)</td>
</tr>
</tbody>
</table>

**Specialty Requirements (32)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO160</td>
<td>Introduction to Human Anatomy and Physiology (4)</td>
</tr>
<tr>
<td>OR</td>
<td>(Also fulfills Biological Science requirement)</td>
</tr>
<tr>
<td>HPM136</td>
<td>Business Skills for Massage Therapy (3)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HPM150</td>
<td>Chiropractic Assistant Training (2)</td>
</tr>
<tr>
<td>OR</td>
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<tr>
<td>HPM151</td>
<td>Study of Acupuncture for Health Care Professionals (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HPM152</td>
<td>Study of Physiotherapy for Health Care Professionals (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM160</td>
<td>Applied Anatomy for Massage Therapy (3)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM173</td>
<td>Pathophysiology (3)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM175L</td>
<td>Practicum – Massage Therapy, Relaxation Massage (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM175M</td>
<td>Practicum – Massage Therapy, Therapeutic Massage (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM175N</td>
<td>Practicum – Massage Therapy for Special Populations (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM175O</td>
<td>Practicum – Massage Therapy, Spa Treatments and Hydrotherapy (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HPM180</td>
<td>Therapeutic Massage I (3)</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HPM181</td>
<td>Therapeutic Massage II (3)</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HPM280</td>
<td>Therapeutic Massage III (3)</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HPM281</td>
<td>Therapeutic Massage IV (3)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HPM282</td>
<td>Therapeutic Massage V (3)</td>
</tr>
</tbody>
</table>

**Elective (1)**

Any 100 or higher college-level course.

**Other Requirements (4)**

Prior to enrollment in any of the Practicum courses, specific mandatory requirements must be met. CPR certification must be current for at least 6 months at the start of Practicum.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC</td>
<td>or DAN Course (1)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>RDG094</td>
<td>Reading Competency: RDG094 College Reading</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
</tbody>
</table>

**Computer Competency (3):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS120</td>
<td>Survey of Computer Information Systems (3)</td>
</tr>
</tbody>
</table>

Students must earn a grade of “C” or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.
MASSAGE THERAPY CERTIFICATE

Signal Peak and Superstition Mountain Campuses

Total Credits: 38

Massage Therapy includes 700 hours of core curriculum which prepares individuals for entry-level positions performing massage therapy in a variety of settings. This program includes relaxation massage, therapeutic massage, massage therapy for special populations, and spa treatments and hydrotherapy. Topics also include physiotherapy, body mechanics, acupuncture, anatomy, pathophysiology, business skills, medical law and ethics.

Prerequisites
High School Diploma or GED; RDG094 R

Pre-Program Requirements:
Apply for admission to the certificate program with the Massage Therapy Program Director before enrolling in the specialty requirements.

Core Requirements (38)
BIO160 Introduction to Human Anatomy and Physiology (4)
HCC111 Health Care Law and Ethics (2)
HPM136 Business Skills for Massage Therapy (3)
HPM150 Chiropractic Assistant Training (2)
HPM151 Study of Acupuncture for Chiropractic Assistants (1)
HPM152 Study of Physiotherapy for Chiropractic Assistants (1)
HPM160 Applied Anatomy for Massage Therapy (3)
HPM173 Pathophysiology (3)
HPM180 Therapeutic Massage I (3)
HPM181 Therapeutic Massage II (3)
HPM280 Therapeutic Massage III (3)
HPM281 Therapeutic Massage IV (3)
HPM282 Therapeutic Massage V (3)
HPM175L Practicum – Massage Therapy, Relaxation (Massage) (1)
HPM175M Practicum – Massage Therapy, Therapeutic Massage (1)
HPM175N Practicum - Massage for Special Populations (1)
HPM175O Practicum – Massage Therapy, Spa and Hydrotherapy Treatment (1)

Other Requirements
Prior to enrollment in any practicum courses, mandatory requirements must be met.

CPR certification must be current for at least six months at the start of the Practicum.

Students must earn a grade of “C” or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
MEDICAL ASSISTANT A.A.S.

Signal Peak and Superstition Mountain Campuses

Total Credits: 66

Preparation of entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains as established by the American Association of Medical Assistants (AAMA). This Degree includes general education requirements and prepares individuals to perform administrative and clinical procedures in ambulatory settings, including physician’s offices, clinics and group practices.

Prerequisites
High School Diploma or GED; MAT082, RDG094

Pre-Program Requirements:
After successful completion of all the General Education requirements, CIS120, physical education activity, CBA112A, CBA112B, OAS101, OAS103, HCC110A and HCC110B, students must pass the required HESI tests with a score of 70 or above in each test, and apply for admission to the program with the HCC Division Chair before enrollment in the Degree program.

General Education Requirements (19-23)

Written Communications (3)
ENGl01 English Composition III (3) OR
ENGL121 Applied Technical Writing (3)

Oral Communications (3)
COM100 Fundamentals of Human Communication (3) OR
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select the Recommended course or a Social and Behavioral Science course, or an AGEC course.
PSY101 Introduction to Psychology (3) (Recommended)

Physical and Biological Sciences (4)
BIO160 Introduction to Human Anatomy & Physiology (4)

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR MAT101 Essential Mathematics (4) or higher

Core Requirements (14)
HCC100 Introduction to Health Care (3)
HCC110A Medical Terminology A (3)
HCC110B Medical Terminology B (3)
HCC111 Health Care Law and Ethics (2)
HCC112 Interpersonal Skills (2)
HCC113 Math and Dosage Calculations for Health Occupations (1)

Specialty Requirements (29)
HIM131 Introduction to Insurance and Insurance Billing I (3)
HPM140 Medical Assisting Skills I (4)
HPM141 Medical Assisting Skills II (4)
HPM162 Basic Pharmacology for Health Occupations (3)
HPM171 Administrative Medical Procedures (4)
HPM173 Pathophysiology (3)
HPM175C Medical Assistant Degree Practicum (4)
(Prior to enrollment in HPM175C, mandatory requirements must be met.)
CBA112A MS Word - Basic (1)
CBA112B MS Word - Intermediate (1)
OAS101 Keyboard - Alphabetic (1)
OAS103 Keyboard - Speed/Accuracy (1)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher OR Transferable Computer Competency course (Consult the CEG.)

Healthcare Provider CPR and First Aid certification is required before enrolling in HPM175C and must be current for at least 6 months after the start of HPM175C.

Students must earn a grade of “C” or better in all required courses for this AAS degree.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least 20 of the certificate credits from CAC.
MEDICAL ASSISTANT CERTIFICATE

Signal Peak and Superstition Mountain Campuses

Total Credits: 37

This Certificate prepares competent entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to perform administrative and clinical procedures in ambulatory settings, including physicians' offices, clinics, and group practices. These domains have been established by the American Association for Medical Assistants (AAMA).

Prerequisites
High School Diploma or GED; MAT082, RDG094

Pre-Program Requirements:
Pass the required HESI tests with a score of 70 or above in each test before enrollment in the program AND apply for admission to the program with the HCC Division Chair before enrollment in the program.

Core Requirements (12)
- BIO160 Introduction to Human Anatomy and Physiology (4)
- HCC111 Health Care Law and Ethics (2)
- HCC112 Interpersonal Skills (2)
- HCC113 Math and Dosage Calculations for Health Occupations (1)
- HCC116 Medical Terminology Accelerated (3)

Specialty Requirements (25)
- HIM131 Introduction to Insurance and Insurance Billing I (3)
- HPM140 Medical Assisting Skills I (4)
- HPM141 Medical Assisting Skills II (4)
- HPM162 Basic Pharmacology for Health Occupations (3)
- HPM171 Administrative Medical Procedures (4)
- HPM173 Pathophysiology (3)
- HPM175E Medical Assistant Certificate Practicum (4)

Other Requirements
Students must earn a grade of “C” or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
PHARMACY TECHNICIAN
CERTIFICATE

Signal Peak Campus

Total Credits: 36

The Pharmacy Technician Certificate prepares entry-level Pharmacy Technicians by emphasizing medical and pharmaceutical terminology, calculations, record keeping, pharmaceutical techniques, medical law and ethics.

Prerequisites
High School Diploma or GED MAT082; RDG094

Pre-Program Requirements:
Pass the required HESI tests with a score of 70 or above on each test before enrollment in the program AND Apply for admission to the program with the HCC Division Chair before enrollment in the program.

Core Requirements (21)
- BIO160 Introduction to Human Anatomy and Physiology (4)
- CIS120 Survey of Computer Information Systems (3)
- HCC100 Introduction to Health Care (3)
- HCC111 Health Care Law and Ethics (2)
- HCC112 Interpersonal Skills (2)
- HCC113 Math and Dosage Calculations (1)
- HCC116 Medical Terminology Accelerated (3)
- MAT086 Pre-Algebra (3)

Specialty Requirements (15)
- HPM105 Pharmacy Techniques (3)
- HPM162 Basic Pharmacology for Health Occupations (3)
- HPM164 Pharmacy Certification Review (2)
- HPM173 Pathophysiology (3)
- HPM175H Practicum - Pharmacy Technician (4)

Other Requirements
Students must earn a grade of “C” or better in all required courses.
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

LAW ENFORCEMENT and ADMINISTRATION OF JUSTICE STUDIES A.A. AND A.A.S.
See Administration of Justice.

MANUFACTURING

FIELD PROGRAMMABLE GATE ARRAY (FPGA) CERTIFICATE

Signal Peak Campus

Total Credits: 18

The Field Programmable Gate Array (FPGA) Certificate provides the basis for an entry-level career or the professional training required of a working engineer. FPGA, embedded fundamentals and MicroBlaze processor applications are emphasized.

Recommended Proficiencies
Computer programming and basic electronics coursework prepare students for success in this Certificate program.

Core Requirements (18)
- ELT128 FPGA Fundamentals (3)
- ELT223 Microcontroller Fundamentals (3)
- ELT260 Advanced FPGA Concepts (3)
- ELT265 MicroBlaze1 (3)
- ELT270 MicroBlaze2 (3)
- ELT275 Embedded Fundamentals (3)

Other Requirements
Students must earn a grade of “C” or better in all required courses.
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
LABVIEW PROGRAMMING
CERTIFICATE

Signal Peak Campus

Total Credits: 16

The LabVIEW Certificate provides the basis for an entry-level career in the LabVIEW programming environment using National Instruments hardware.

Recommended Proficiencies
Computer programming and basic electronics coursework prepare students for success in this Certificate program.

Core Requirements (16)
MET261 LabVIEW 1 Programming (3)
MET262 LabVIEW 2 Programming (3)
MET263 LabVIEW 3 Programming (3)
MET264 LabVIEW FPGA Applications (3)
MET265 LabVIEW Overview (4)

Other Requirements
Reading Competency: RDG094 College Reading

Students must earn a grade of “C” or better in all required courses.
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.
Students must earn at least one-third of the certificate credits from CAC.

MANUFACTURING ELECTRONICS
CERTIFICATE

Signal Peak Campus

Total Credits: 32

The Certificate provides the basis for an entry-level career in the electronics and related fields of both manufacturing and service-maintenance as technicians and provides upgrading of skills for persons presently employed.

Recommended Proficiencies
Fundamental computer usage skills.

Core Requirements (32)
CHM130 Fundamental Chemistry (4)
ELC123 Direct Current Circuit Analysis (3)
ELC124 Alternating Current Circuit Analysis (3)
ELC128 Intro to Programmable Logic Controllers (3)
ELC220 Active Circuits (3)
ELC223 Integrated Circuit Devices (3)
ELT128 FPGA Fundamentals (3)
ENG121 Applied Technical Writing (3)
MAT121 Intermediate Algebra, Standard (4)
MET132 Fluid Power (Hydraulics-Pneumatics) (3)
MET221 Electro-Mechanical Technology (3)

Other Requirements
Students must earn a grade of “C” or better in all required courses.
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
MANUFACTURING ENGINEERING
A.A.S.

Signal Peak Campus

Total Credits: 67

The Manufacturing Electronics A.A.S. Degree program provides opportunities for students to gain knowledge, skills and understanding of the concepts and applications of electronics in manufacturing. This Degree has been developed in cooperation with the semiconductor manufacturing industries. Students are prepared for employment in the electronics, service maintenance, and related manufacturing fields as entry level technicians. For those presently employed in the industry it provides an opportunity to upgrade skills.

Recommended Proficiencies
Fundamental computer usage skills.

General Education Requirements (24)

Select AGEC approved courses if A.A.S. to B.A.S. Degree desired.

Written Communications (3)
ENG101 English Composition III (3) OR
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
ART207 Art History I (3) OR
MHL100 Music Appreciation (3)
MHL207 Survey of Jazz/Pop Music (3)
THE100 Theater Appreciation (3) OR
Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
ECN201 Principles of Macroeconomics (3)
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (8)
CHM130 Fundamental Chemistry (4)
PHY100 Physical Universe (4) or higher
Or select a Biological or Physical Science course, or an AGEC Lab course.

Mathematics (3-4)
Select a college-level Mathematics course
MAT121 Intermediate Algebra, Standard (4) or higher

Core Requirements (33)
ELC122 Direct Current and Alternating Current Circuit Analysis (3)
ELC220 Active Circuits (3)
ELC221 Control Devices (3)
ELT128 FPGA Fundamentals (3)
ELT223 Microcontroller Fundamentals (3)
MET125 Principles of Fabrication (3)
MET132 Fluid Power (Hydraulics-Pneumatics) (3)
MET150 VB.NET for Engineering (3)
MET221 Electro-Mechanical Technology (3)
MET226 Electro-Mechanical Systems (3)
MET232 Solids Modeling - Solidworks (3)

Specialization Options (6)
Select one of the following specialties.

Specialization Requirements for Semiconductor Industry:
ELC200 Radio Frequency RF/High Vacuum HV (3)
MET230 Semiconductor I-Seminar (3)

Specialization Requirements for all Automation Industries:
ELC128 Introduction to Programmable Logic Controllers (3)
ELC228 Advanced Programmable Logic Controllers (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading OR

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher OR
Transferable Computer Competency course (Consult the CEG.)

Students must earn a grade of “C” or better in all required courses for this AAS degree.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.
NANOFABRICATION TECHNOLOGY
A.A.S.

Signal Peak Campus

Total Credits: 70

The Nanofabrication Technology Degree program offers students the opportunity to enter the exciting world of Nanotechnology. Nanofabrication and nanotechnology is engineering at the atomic length scale, a size range which until recently was only available to nature. Being able to engineer such small structures opens the door to a multitude of new opportunities in the fields of chemical technology, bio-technology, biopharmaceutical labs, micro-technology labs, material science labs and electronic technology.

Recommended Proficiencies
Strong math and science background.

Prerequisites
CHM130       Fundamental Chemistry
MAT092       Introductory Algebra
RDG094       College Reading

General Education Requirements (36)

Written Communications (3)
ENG100       English Composition III (3) or higher
ENG121       Applied Technical Writing (3)

Oral Communications (3)
COM100       Fundamentals of Human Communication (3) or higher

Arts and Humanities (3)
Select as Art, Humanities, Literature, Music, Philosophy or Theater course numbered 100 or above or an AGEC course.

Social and Behavioral Sciences (3)
PSY101       Introduction to Psychology (3)
Or select a Social and Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (16)
CHM151       General Chemistry I (4)
CHM152       General Chemistry II (4)
PHY111       College Physics I (4)
PHY112       College Physics II (4)

Mathematics (8)
Select a college-level Mathematics course
MAT151       College Algebra (4)
MAT182       Trigonometry with Algebra Review (4)

Core Requirements (30)
ELC122       Direct Current and Alternating Current Circuit Analysis (3)
ELC200       Radio Frequency RF/High Vacuum HV (3)
ELC220       Active Circuits (3)
MET230       Semiconductor I-Seminar (3)
MET290       Material, Safety and Equipment Overview for Nanotechnology (3)
MET291       Basic Nanotechnology Processes (3)
MET292       Materials in Nanotechnology (3)
MET293       Patterning for Nanotechnology (3)
MET294       Materials Modification in Nanotechnology (3)
MET295       Characterization, Testing of Nanotechnology Structures and Materials (3)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124       Microcomputers in Agriculture
CIS110       Fundamentals of Computer Literacy or higher
OR
Transferable Computer Competency course (Consult the CEG.)

Students must earn a grade of “C” or better in all required courses for this AAS degree.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 70 credits.
NUTRITION AND DIETETICS

COMMUNITY NUTRITION WORKER CERTIFICATE

District-Wide

Total Credits: 16

The Community Nutrition Worker Certificate provides the opportunity for individuals to develop skills and competencies in the areas of food, nutrition and health necessary for careers in public health nutrition.

Recommended Proficiencies
High school diploma or GED

Core Requirements (16)
- NTR123 Nutrition throughout the Life Cycle (3)
- NTR127 Breastfeeding and Human Lactation (1)
- NTR134 Healthy Weight for Kids (1)
- NTR191 Nutrition Counseling Skill Development (3)
- NTR232A Food and Culture (1)

Select one of the following options (4):
- NTR141 Nutrition and Wellness (4)
- OR
- NTR104 Nutrition (3) plus
- NTR104L Personal Wellness Lab (1)

Select at least three credits from the following options (3):
- NTR130 Diabetes Overview (1)
- NTR131 Introduction to Diabetes (3)
- NTR136 Management of Gestational Diabetes (1)
- NTR137 Carbohydrate Counting (1)
- NTR201 Nutrition Literacy (1)
- NTR247 Weight Management Theory (3)
- NTR272 Certified Breastfeeding Counselor (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

DIABETES CARE AND EDUCATION CERTIFICATE

District-Wide

Total Credits: 16

The Diabetes Care and Education Certificate provides current training and information to paraprofessionals working with people at risk for developing diabetes or developing complications from diabetes.

Recommended Proficiencies
High school diploma or GED

Prerequisites
RDG094 College Reading R

Core Requirements (10)
- NTR131 Introduction to Diabetes (3)
- NTR141 Nutrition and Wellness (4)
- OR
- NTR104 Nutrition (3) plus
- NTR104L Personal Wellness Lab (1)
- NTR191 Nutrition Counseling Skill Development (3)

Electives (6)
Select from the following options:
- NTR134 Healthy Weight for Kids (1)
- NTR135 Healthy Weight for Adults (1)
- NTR136 Management of Gestational Diabetes (1)
- NTR137 Carbohydrate Counting (1)
- NTR201 Nutrition Literacy (1)
- NTR232A Food and Culture (1)
- NTR247 Weight Management Theory (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND
AGEC: Dual Enrollment: IW
Intensive Writing: Programs of Study/Tech Prep: POS
Reading Required: RDG094: SUN Course:
DEGREES AND CERTIFICATES

DIETARY MANAGER TRAINING PROGRAM CERTIFICATE

District-Wide

Total Credits: 16

The Dietary Manager Training Certificate prepares food service workers and/or supervisors for management in health care facilities and various other food service establishments. This training program has been approved by the Association of Nutrition and Foodservice Professionals (ANFP). Upon successful completion, graduates are eligible to take the National Certification exam for the Certified Dietary Manager and the Certified Food Protection Professional credentials (CDM, CFPP).

Recommended Proficiencies
High school diploma or GED

Core Requirements (16)
NTR156 Foundations of Dietary Manager Internships (2)
NTR196 Dietary Manager Internship (3)
NTR223 Food Service Management (3)
NTR240 Clinical Nutrition (3)

CUL105 Food Safety Foundations (1)
NTR105 ServSafe Certification (1)

Select one of the following options (3):
NTR104 Nutrition (3)
NTR141 Nutrition and Wellness (4)
NTR200 Human Nutrition (3)

Select one credit from the following (1):
NTR134 Healthy Weight for Kids (1)
NTR232A Food and Culture (1)
NTR136 Management of Gestational Diabetes (1)
NTR137 Carbohydrate Counting (1)
NTR130 Diabetes Overview (1)
NTR or CUL Elective (1) with Program Director consent

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

DIETETIC TECHNICIAN A.A.S.

District-Wide

Total Credits: 64

The Dietetic Technician Degree is designed for highly motivated individuals who would like to work in healthcare, schools and wellness. Students who successfully complete the coursework and internship are eligible to take the National Registration Examination for Dietetic Technicians (DTR) offered by the Commission on Dietetic Registration (CDR), the credentialing agency for the Academy of Nutrition and Dietetics. This program is approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) located at 120 S. Riverside Plaza, Suite 2000, Chicago, IL 60606-6995; 1-800-877-1600 or 312-899-0040, ext. 5400.

Note: Contact the Dietetic Education Program office for advising.

Recommended Proficiencies
High school diploma or GED

General Education Requirements (22-23)

Written Communications (3)
ENG101 English Composition III (3)
ENG121 Applied Technical Writing (3)

Oral Communications (3)
COM100 Fundamentals of Human Communication (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Arts and Humanities (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (7)
BIO160 Introduction to Human Anatomy/Physiology (4)
BIO201 Human Anatomy and Physiology I (4)
BIO202 Human Anatomy and Physiology II (4)

AND
CHM130 Fundamentals of Chemistry (4)

OR
CHM138 Chemistry for Allied Health (3) (equivalent or higher)
Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR
MAT101 Essential Mathematics (4) or higher

Core Requirements (35)
NTR123 Nutrition throughout the Life Cycle (3)
NTR129 Introduction to Health Care for Nutrition Professionals (3)
NTR142 Applied Food Science (3)
NTR150 Overview of Nutrition Professions (1)
NTR157 Foundations of Dietetic Technician Internship (2)
NTR191 Nutrition Counseling Skill Development (3)
NTR200 Human Nutrition (3)
NTR201 Nutrition Literacy (1)
NTR222 Nutrition Assessment (3)
NTR223 Food Service Management (3)
NTR232A Food and Culture (1)
NTR240 Clinical Nutrition (3)
NTR295 Dietetic Technician Professional Practice Internship (1)
NTR296 Dietetic Technician Internship (6)
CUL105 Food Safety Foundations (1) OR
NTR105 ServSafe Certification (1)

Elective (1)
Select any NTR or CUL course (1)

Other Requirements (4)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher OR Transferable Computer Competency course (Consult the CEG.)

Completion of NTR and CHM course requirements within five (5) years of beginning the program.

Meet all ACEND requirements. CAC recommends that students work in a nutrition-related field which is desirable for obtaining a supervised practice site.

Students must earn a grade of “C” or better in all required courses for this A.A.S. degree. Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC. This A.A.S. Degree requires 64 credits.

NUTRITION AND HEALTH PROMOTION CERTIFICATE

District-Wide

Total Credits: 25

The Nutrition and Health Promotion Certificate is designed to provide knowledge and training for people who are working with individuals who need education and coaching to lead a healthy lifestyle. This certificate is based on health promotion and disease prevention.

Recommended Proficiencies
High school diploma or GED

Prerequisites
RDG094 College Reading

Core Requirements (25)
CUL105 Food Safety Foundations (1)
NTR123 Nutrition throughout the Life Cycle (3)
NTR129 Introduction to Healthcare for Nutrition Professionals (3)

NTR141 Nutrition and Wellness (4) OR
NTR104 Nutrition (3) AND
NTR104L Personal Wellness Lab (1)

NTR200 Human Nutrition (3) AND
NTR104L Personal Wellness Lab (1)

NTR150 Overview of Nutrition Professions (1)
NTR191 Nutrition Counseling Skill Development (3)
NTR222 Nutrition Assessment (3)
NTR232A Food and Culture (1)
NTR240 Clinical Nutrition (3)
NTR247 Weight Management Theory (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
RENEWABLE ENERGY TECHNOLOGY

BIOFUELS TECHNICIAN CERTIFICATE

Signal Peak Campus

Total Credits: 16

The Biofuels Technician Certificate provides students with an applied foundation in Biofuels production technology, incorporating all three of the major production areas: biodiesel, bioethanol fuel and biogas. The curriculum is designed to prepare students for entry level employment or further study in the field.

Prerequisite
RDG094 College Reading (3)

Core Requirements (16)
RET250 Ethanol Process Fundamentals (3)
RET252 Biofuels Facilities Design and Boiler Systems (3)
RET255 Distillation and Evaporation Theory (3)
RET275 Biodiesel Production and Design (3)
RET296 Renewable Energy Technology Internship (4) (Take one time for credit)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND
AGEC: Dual Enrollment: IW Intensive Writing: POS Programs of Study/Tech Prep: SUN Course: RDG094: R

RENEWABLE ENERGY TECHNOLOGY A.A.S.

Signal Peak Campus

Total Credits: 64-65

The Renewable Energy Technology A.A.S. Degree provides solid foundational knowledge, skills, strategies and field experience to prepare students for multiple roles within alternative energy fields. Students select a specialization area of either Biofuels or Photovoltaic Technology.

Prerequisite
RDG094 College Reading (3)

General Education Requirements (22-23)

Written Communications (3)
ENG101 English Composition III (3) OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (8)
AGS101 World of Plants (4) OR AGS104 Agricultural Environmental Science (4)
BIO100 Biology Concepts (4) OR CHM130 Fundamental Chemistry (4)
ENVI01 Environmental Science (4) OR PHY100 Physical Universe (4)

Or select Biological and Physical Lab Science courses numbered 100 or above, or an AGEC Science Lab courses.

Mathematics (2-4)
Select a college-level Mathematics course
MAT111 Math for Electricians (2)
MAT121 Intermediate Algebra, Standard (4) or higher
MAT162 Applied Statistics (3)

Core Requirements (14)
RET105 Introduction to Renewable Energy (3)
RET160 OSHA Safety for Renewable Energy (1)
RET296 Renewable Energy Technology Internship (4)
DEGREES AND CERTIFICATES

Select one of the following (3):
- DFT120 Interpreting Engineering Drawings (3)
- DFT127 Autocad I: Computer Drafting and Design (3)
- DFT128 Autocad II: Computer Drafting and Design (3)
- MET232 Solid Works (3)

Select one of the following (3):
- MET125 Principles of Fabrication (3) OR
- WLD110 Survey of Welding (3)

Select one Specialization:
Biofuels Specialization Requirements (23)
- ELC221 Control Devices (3)
- DIE110 Introduction to Diesel Engines and Fuel Systems (3)
- MET132 Fluid Power (3)
- RET250 Ethanol Process Fundamentals (3)
- RET252 Biofuels Facilities Design and Boiler Systems (3)
- RET255 Distillation and Evaporation Theory (3)
- RET275 Biodiesel Production and Design (3)
- RET150 Pollution Controls and Industrial Waste (2)

SOLAR PHOTO VOLTAIC TECHNICIAN CERTIFICATE

Signal Peak Campus

Total Credits: 9

The Solar PV Technician Certificate program offers students the opportunity to gain experience, knowledge and safety practices of solar photo voltaic systems.

Recommended Proficiencies
Students must understand basic electricity and the lethal dangers of both alternating current (AC) and more specifically the characteristics of direct current (DC).

Core Requirements (9)
- ELC126 Residential Wiring (3)
- ELC201 Solar Photo Voltaic I (3)
- ELC202 Solar Photo Voltaic II (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

Other Requirements (4)
- BUS100 Introduction to Business (3)
- BUS101 Business Mathematics (3)
- BUS122 Small Business Management (3)
- ELC126 Residential Wiring (3)
- ELC201 Solar Photo Voltaic I (3)
- ELC202 Solar Photo Voltaic II (3)
- POS101 American Government and Politics (3)
- SKL115 Employment Readiness Part 1 (3)
- SKL116 Employment Readiness Part 2 (3)
- Elective (3) Consult CAC RET Advisor.

Other Requirements (4)
- PAC or DAN Course (1)
- Reading Competency: RDG094 College Reading

Computer Competency (3):
- AGB124 Microcomputers in Agriculture
- CIS110 Fundamentals of Computer Literacy or higher OR Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64-65 credits.

ICON LEGEND

AGEC: Dual Enrollment: POS
Intensive Writing: IW Programs of Study/Tech Prep: IW
Reading Required: RDG094: Br SUN Course:
SPORTS AND FITNESS

ATHLETIC STUDIES A.A.

Signal Peak Campus

Total Credits: 60-64

The Athletic Studies A.A. Degree prepares students to transfer to a four-year college/university by completing the AGEC-A Certificate and gathering a broad background in sports, intercollegiate athletics, sports management and exercise.

Recommended Proficiencies
College-level Reading and Mathematics placement test scores or coursework.

General Education Requirements AGEC-A (35-36)

Written Communications (6)
ENG101 English Composition III (3) ☐ ☐
ENG102 English Composition IV (3) ☐ ☐

Oral Communications (3)
Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

Arts and Humanities (6-9)
Select Art and Humanities AGEC courses.

Social and Behavioral Sciences (6-9)
Select AGEC courses from at least two different disciplines.
PEH101 Personal Health (3) ☐
PSY101 Introduction to Psychology (3) ☐ ☐

Physical and Biological Sciences (8)
Select AGEC courses with a laboratory component.

Mathematics (3-4)
MAT141 College Mathematics, Standard (4) ☐ ☐ or higher
MAT162 Applied Statistics (3) ☐

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the catalog, consult an academic advisor and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy the three (3) Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (26)
PAC201J Advanced Weight Training (2)
PED100 History and Philosophical Foundations of Sport and Physical Education (3)
PED101 History of Intercollegiate Athletics (3)
PED102 The Management of Sports (3)
PED103 Foundations of Exercise (3)
PED105 Women and Sport in the U.S. (3)
PED112 Introduction to Strength Training (3)
PEH200 Sport Safety Training/CPD/AED for the Professional Rescuer (3)

Select three of the following (3):
PED202A Team Sports Officiating Baseball (1)
PED202B Team Sports Officiating Basketball (1)
PED202C Team Sports Officiating Football (1)
PED202D Team Sports Officiating Soccer (1)
PED202E Team Sports Officiating Softball (1)
PED202F Team Sports Officiating Volleyball (1)

Other Requirements (3)
Reading Competency: RDG094 College Reading ☒

Computer Competency (3):
AGB124 Microcomputers in Agriculture (3) OR
CIS120 Survey of Computer Information Systems (3) ☐
Other A.A. Degree Requirements
Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in each A.A. degree required course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

This A.A. Degree requires 60-64 semester credits.

ATHLETIC TRAINING EDUCATION PROGRAM A.A.
Signal Peak Campus

Total Credits: 60-64
The Athletic Training Education Program (ATEP) A.A. Degree provides both academic instruction and hands-on clinical application to prepare the student to transfer an Associate of Arts degree with a specialization in Athletic Training to an accredited university. Athletic training education includes taping, rehabilitation, modalities, practice, and event coverage of varsity athletic teams.

Recommended Proficiencies
Previous experience in a High School athletic program is desirable but not necessary.

College level reading, writing and oral communication skills recommended.

General Education Requirements AGEC-A (35-36)

Written Communications (6)
ENG101 English Composition III (3)  
ENG102 English Composition IV (3)  

Oral Communications (3)
Select an AGEC course.

Arts and Humanities (6)
Select one Arts and one Humanities AGEC course.

Social and Behavioral Sciences (6-9)
Select AGEC courses from at least two different disciplines.
PSY101 Introduction to Psychology (3)  

Physical and Biological Sciences (8)
BIO201 Human Anatomy & Physiology I (4)  
BIO202 Human Anatomy & Physiology II (4)  
Or select an AGEC Lab course.

Mathematics (3-4)
MAT141 College Mathematics, Standard (4)  or higher

Subject Options (0-6)
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.
Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in
   Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in
   Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in
   Global/International Awareness or
   Historical Awareness

Note: Courses used in other areas, such as Oral
Communications, Arts and Humanities, Social and Behavioral
Sciences, or Transfer Electives, may also be used to satisfy the
three (3) Special Awareness Requirements categories. A
course may not be used to satisfy more than one Special
Awareness Requirements category.

Core Requirements (26)
PED104  Anatomical Kinesiology (3)
PED108  Introduction to Athletic Training (3)
PED109A Athletic Training Practicum I (2)
PED109B Athletic Training Practicum II (2)
PED109C Athletic Training Practicum III (2)
PED109D Athletic Training Practicum IV (2)
PED112  Introduction to Strength Training (3)
PED209  Introduction to Rehabilitation Techniques (3)
PEH101  Personal Health (3)
PEH200  Sports Safety Training/ CPR/AED for the
        Professional Rescuer (3)

Other Requirements (3)
Reading Competency: RDG094 College Reading .Requires

Computer Competency (3):
AGB124  Microcomputers in Agriculture (3)  OR
CIS120  Survey of Computer Information Systems (3)

Other A.A. Degree Requirements
Some A.A. Degrees require up to 16 credits of a Second
Language to demonstrate proficiency. Many four-year
degrees require either a second semester or fourth semester
level of a second language and strongly encourage students
to complete this requirement at the community college
prior to transfer.

Check your university catalog, Transfer Guides at
http://www.aztransfer.com/TransferGuides, or meet with
an academic advisor. Students may demonstrate
proficiency by completion of coursework and/or a
proficiency test.

Students undecided about their major are encouraged to
complete a fourth semester of a second language. CAC
offers Spanish, French, Sign Language and other Foreign
Languages and Literatures. Contact an academic advisor
for assistance.

Students must earn a grade of “C” or better in each A.A.
degree required course. Students must earn a minimum of
20 credits from CAC which includes the AGEC-A
requirements.

This A.A. Degree requires 60-64 semester credits.
GROUP FITNESS INSTRUCTOR CERTIFICATE

Signal Peak Campus

Total Credits: 19

Upon completion, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Group Fitness Instructor. The Group Fitness Instructor Certificate core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Group Fitness Instructor. Courses include introductions to biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures and health screening.

Recommended Proficiencies
College-level Reading, Writing and Oral Communication skills recommended

Core Requirements (19)
NTR141 Nutrition and Wellness (4)
PED103 Foundations of Exercise (3)
PED104 Anatomical Kinesiology (3)
PEH200 Sports Safety Training (3)
PEH203 Group Fitness Instructor Methods (3)

Three Physical Activity Courses required (3)
The following courses are recommended:
PAC101J Basic and Beginning Techniques of Weight Training (1)
PAC101K Basic and Beginning Techniques of Yoga (1)
PAC105 Physical Fitness: Core Emphasis (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

PERSONAL TRAINER CERTIFICATE

Signal Peak Campus

Total Credits: 19

Upon completion of this Personal Trainer Certificate, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Personal Trainer. The program core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Personal Trainer. Courses include introductions to biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures and health screening.

Recommended Proficiencies
College level reading, writing and oral communication skills recommended

Core Requirements (19)
NTR141 Nutrition and Wellness (4)
PED103 Foundations of Exercise (3)
PED104 Anatomical Kinesiology (3)
PEH200 Sports Safety Training (3)
PEH204 Personal Training Methods (3)

Three Physical Activity Courses required (3)
The following courses are recommended:
PAC101J Basic and Beginning Techniques of Weight Training (1)
PAC101K Basic and Beginning Techniques of Yoga (1)
PAC105 Physical Fitness: Core Emphasis (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
RECREATION AND TOURISM MANAGEMENT A.A.

Signal Peak Campus

Total Credits: 60-64

This A.A. Degree prepares students for employment in recreation and tourism management and program delivery positions in diverse public, nonprofit and private organizations such as municipal and county parks and recreation departments, state and national resource agencies, YMCAs, Boys and Girls Clubs of America, and other nonprofit agencies, clinical rehabilitation centers, hospitals, visitor and convention bureaus, senior centers, resorts, destination management companies and other components of the tourism/commercial recreation industry. Since this Degree includes the AGEC-A, general education requirements, students may choose to transfer the Degree to a university to earn additional credentials.

Recommended Proficiencies
College level reading, writing and oral communication skills recommended

Prerequisite
RDG094 College Reading

General Education Requirements AGEC-A (35-36)

Written Communications (6)
ENG101 English Composition III (3)
ENG102 English Composition IV (3)

Oral Communications (3)
COM263 Intercultural Communication (3)

For the following two categories, for each category select courses from different disciplines.

Arts and Humanities (6-9)
Select one Art and one Humanities AGEC course.

Social and Behavioral Sciences (6-9)
ECN202 Principles of Microeconomics (3)
Select AGEC courses from different disciplines.

Physical and Biological Sciences (8)
ENV101 Environmental Science (4)
NTR141 Nutrition and Wellness (4)
Or select AGEC Science Lab courses.

Mathematics (3-4)
MAT141 College Mathematics, Standard (4) or higher

Subject Options
Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

Special Awareness Requirements (0-9)
Select AGEC courses to fulfill these requirements.
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

Note: Courses used in other areas, such as Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy the three Special Awareness Requirements categories. A course may not be used to satisfy more than one Special Awareness Requirements category.

Core Requirements (30)
BUS100 Introduction to Business (3)
HRM100 Introduction to Hospitality (3)
REC101 Recreation, Leisure, and the Quality of Life (3)
REC108 Recreation Practicum (3)
REC203 Leisure Delivery Systems (3)
REC220 Introduction to Nonprofit Youth and Human Service Agencies (3)
REC230 Program Planning (3)
REC250 Leadership in Recreation (3)

Select two of the following courses (6):
ACC201 Financial Accounting (3)
BUS190 Principles of Management and Leadership (3)
HRM102 Management of Guest Services (3)
HRM208 Hospitality Law (3)

Other Requirements (3)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120 Survey of Computer Information Systems (3)

ICON LEGEND
AGEC: ⭕ Dual Enrollment: ⭕ ⭕
Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: R SUN Course: ⭕
**DEGREES AND CERTIFICATES**

**Other A.A. Degree Requirements**

Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

Students undecided about their major are encouraged to complete a fourth semester of a second language. CAC offers Spanish, French, Sign Language and other Foreign Languages and Literatures. Contact an academic advisor for assistance.

Students must earn a grade of “C” or better in all required courses. Students must earn a minimum of 20 credits from CAC.

This A.A. Degree requires 60-64 semester credits.

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**RECREATION MANAGEMENT CERTIFICATE**

**Signal Peak Campus**

**Total Credits: 19**

This Certificate prepares students for employment in recreation and tourism management and program delivery positions in diverse public, nonprofit, and private organizations such as municipal and county parks and recreation departments, state and national resource agencies, YMCAs, Boys and Girls Clubs of America, and other nonprofit agencies, clinical rehabilitation centers, hospitals, visitor and convention bureaus, senior centers, resorts and spas, destination management companies and other components of the tourism/commercial recreation industry.

**Recommended Proficiencies**

College-level Reading, Writing and Oral Communication skills recommended

**Core Requirements (19)**

- HRM100 Introduction to Hospitality (3)
- PAC Any Physical Activity Course (1)
- PED102 The Management of Sport (3)
- REC101 Recreation, Leisure, and the Quality of Life (3)
- REC108 Recreation Practicum (3)
- REC203 Leisure Delivery Systems (3)
- REC230 Program Planning (3)
  OR
- REC250 Leadership in Recreation (3)

**Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
SPORTS INFORMATION CERTIFICATE

Signal Peak Campus

Total Credits: 19

The Sports Information Certificate is designed to provide current training and information to students interested in the promotion and operation of sporting events. This program will enhance the understanding and application of strategies to effectively manage and promote youth, high school, collegiate, and professional sporting events.

Recommended Proficiencies
High School diploma or GED; College-level Reading, Writing and Oral Communication skills recommended.

Prerequisite
RDG094 College Reading (3)

Core Requirements (19)
CIS112 Web Page Design Fundamentals (3)
MSC101 Media and Society (3) 
MSC102 Writing for the Print Media I (3)
MSC110 Publications (3)
PED101 History of Intercollegiate Athletics (3)
PED102 The Management of Sport (3)

PAC course (1):
Select one of the recommended courses:
PAC101A Basic and Beginning Techniques of Golf (1)
PAC101M Basic and Beginning Techniques of Basketball (1)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

SPORTS MANAGEMENT A.A.S.

Signal Peak Campus

Total Credits: 68

The Sports Management Degree prepares individuals to meet the needs of the sports industry. Students completing this degree will be exposed to sport promotion, health and fitness center management, sporting goods management/sales, and the successful operation of numerous types of sport organizations, ranging from various professional teams/leagues, to many national and international amateur sports organizations, federations, conferences, and associations.

The program’s Business core focuses on the basics of accounting, computer information systems, marketing, management, the legal environment of business, human relations, and supervisory techniques. The program’s Sports/Fitness core focuses on the basics of the history/philosophical foundations of sport/physical education, strength/athletic training, sports nutrition, lifetime fitness/wellness, sports safety training, and physical activity.

Recommended Proficiencies
High School diploma or GED; College-level Reading, Writing and Oral Communication skills recommended.

Prerequisite
RDG094 College Reading (3)

General Education Requirements (32)

Written Communications (3)
ENG101 English Composition III (3) 
ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course.

Arts (3)
Select an Art course, or an AGEC course.

Humanities (3)
PHI105 Introduction to Ethics (3) (Recommended) 
Or select a Humanities course, or an AGEC course.

Social and Behavioral Sciences (12)
ECN201 Principles of Macroeconomics (3) 
ECN202 Principles of Microeconomics (3) 
MSC101 Media and Society (3) 
PEH101 Personal Health (3) 
PSY101 Introduction to Psychology (3) 
Or select Social and Behavioral Science courses, or AGEC courses.
Physical and Biological Sciences (8)
NTR141  Nutrition and Wellness (4)  ☐
BIO160  Introduction to Human Anatomy and
        Physiology (4)  ☐

Or select Biological and Physical Lab Science courses
numbered 100 or above, or AGEC Science Lab courses.

Mathematics (3-4)
MAT162  Applied Statistics (3)  ☐ (Recommended)
        Or select a college-level Mathematics course
BUS101  Business Mathematics (3)
MAT101  Essential Mathematics (4) or higher

Core Requirements (30)
Business Core (12)
ACC201  Financial Accounting (3)  ☐
BUS123  Business Relations (3)
BUS190  Principles of Management and Leadership (3)  ☐
BUS201  Legal Environment of Business (3)

Sports and Fitness Core (18)
PED100  History and Philosophical Foundations of
        Sport and Physical Education (3)
PED102  The Management of Sport (3)

Select four of the following courses (12):
PED101  History of Intercollegiate Athletics (3)
PED103  Foundations of Exercise (3)
PED105  Women and Sport in the U.S. (3)
PED108  Introduction to Athletic Training (3)
PED112  Introduction to Strength Training (3)
PEH200  Sports Safety Training (3)

Other Requirements (6)
Physical Education Activity: Select 3 credits
Reading Competency: RDG094 College Reading  R

Computer Competency (3):
AGB124  Microcomputers in Agriculture
CIS110  Fundamentals of Computer Literacy or higher
        OR
Transferable Computer Competency course
(Consult the CEG.)

Students must earn a grade of “C” or better in all required
courses.

Students must earn a cumulative grade point average
(CGPA) of at least a 2.0 on a 4.0 scale. Students must earn
a minimum of 20 credits from CAC.

Students desiring to earn an AGEC Certificate (35 credits),
see AGEC Certificate requirements.

This A.A.S. Degree requires 68 credits.
TECHNOLOGY

COMPUTER AIDED DESIGN CERTIFICATE

Signal Peak Campus

Total Credits: 25

This Certificate offers preparation for entry-level positions in computer aided design and drafting.

Core Requirements (15)
DFT127 Autocad I (3)
DFT128 Autocad II (3)
MAT101 Essential Mathematics (4) or higher

Select one of the following (3):
DFT130 Advanced Computer Aided Drafting Applications (1) (Register three terms to earn 3 credits)
DFT131 Autocad III (3)

Select one of the following (3):
COM100 Fundamentals of Human Communication (3)
ENG121 Applied Technical Writing (3)

Electives (10)
Select 10 credits from any of the following areas:
CET Civil Engineering Technology
CIS Computer Information Systems
DFT Drafting
ELC Electricity
ELT Electronics
HEO Heavy Equipment Operator
WLD Welding

OR
MAT121 Intermediate Algebra, Standard (4)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

WELDING CERTIFICATE

Signal Peak Campus

Total Credits: 33

This Welding Certificate provides students with entry-level welding skills enabling them to gain employment as welding technicians.

Core Requirements (18)
WLD121 Shielded Metal Arc Welding I (3)
WLD122 Shielded Metal Arc Welding II (3)
WLD221 Gas Tungsten Arc Welding (3)
WLD222 Gas Metal Arc Welding (3)
WLD227 Welding Design and Fabrication (3) (Register two terms to earn 6 credits)

Select one of the following (3):
ENG101 English Composition III (3)
ENG121 Applied Technical Writing (3)

Electives (12)
Select 12 credits from any of the following courses:
DFT127 AutoCAD I (3)
DFT128 AutoCAD II (3)
DFT131 AutoCAD III (3)
MAT141 College Mathematics, Standard (4)
WLD110 Survey of Welding Processes (3)
WLD120 Oxy-Acetylene Welding (3)
WLD125 Pipe Welding I (3)
WLD128 Blueprint Reading for Welders (3)
WLD223 Automatic and Semi-Automatic Welding (3)
WLD225 Shielded Metal Arc Welding III (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

AGRICULTURE

FARM BUSINESS MANAGEMENT CERTIFICATE

Signal Peak Campus

Total Credits: 30

The Farm Business Management Certificate develops the farm operator’s ability to organize resources in order to meet family and business goals. These abilities include the management functions of planning, implementing and controlling the farm system and its component subsystems.

Recommended Proficiencies
Basic business experience and fundamental computer skills recommended.

Prerequisites
Own or operate a farm business.

Core Requirements (30)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB127</td>
<td>Farm Business Management I A</td>
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<td>AGB128</td>
<td>Farm Business Management I B</td>
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<tr>
<td>AGB228</td>
<td>Farm Business Management II A</td>
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<td>AGB230</td>
<td>Farm Business Management III A</td>
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<tr>
<td>AGB231</td>
<td>Farm Business Management III B</td>
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</tbody>
</table>

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND

AGEC: ★ Dual Enrollment: ☀
Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ☐ SUN Course: ☀

CORRECTIONS

ADVANCED CORRECTIONS CERTIFICATE

Superstition Mountain Campus, Florence and SanTan Centers

Total Credits: 39

This Advanced Corrections Certificate is designed to upgrade the skills and knowledge of Correctional Officers currently working in the corrections field.

Prerequisites
RDG094 College Reading ☐
Successful completion of Arizona Correctional Officers Training Academy Certificate (21 credits).

Core Requirements (36)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BUS190</td>
<td>Principles of Management and Leadership</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>(*May be fulfilled by successful completion of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COTA Certificate)</td>
<td></td>
</tr>
<tr>
<td>COM101</td>
<td>Interpersonal Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM263</td>
<td>Intercultural Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>POS220</td>
<td>U.S. and Arizona Constitutions</td>
<td>(3)</td>
</tr>
<tr>
<td>PSY101</td>
<td>Introduction to Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>SOC100</td>
<td>Introduction to Sociology</td>
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Electives (3)

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<td>AJS101</td>
<td>Introduction to Administration of Justice</td>
<td>(3)</td>
</tr>
<tr>
<td>AJS275</td>
<td>Criminal Investigations</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS120</td>
<td>Survey of Computer Information Systems</td>
<td>(3)</td>
</tr>
<tr>
<td>PHI112</td>
<td>World Religions</td>
<td>(3)</td>
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<tr>
<td>SPA</td>
<td>Any Spanish course(s)</td>
<td></td>
</tr>
<tr>
<td>SOC200</td>
<td>Racial and Ethnic Minorities</td>
<td>(3)</td>
</tr>
<tr>
<td>PSY200</td>
<td>Social Psychology</td>
<td>(3)</td>
</tr>
</tbody>
</table>

*Correction Officers who have the rank of Sergeant or higher are required to request the Department of Corrections submit, to CAC Admissions, an official copy of their Sergeant Leadership Academy Certificate of Completion to receive credit for BUS190.

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
**CORRECTIONS A.A.S.  
Superstition Mountain Campus**

**Total Credits: 64**

This Degree is designed to upgrade the skills and knowledge of Correctional Officers currently working in the field. Completion of the Arizona Correctional Officers Training Academy (COTA) Certificate program is required for admission into the degree program. Upon successful completion of COTA, students are eligible to apply up to 21 credits towards the Corrections A.A.S. Degree, per CAO Memo: COTA Certified Completers dated 09/07/2012.

**Prerequisites:**
- RDG094  College Reading
- Successful completion of (Arizona Correctional Officers Training Academy) Certificate (21 credits).

**General Education Requirements (19-23)**

**Written Communications (3)**
- ENG101  English Composition III (3)
- ENG121  Applied Technical Writing (3)

**Oral Communications (3)**
- Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.
  - COM101  Interpersonal Communication (3)
  - COM263  Intercultural Communication (3)

**Arts and Humanities (3)**
- Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

**Social Behavioral Sciences (3)**
- PSY101  Introduction to Psychology (3)
- SOC100  Introduction to Sociology (3)
- Or select a Social Behavioral Science course numbered 100 or above, or an AGEC course.

**Physical and Biological Sciences (4)**
- Select a Biological or Physical Science course numbered 100 or above, or an AGEC course.

**Mathematics (3-4)**
- Select a college-level Mathematics course
  - MAT121  Intermediate Algebra, Standard (4) *(Recommended)* or higher

**Core Requirements (42)**
- COTA Certification (21)
- AJS101  Introduction to Administration of Justice (3)
- AJS123  Ethics and the Administration of Justice (3)
- AJS209  Substantive Criminal Law (3)
- AJS240  The Corrections Function (3)
- BUS190  Principles of Management and Leadership (3)
  - (*May be fulfilled by submission of official Sergeant Leadership Academy Certification to CAC Admissions*)
- CIS120  Survey of Computer Information Systems (3)
- POS220  U.S. and Arizona Constitutions (3)

**Electives (3)**
- Select 3 credits from the following courses:
  - AJS225  Criminology (3)
  - AJS275  Criminal Investigations (3)
  - PHI112  World Religions (3)
  - SPA  Any Spanish course(s)
  - SOC200  Racial and Ethnic Minorities (3)
  - PSY200  Social Psychology (3) or higher

**Other Requirements (0-4)**
- PAC or DAN (1) *(Fulfilled by COTA physical training)*
- Reading Competency: RDG094 College Reading
- Computer Competency (3):
  - CIS120  Survey of Computer Information Systems (3) *(Fulfilled under Core Requirements)*

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Corrections A.A.S. Degree requires 64 credits.
DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

DIESEL/HEAVY EQUIPMENT

HEAVY EQUIPMENT MECHANIC'S APPRENTICESHIP CERTIFICATE

Signal Peak Campus

Total Credits: 30

The Heavy Equipment Mechanic's Apprenticeship training is sponsored by the Arizona Chapter of Associated General Contractors (AGC) for repair and maintenance of heavy equipment to journeyman standards. Students must be sponsored by an AGC contractor and meet the AGC contractor’s entry level proficiencies to enroll in this program.

Prerequisites
Students must be sponsored by an Associated General Contractor (AGC).

Core Requirements (30)
AGC112 Introduction to Mechanical Technology (.5)
AGC113 Introduction to Mechanical Technology Lab (1)
AGC114 Equipment Preventive Maintenance (.5)
AGC115 Equipment Preventive Maintenance Lab (.5)
AGC116 Mobile Air Conditioning (1)
AGC117 Mobile Air Conditioning Lab (1.5)
AGC126 Electrical and Electronic Systems (1)
AGC127 Electrical and Electronic Systems Lab (1.5)
AGC128 Hydraulic Systems (1)
AGC129 Hydraulic Systems Lab (1.5)
AGC136 Chassis and Drive Systems (1)
AGC137 Chassis and Drive Systems Lab (1.5)
AGC138 Brakes, Steering, Suspension Systems (1)
AGC139 Brakes, Steering, Suspension Systems Lab (1.5)
AGC248 Diesel Engines I (2)
AGC249 Diesel Engines I Lab (3)
AGC258 Diesel Engines II (2)
AGC259 Diesel Engines II Lab (3)
AGC268 Systems Diagnostics and Reconditioning (2)
AGC269 System Diagnostics and Reconditioning Lab (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

JOHN DEERE CONSTRUCTION AND FORESTRY EQUIPMENT TECHNOLOGY A.A.S.

Signal Peak Campus

Total Credits: 75

The John Deere Construction and Forestry Equipment Technology A.A.S. Degree prepares students for employment as diesel and heavy equipment technicians at John Deere Dealerships. Students must be sponsored by a John Deere Dealership; dealerships are located in Arizona, Nevada and California.

General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3) OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (4)
Select a course numbered 100 or above from biological or physical science disciplines, or an AGEC course.

Mathematics (3-4)
Select a college-level Mathematics course
BUS101 Business Mathematics (3) OR MAT101 Essential Mathematics (4) or higher

ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: SUN Course:
DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

Required Courses (55)
CFE101  John Deere Diesel Engines and Fuel Systems (12)
CFE102  John Deere Hydraulic and Electrical/Electronics Systems (12)
CFE201  John Deere Chassis and Drives (10)
CFE202  John Deere Heavy Equipment Reconditioning and Operations (10)
DIE222  Mobile Refrigeration (3)
DIE225  Preventive Maintenance (2)
WLD  Any Welding course (3)
TEC129  Computers for Technicians (3)
CIS  Any Computer Competency Course

Consult the CEG to determine course transferability.

Other Requirements (1-4)
PAC or DAN course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
TEC129  Computers for Technicians (3) OR
CIS 110  Fundamentals of Computer Literacy (3)
or higher (Fulfilled in Required Courses)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The John Deere Construction and Forestry Equipment Technology A.A.S. Degree requires 78 credits.

OPERATOR'S APPRENTICESHIP PROGRAM CERTIFICATE
(Associated General Contractors)

Signal Peak Campus

Total Credits: 30

Heavy Equipment Operator’s Apprenticeship training is sponsored by the Associated General Contractors (AGC) for operation of heavy equipment to journeyman standards. Students must be sponsored by an Associated General Contractor (AGC).

Prerequisites
Students must be sponsored by an Associated General Contractor (AGC).

Required Courses (30)
AGC102  Introduction to Construction Math (1)
AGC103  Basic Safety (.5)
AGC104  Soils I (1)
AGC105  Grades I (1)
AGC106  Machine Orientation I (.5)
AGC107  Machine Operation I (1)
AGC121  Equipment Preventive Maintenance (1)
AGC122  Introduction to Earth Moving (1)
AGC123  Machine Orientation II (.5)
AGC124  Machine Operation II (2.5)
AGC131  Safety Part II (1)
AGC132  Rigging and Hoisting (1)
AGC133  Machines Theory I (1)
AGC134  Machine Operation III (2)
AGC141  Soils II (1)
AGC142  Grades II (1)
AGC143  Machines Theory II (1)
AGC144  Machine Operation IV (2)
AGC151  Machines Theory III (.5)
AGC152  Advanced Safety (1)
AGC153  Soils III (1)
AGC154  Machine Operation V (2.5)
AGC161  Finishing and Grading (1.5)
AGC162  Operator Supervision (1)
AGC163  Machine Operation VI (2.5)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.
DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

HEALTH CAREERS

DIAGNOSTIC MEDICAL SONOGRAPHY A.A.S.

Superstition Mountain Campus

Total Credits: 84

The two-year, full-time DMS program trains health care professionals as Diagnostic Medical Sonographers who provide patient services using high frequency sound waves to produce images of internal structures. Under the supervision of a physician, Sonographers gather ultrasound data on all types of patients in order to diagnose a variety of conditions and diseases in the body, assess circulatory flow and changes, assist MDs during procedures; and monitor fetal growth, development and wellbeing.

Prerequisites:
PHY100 College Physics (4) or higher OR RAD150 Radiation Physics (3)

Candidates must complete a prior associate's degree in an Allied Health Profession which includes direct patient care, such as Radiologic Technician, Registered Nurse, Respiratory Therapist or Physical Therapist. The General Education coursework in that degree must include MAT151 College Algebra, Standard and the minimum A.A.S. Degree General Education requirements.

Candidates must possess recent healthcare professional experience American Health Association (AHA) cardiopulmonary resuscitation (CPR) or equivalent embedded in their healthcare specialty degree.

Recommended Proficiencies
College-level Reading, Writing and Math placement test scores or coursework. Candidates who have completed a prior A.A.S. may count their General Education course credits toward the DMS Degree requirements.

General Education Requirements (20-23)

Written Communications (3)
ENG101 English Composition III (3) OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (8)
BIO201 Human Anatomy & Physiology I (4) OR BIO202 Human Anatomy & Physiology II (4)

Mathematics (3-4)
MAT151 College Algebra, Standard (4) or higher

Core Requirements (63 Credits)
DMS101 Introduction to Diagnostic Medical Sonography (3)
DMS120 Cross Sectional Imaging (3)
DMS130 Sonography Physics and Instrumentation I (2)
DMS131 Physics and Instrumentation Lab (1)
DMS132 Abdominal Imaging I (3)
DMS133 Abdominal Imaging Lab (1)
DMS135 Small Parts Imaging (1)
DMS140 Sonographic OB/GYN Imaging I (2)
DMS149 Pathology for Medical Imaging (3)
DMS150 Clinical Sonography Practicum I (2)
DMS151 Clinical Sonography Practicum II (3)
DMS152 Clinical Sonography Practicum III (4)
DMS154 Abdominal Imaging II (2)
DMS158 Sonography Case Studies I (1)
DMS159 Sonography Case Studies II (2)
DMS234 Sonography Physics/Instrumentation II (2)
DMS242 High Risk OB/GYN Imaging (2)
DMS254 Clinical Sonography Practicum IV (4)
DMS255 Clinical Sonography Practicum V (4)
DMS256 Clinical Sonography Practicum VI (4)
DMS259 Sonography Case Studies III (2)
DMS260 OB/GYN Sonography Lab (1)
DMS271 Concepts of Vascular Imaging (2)
DMS272 Vascular Imaging Lab (1)
DMS273 Advanced Sonography Applications (3)
DMS280 Physics and Instrumentation Review (1)
DMS281 Abdominal Imaging Review (1)
DMS282 OB/GYN Review (1)
DMS290 Sonography Capstone Seminar (2)
**Other Requirements (4)**

PAC or DAN course (1)

Reading Competency: RDG094 College Reading \( \mathcal{R} \)

**Computer Competency (3):**

*(Filled in DMS101 under Core Requirements)*

Students must earn a grade of "C" or better in all required courses for this AAS degree. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 84 credits.
DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

NURSING A.A.S.

Signal Peak Campus

Total Credits: 71

Central Arizona College’s Registered Nursing Program prepares students for the medical workforce or to complete further education to specialize in clinical practice, teaching or administration. The CAC Nursing Program is approved by the Arizona State Board of Nursing, 4747 N. 7th Street, Suite 200, Phoenix, AZ 85014 (602-771-7803), www.azbn.gov., and accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, Georgia 30326 (404-975-5000), www.nlnac.org.

Current Nursing students may apply to take the Practical Nurse Licensing Examination (NCLEX-PN) after completing the general education requirements, NUR121, NUR122 and NUR150. Completion of the four-semester Program qualifies the student for the Nursing Associate of Applied Science Degree and for taking the Registered Nurse Licensing Examination (NCLEX-RN).

In addition to the admission requirements of the College, applicants must meet the current requirements established by the Nursing Admissions Committee in conjunction with the Nursing Faculty. These requirements include, but are not limited to:

1. Competence in Math, English, and Reading
2. Completion of BIO201 (4) and BIO202 (4)
3. C.N.A. license from the Arizona State Board of Nursing
4. Attendance at a Nursing Information session
5. Eligibility to register for MAT121 or higher
6. Eligibility to register for ENG101
7. Successfully completed the HESI Entrance Test at CAC (within 3 attempts)
8. Cumulative GPA of 2.75 or higher
9. Completed CAC Nursing program application

Students must be able to meet the Essential Functions of the Nursing Program as listed in the Nursing Application and Information Packet. Admission to the Nursing Program is selective and based on a point system (specific established criteria). Acceptance into the College does not guarantee acceptance into the Nursing Program.

Further information may be obtained at URL: http://www.centralaz.edu/Home/Academics/Divisions_and_Programs/Nursing_Division.htm.

Admission Requirements

In addition to the admission requirements of the College, applicants must meet the current requirements established by the Nursing Admissions Committee in conjunction with the Nursing Faculty. These requirements include, but are not limited to:

- Competence in Mathematics, English and Reading
- Completion of BIO201 (4) and BIO202 (4)
- C.N.A. license from the Arizona State Board of Nursing
- Attendance at a Nursing Information session
- Eligible to register for MAT121 or higher
- Eligible to register for ENG101
- Successfully completed the HESI Entrance Test at CAC (within 3 attempts)
- Cumulative GPA of 2.75 or higher
- Completed program application
- Students must be able to meet the Essential Functions of the Nursing Program listed in the nursing application and information packet.

Proper course sequencing is essential. Please see your academic advisor.

Prerequisites

Arizona Nursing Assistant Certification

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIO201 Human Anatomy II</td>
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<tr>
<td>BIO202 Human Anatomy I</td>
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General Education Requirements (30)

Written Communications (6)

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<th>Course</th>
<th>Units</th>
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<tr>
<td>ENG101 English Composition III</td>
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<tr>
<td>ENG102 English Composition IV</td>
<td>3</td>
<td>(Recommended)</td>
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</table>
Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (9)
- PSY101 Introduction to Psychology (3) (Recommended)
- PSY203 Developmental Psychology (3) (Recommended)
- SOC100 Introduction to Sociology (3) (Recommended)
Or select Social & Behavioral Sciences courses numbered 100 or above, or AGEC courses.

Physical and Biological Sciences (8)
- BIO202 Human Anatomy & Physiology II (4) (Fulfilled under Prerequisites)
- BIO205 Microbiology (4)

Mathematics (4)
- MAT121 Intermediate Algebra, Standard (4) OR
- MAT141 College Mathematics, Standard (4)

Core Requirements (40)
Proper course sequencing is essential. Please see your academic advisor.
- NUR121 Intro to Nursing Transitions (8)
- NUR122 Nursing Health Illness Transitions (8)
- NUR126 Principles of Pharmacology/Drug Dosages (2)
- NUR145 Pharmacology (3)
- NUR221 Nursing Developmental Transitions (8)
- NUR222 Nursing Organizational Transitions (8)
- NTR200 Human Nutrition (3)

Other Requirements (1)
PAC or DAN course (1)
Reading Competency: RDG094 College Reading

Students must earn a grade of "C" or better in all courses to receive this AAS degree. Students must earn a minimum of 20 credits from CAC.

The Nursing A.A.S. Degree requires 71 credits.

PRACTICAL NURSING CERTIFICATE

Signal Peak Campus

Total Credits: 36

The Practical Nursing Certificate is earned upon successful completion of the first year of the Associate of Applied Science Registered Nursing Degree and the Optional NCLEX-PN Completion Course: NUR150.

Recommended Proficiencies
College-level Mathematics, English and Reading placement test scores or coursework

Prerequisites
NUR121 Introduction to Nursing Transitions (8) *
NUR126 Principles of Pharmacology and Drug Dosages (2) **

Students must successfully complete the first year of the Registered Nursing Associate of Applied Science Degree AND Program director consent required.

Required Courses (36)
- ENG101 English Composition III (3)
- ENG102 English Composition IV (3)
- NUR121 Introduction to Nursing Trans. (8) *
- NUR122 Nursing in Health Illness Trans. (8)
- NUR126 Principles of Pharmacology and Drug Dosages (2) **
- NUR145 Pharmacology (3)
- NUR150 Nursing Professional Transitions (3) (NCLEX-PN Completion Course)
- PSY101 Introduction to Psychology (3)
- PSY203 Developmental Psychology (3)

Other Requirements
Students must earn a cumulative grade point average (CGPA) of at least a 2.75 on a 4.0 scale.
Students must earn at least one-third of the certificate credits from CAC.
RADIONIC TECHNOLOGY A.A.S.

Superstition Mountain Campus

Total Credits: 79

Radiologic Technology is a health care profession involving the use of ionizing radiation to generate diagnostic images in the diagnosis and treatment of disease. The Associate of Applied Science Degree in Radiologic Technology is a two-year program (six sequential semesters including summers) that prepares students for entry-level positions as radiographers.

The program starts once per year in the Spring Semester. Students must complete 24 credits of general education requirements and 55 credits of major core courses.

The curriculum is designed in accordance with the Radiography Curriculum established by the American Society of Radiologic Technologists. Students are required by Arizona State Statute to complete 1,800 practicum hours within the two years. The Radiologic Technology course of study is a demanding experience and involves a full-time commitment of at least 40 hours per week plus homework. Students must earn a grade of "C" or better in all required courses.

The program starts once per year in the Spring Semester. Students must complete 24 credits of general education requirements and 55 credits of major core courses.

Recommended Proficiencies

Enrollment is limited and the selective admission process is highly competitive. Students must meet the minimum admission requirements of the program and those required for admission to Central Arizona College. Admission to the program is based on a point value system. Points are calculated by a formula related mainly to grade point average, residency, work experience, committee interview and other criteria.

CAC highly recommends candidates complete BIO201 and BIO202. Achieving a high level of success in the courses taken before applying to the program will improve a student’s chance for admission to the radiography program.

Admission requirements:
- High School Diploma or equivalency (GED)
- Record of Immunizations
- Pre-admission testing to prove college-level English, reading and math proficiency
- Pass screening tests that will include: drug testing, criminal background check and fingerprinting
- Possess the ability to perform basic physical tasks as required
- Submission of the Radiologic Technology Program Application Form
- Two letters of recommendation

Prerequisites

Radiologic Technology Cohort student.
HCC116 Medical Terminology (3) or equivalent course.

General Education Requirements (23)

Candidates who have completed a prior associate's degree or earned General Education course credits with a grade of "C" or better from regionally accredited institutions may count them toward the General Education Requirements below.

Written Communications (3)
ENG101 English Composition III (3) (SUN ENG 1101) OR ENG121 Applied Technical Writing (3)

Oral Communications (3)
Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.

Arts and Humanities (3)
Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

Social and Behavioral Sciences (3)
Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

Physical and Biological Sciences (8)
BIO201 Human Anatomy & Physiology I (4)  ❇❇
BIO202 Human Anatomy & Physiology II (4)  ❇❇

Mathematics (3)
MAT121 Intermediate Algebra, Standard (4) or higher
DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

Required Courses (55)
RAD100  Fundamentals of Radiologic Science and Health Care (1)
RAD110  Radiographic Positioning I (4)
RAD120  Principles of Radiographic Exposure I (3)
RAD130  Patient Care in Radiologic Science (2)
RAD140  Practicum I (240-280 hours) (3)
RAD150  Radiation Physics I (3)
RAD160  Radiographic Positioning II (4)
RAD170  Principles of Radiographic Exposure II (3)
RAD180  Practicum II (240-280 hours) (3)
RAD200  Practicum III (600-650 hours) (7)
RAD210  Radiation Physics II (3)
RAD230  Radiobiology and Radiation Protection (3)
RAD240  Practicum IV (360-390 hours) (4)
RAD250  Basic Pharmacology and Drug Administration (1)
RAD260  Radiographic Pathology (2)
RAD270  Advanced Imaging (2)
RAD280  Registry Review (3)
RAD290  Practicum V (360-390 hours) (4)

Other Requirements (4)
PAC or DAN course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
(Fulfilled in RAD Core Requirements)

Students must earn a grade of "C" or better in all courses to receive this degree. Students must earn a minimum of 20 credits from CAC.

The Radiologic Technology A.A.S. Degree requires 79 credits.
Course Descriptions
Course Delivery
In addition to classes offered at our campuses and sites, Central Arizona College also offers classes in a variety of flexible modalities and formats for our students’ convenience. Formats include on-site, face-to-face, hybrid, online, interactive television, open entry/closed exit and accelerated. While assignments and methods vary, all classes, regardless of modality or format, hold students to the same rigorous, high academic standards.

The course schedule indicates the delivery format of a class. Students should understand the methods and expectations inherent in the format they choose prior to beginning their class, and will be held responsible for that understanding. Information about online and hybrid classes can be found on the Central Arizona College website.

Prerequisites and Corequisites
A prerequisite is a requirement the student must meet prior to enrollment in the proposed course. A corequisite is a requirement the student must meet concurrently with the proposed course.

Prerequisites and corequisites may be met by completing the courses listed with a grade of “C” or better, completing a competency exam, or through an equivalent assessment score.

“Instructor consent” may be secured directly from the course instructor. Instructor consent permits a student to enroll in a course without the prerequisite or corequisite, however it does not guarantee a waiver of these prerequisites and corequisites; for any other course.

Dropping a required corequisite will result in the student being withdrawn from the course requiring the corequisite.

Additional Options: Times for Credit and Grading
Courses that may be repeated for credit are so noted in the course description. These courses may not be repeated in the same semester.

Students may select the “Satisfactory/Unsatisfactory” grading option for courses noted in the course description. However, students may not choose the “Satisfactory/Unsatisfactory” grading option for courses to complete a certificate or degree.

SPECIAL COURSES
088/098 Selected Topic, Developmental
Various Credits
Developmental instruction in a specific discipline such as English, mathematics, reading, social sciences and others areas is offered to provide a foundation for college-level course work.

197/297 Career Advancement
Up to 4 Credits
Courses in the 197 or 297 series offer a combination of on-the-job and related college training with the flexibility to meet students’ specialized vocational needs. Courses may be offered in any discipline with appropriate approvals and may be repeated for credit.

198/298 Selected Topics
Various Credits
Courses in the 198 or 298 series offer special and current topics on a short-term basis. Selected topics can be in the form of a class or special offering in any discipline with appropriate approvals. These classes may not transfer and are degree applicable only with special approval.

APPROVED COURSES
The following list of Central Arizona College academic courses includes courses which are offered every semester as well as courses offered only on a cyclical program basis. Please see the Class Schedule for a listing of currently offered courses. Also, consult an academic advisor to view program sequencing guides to efficiently and effectively complete your academic goals.

SUN Shared Unique Number System
The Shared Unique Number (SUN) code for select general education and major preparation courses offers Arizona course transfer information. The SUN designation/icon indicates transferability within the Arizona Transfer System that includes the three public universities and select public and tribal community colleges. For specific course transferability status based on the term taken with a grade of “C” or better, consult the Course Equivalency Guide (CEG) on the AZTransfer website: http://www.aztransfer.com/home. Also, consult your CAC advisor and the bachelor’s degree program institution’s advisor for specific applicability of the transferable course to your specific academic goals or baccalaureate degree program.
Arizona General Education Curriculum (AGEC)
The Arizona General Education Curriculum (AGEC) icon indicates the course is approved to fulfill one or more AGE categories. The AGE curriculum provides students attending any Arizona public community college with the opportunity to build a general education curriculum that is transferable upon completion to another Arizona public community college or university. The AGE has three forms: the AGEA (35 credits), AGEC-B (35 credits) and AGEC-S (35-37 credits). Arizona community and tribal colleges are obligated to accept AGE coursework from another Arizona public community or tribal postsecondary institution. AGE requirements will be accepted and applied as defined by the source institution. CAC accepts AGE approved courses from Arizona colleges/universities and applies them toward CAC AGE requirements. The only exception is AGE course work where the "special requirements" are embedded (completed by a combination of coursework) as the requirement may not be complete in absence of a completed AGE. Application of AGE coursework containing embedded "special requirements" is up to the discretion of the receiving institution. The certified CAC AGE Certificate (35 credits) is transferable from one Arizona public community college to another Arizona public or tribal community college as well as from an Arizona public community college to an Arizona public university. In addition, the CAC AGE transfers as a block of 35 credits toward baccalaureate degrees among CAC articulation agreement institutions. See Articulation Agreement section in this Catalog for details.

AGEC Grandfather Clause
CAC accepts transferred general education courses toward AGE requirements, provided the courses were taken prior to Fall 1999 and the current course equivalent at CAC fulfills one or more AGE requirements. Students must provide evidence of fulfilling the Intensive Writing AGE requirement.

CAC AGE-Web
See AzTransfer AGE-Web for Central Arizona College’s AGE Course List and the AGE categories required at CAC: http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/1/wo/PzSkDrydEKg4qVxnyjhhW/M/4.0.45.2.1.1

Tech Prep/Programs of Study POS
Tech Prep courses are now called Programs of Study courses. Many POS courses apply to A.A.S. Degree requirements.

Cross Listed Courses
Courses indicated as cross listed with another course are courses that are identical in content. Students will only receive credit for one of the two courses. Consult an academic advisor to determine the best course to achieve your academic goal.

Dual Enrollment
The Dual Enrollment icon indicates an academic course that high school students may be able to take to begin work on a college credential. Not all the courses are available at every high school.
ACCOUNTING (ACC)

ACC100 Fundamentals of Accounting
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
The basics of accounting for a small business with emphasis on recording transactions, posting to the general ledger, preparing financial statements, recording payroll, accounting for inventory and accrual accounting. Prerequisite: RDG094.

ACC121 Income Tax Fundamentals
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Theory, rules and procedures used in preparing federal income tax returns for individuals, corporations and partnerships. Prerequisite: ACC100 or ACC201.

ACC201 Financial Accounting
3 Credits (3 Lectures) ACC 2201 R
Typically Offered: Fall, Spring and Summer
Theory and practice of accounting applicable to the accumulation, reporting and uses of financial information. Prerequisite: RDG094.

ACC202 Managerial Accounting
3 Credits (3 Lectures) ACC 2202
Typically Offered: Fall, Spring and Summer
Selection and analysis of accounting information for internal organization use by management. Prerequisite: ACC201.

ACC222 Payroll Accounting
3 Credits (3 Lectures)
Typically Offered: Spring
Functions and practical operation of payroll accounting, with examination of current payroll tax laws, methods of computing wages and salaries, timekeeping methods and microcomputer software for payroll systems. Prerequisites: ACC100 OR ACC201 R; CIS120 R OR CBA133A OR CBA113A.

ACC226 Accounting with QuickBooks Pro
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Practical application of accounting utilizing QuickBooks Pro. Topics covered will include the general ledger, accounts receivable, accounts payable, job costing, payroll and inventory. Prerequisite: ACC100 OR ACC201 R.

ACC227 Accounting with Peachtree Complete
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Practical application of accounting concepts utilizing all features of Peachtree Complete. Prerequisite: ACC100 OR ACC201 R.

ADMINISTRATION OF JUSTICE (AJS)

AJS101 Introduction to Administration of Justice
3 Credits (3 Lectures) AJS1101 POS R
Typically Offered: Fall, Spring and Summer
History and philosophy of the Criminal Justice System. Organization and jurisdiction of local, state and federal law enforcement, judicial and correctional systems. Career opportunities and qualifying requirements, terminology and constitutional precedence. Prerequisite: RDG094.

AJS110 Public Safety Dispatch Education and Training
3 Credits (3 Lectures)
Typically Offered: Consult CAC Class Schedule.
An introduction to the theories, methods and techniques of public safety dispatching for police, fire and EMS agencies to include actual scenario-based instruction and practice.

AJS122 Traffic Control
3 Credits (3 Lectures)
Typically Offered: Consult CAC Class Schedule.
Analysis of traffic control, fundamentals of traffic accident investigation and motor vehicle law, including Arizona laws.
AJS123 Ethics and the Administration of Justice
3 Credits (3 Lectures)  \( ^R \)
Typically Offered: Fall and Spring
Explore ethical issues in the justice system. Focus on ethics and the law, the police, the courts and corrections. Review ethical theory related to the administration of justice. Prerequisite: RDG094.

AJS124 Defense Tactics
3 Credits (2.75 Lectures, 1 Lab)
Typically Offered: Consult CAC Class Schedule.
Physical control of suspects, including handcuffing, search security, baton, come-alongs and defense tactics. Prerequisites: Certification of Good Health and CARLOTA cohort student.

AJS130 Firearms
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Consult CAC Class Schedule.
Firearm safety, marksmanship, combat shooting, and legal responsibilities. Prerequisite: CARLOTA cohort student.

AJS140 Communications in Law Enforcement
3.5 Credits (3 Lectures, 2 Labs)
Typically Offered: Consult CAC Class Schedule.
Use of modern technology in gathering and processing information, written reports and techniques of police radio use.

AJS209 Substantive Criminal Law
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Philosophy of legal sanctions and historical development from common law to modern American criminal law, classifications of crimes, elements of and parties to crimes, general definitions of crimes and common defense. Prerequisite: AJS101 or CARLOTA cohort student.

AJS210 Constitutional Law
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Focus on selected aspects of civil liberties and civil rights in the United States. Emphasis is on the Constitution and the United States Supreme Court cases that delineate the legal doctrines relevant to defining the Constitution's guarantees of liberty. Prerequisite: AJS101 or POS101.

AJS212 Juvenile Justice Procedures
3 Credits (3 Lectures)
Typically Offered: Fall
History and development of juvenile justice theories, procedures and institutions. Prerequisite: SOC100 or AJS101.

AJS222 Criminalistics
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Introduction to the scientific aspects of criminal investigation and the crime laboratory's role in the criminal justice system. Emphasis on the collection, preservation and transportation of evidence and the techniques of examining physical evidence to include modern criminalistic research developments. Prerequisite: AJS101.

AJS224 Police Administration
3 Credits (3 Lectures)
Typically Offered: Fall
Principles of administration, organization and management; responsibilities and interrelationships of administrative and line-and-staff services; and analysis of functional divisions of modern police and correctional operations. Prerequisite: AJS101.

AJS225 Criminology
3 Credits (3 Lectures)  \( ^I W \)
Typically Offered: Fall, Spring and Summer
Theories of criminality and the economic, social and psychological impact of crime, victimization and relationships between statistics and crime trends. Prerequisite: AJS101 or SOC100. Corequisite: ENG102.
AJS230 The Police Function
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Theories of procedures and methods of operation of public police emphasizing discretionary powers, with a survey of career opportunities and current trends in law enforcement. Prerequisite: AJS101 or CARLOTA cohort student.

AJS240 The Corrections Function
3 Credits (3 Lectures) POS
Typically Offered: Spring
History and development of correctional theories and institutions. Prerequisite: AJS101.

AJS260 Procedural Criminal Law
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Introduction to procedural criminal law; focusing on court holdings, procedural requirements, and effect on the daily operations of law enforcement. Prerequisite: AJS101.

AJS270 Community Relations
3 Credits (3 Lectures) IW
Typically Offered: Spring
Recognition and understanding of community problems; methods of coping with crisis situations, victimology, ethnic and minority cultures; and cooperating with personnel in community action programs and local police operations. Prerequisite: AJS101 or CARLOTA cohort student.

AJS275 Criminal Investigations
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
Theory of criminal investigation, crime scene procedures, case preparation, interviewing and basic investigative techniques. Prerequisite: AJS101 or CARLOTA cohort student.

AJS295 Internship
3 Credits (Internship)
Typically Offered: Spring
Internship in the Criminal Justice field to provide employment experience. May be taken two times for credit; may only use once for elective credit. Prerequisite: AJS101.

AGRICULTURE BUSINESS (AGB)

AGB121 Resource and Environmental Economics
3 Credits (3 Lectures)
Typically Offered: Spring
An introductory analysis of the agriculture economy dealing with the principles of economics and marketing of agriculture products.

AGB123 Agriculture Accounting
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Agriculture accounting principles and practices.

AGB124 Microcomputers in Agriculture
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Introduction to the operation and capabilities of microcomputers in agriculture applications. Simple programming, data analysis, graphical display, spreadsheets and word processing are included. Prerequisite: RDG094.

AGB127 Farm Business Management IA
5 Credits (2 Lectures, 9 Labs)
Typically Offered: Fall and Spring
Introduction to farm analysis and decision-making, including financial and physical records.

AGB128 Farm Business Management IB
5 Credits (2 Lectures, 9 Labs)
Typically Offered: Fall and Spring
Generally accepted accounting procedures ensuring accurate and timely farm business management information applied to the first fiscal cycle. Prerequisite: AGB127.

AGB130 Agricultural Leadership
1 Credit (1 Lecture) R
Typically Offered: Fall and Spring
Identification of agricultural leadership styles and roles; development of leadership techniques and skills required in working with organizations and youth groups, including communicating, guiding, evaluating and ethical considerations. May be taken two times for credit. Prerequisite: RDG094. Note: Fall semester course develops the November FFA Field Day; Spring semester course develops the February Field Day.
COURSE DESCRIPTIONS

AGB213 Introduction to Agricultural Commodity and Food Marketing
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer
An investigation of the organizational, institutional and economic principles that form the agricultural and food marketing systems in the United States. Applications of microeconomics, market performance and international trade analysis are included. Prerequisite: RDG094.

AGB225 Agriculture Business Analysis
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
Agricultural business analysis using accounting to determine profit and loss, financing the credit needs of an agriculture business, creating budgets and prioritization of enterprises.

AGB228 Farm Business Management IIA
5 Credits (2 Lectures, 9 Labs)  
Typically Offered: Fall and Spring
Refinement of accounting and analysis skills with use of first and second year records to provide material for comparative analysis, budgeting and tax planning.

AGB230 Farm Business Management IIIA
5 Credits (2 Lectures, 9 Labs)  
Typically Offered: Fall and Spring
Instruction and assistance required to properly evaluate and reorganize the farm business, focusing on farm accounting and analysis of aspects identified in the organizational plan.

AGB231 Farm Business Management IIIB
5 Credits (2 Lectures, 9 Labs)  
Typically Offered: Fall and Spring
Farm business management necessary to complete the third year of farm analysis, emphasizing comparative analysis and business reorganization. Prerequisite: AGB230.

AGB233 Farm Business Management Payroll
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring
Procedures to enable participants to understand and use payroll computer software in farm business. May be taken two times for credit. Note: Payroll accounting requirements span a full financial year.

AGB234 Agricultural Leadership Development
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
Characteristics of effective leaders, including leadership styles and strategies for the management and organization of youth groups in agriculture. Practice in leadership development techniques. Prerequisite: RDG094.

AGB235 Advanced Farm Business Management
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring
A seminar designed to provide educational support to assist in the selection of farm business management software updates. Emphasis is placed on update procedures and use of software enhancements. May be taken two times for credit. Prerequisite: Farm Business Management Certificate or equivalent.

AGRICULTURE SCIENCE (AGS)

AGS101 World of Plants
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Fall and Spring
The structure, function and use of plants in the living world and scientific experiences relating to the plant kingdom and the plant environment. Prerequisite: RDG094.

AGS104 Agricultural Environmental Science
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer
Science-based approaches to understanding the environmental concepts of ecosystems, population dynamics and agricultural sustainability. Prerequisite: RDG094.
AGS106 Entomology
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Fall and Spring
Identification, classification, control and management of insects and other land arthropods affecting humans and their environment. Prerequisite: RDG094.

AGS110 Agricultural Mechanics I
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer
Develop fundamental knowledge and skills related to production and urban agricultural industry, including operation and maintenance of mechanical hand tools, electrical wiring, plumbing and irrigation, arc, gas metal arc welding and oxy-fuel welding. Field trips required. Necessary safety equipment will be provided by the student.

AGS112 Natural Resources and Conservation
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
The conservation and multiple use of natural resources, including recreation, water, forestry, range, soils, wildlife, fossil and alternative fuels. Prerequisite: ENG101. Corequisite: ENG102.

AGS140 Agricultural Mechanics II
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer
Study of production and urban agricultural industry, including Global Positioning Systems, urban and production agricultural equipment, concrete construction, surveying, three-view drawings and bill of materials. Field trips required. Necessary safety equipment will be provided by the student. Prerequisite: AGS110 or instructor consent.

AGS195A Careers in Environmental Science
1 Credit (.5 Lecture, 2 Labs)  
Typically Offered: Fall, Spring and Summer
An introduction to the various careers and industries associated with the environmental science field. Students build industry network relationships. Field trip required. Corequisite: AGS110 or instructor consent.

AGS196 Agriculture Internship
1 Credit (1 Internship)  
Typically Offered: Fall, Spring and Summer
Students work in agriculture internship placements tailored to the students’ academic program, interests and skills. May be taken more than four times for credit. Prerequisite: RDG094 and instructor consent.

AGS204 Environmental Sustainability
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
Understanding the Earth’s environment and the important challenges facing humanity, including climate change, pollution, and loss of biodiversity and water shortages. Students must attend at least one local governmental environmental science forum. Prerequisite: RDG094.

AGS221 Soil Science
4 Credits (3 Lectures)  
Typically Offered: Fall and Spring
Fundamental principles of soil science, including the origin, nature and classification of soils; emphasizing the chemical, physical and biological properties in relation to growth; and nutrition of plants and non-plant uses of soils. Prerequisite: RDG094.

AGS235 Principles of Horticulture
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring
Principles and skills in the science, operations and management of field, orchard and ornamental horticultural plant propagation using seed, cutting, budding and grafting in propagating plants for greenhouses and outdoor nurseries. Prerequisites: AGS240, RDG094.

AGS240 Plant Biology
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Spring
A study of the origin, evolution, anatomy, function and ecology of land plants. Genetics, cellular structure, reproduction and the anatomy of monocot and dicot stems, roots, leaves, flowers and fruits are described. Includes aspects of plant physiology, photosynthesis, respiration and plant soil-water relationships. Prerequisite: RDG094.
AGS296 Agriculture Internship
3 Credit (3 Internships) R
Typically Offered: Fall, Spring and Summer

Students work in agriculture internship placements tailored to the students’ academic program, interests and skills. May be taken two times for credit. Prerequisite: RDG094 and instructor consent. Note: Students may serve as an intern for a local agricultural company more than one semester during their CAC enrollment.

ANIMAL SCIENCE (ANS)

ANS101 Animal Industry
3 Credits (2 Lectures, 3 Labs) R
Typically Offered: Fall

Fundamental principles of animal, dairy, equine and poultry science focusing on production, marketing and distribution. Prerequisite: RDG094.

ANS102 Horsemanship I
3 Credits (1 Lecture, 6 Labs)
Typically Offered: Fall and Spring

Fundamental knowledge and skill development in horse anatomy and function. Conformation and riding is emphasized in this course. Individual help is given in areas needed. The student must supply a horse and tack for this course.

ANS110 Horse Event Production
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring

Horse event production for future equine professionals including organizing shows, events or clinics related to the equine industry.

ANS111 Horseshoeing I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring

Fundamentals for the beginning horseshoer, including horse anatomy and physiology relative to the proper shoeing of horses.

ANS121 Equine Facility Management I
1 Credit (1 Lecture)
Typically Offered: Fall and Spring

This course is designed to educate students in safe and effective equine facilities management. Students boarding a horse in a CAC facility must sign up for the Equine Facility Management course.

ANS122 Equine Facilities Management II
1 Credit (1 Lecture)
Typically Offered: Fall and Spring

Students will plan, design and perform a cost analysis of a horse facility, paying attention to safety and ease of use. Students boarding a horse at Central Arizona College must sign up for this course.

ANS131 Training the Roping Horse I
3 Credits (1 Lecture, 6 Labs)
Typically Offered: Fall and Spring

Fundamentals of starting a horse in roping events including the many stages of roping, from starting the horse in the pen and finishing the horse out of a roping box. The emphasis is on correct horsemanship principals as well as physical and mental preparation of the horse and rider. The student must supply the horse and tack for this course. May be taken two times for credit.

ANS172 Introduction to Western Horsemanship
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall

An introduction to the basic theories of western horsemanship with an emphasis on correct seat, leg and hand positions. Course includes proper equine handling techniques. Students will ride in a schooling show environment using western tack. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

ANS195 Careers in Veterinary Science
1 Credit (1 Lecture)
Typically Offered: Fall

An introduction to the various careers and industries associated with the veterinary science field. Students build industry network relationships. Group field trip required. Recommended: RDG094.
ANS200 Introduction to Equine Science  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Introduction to equine sciences including basic structure and function of equine anatomy, disease prevention and treatment, common breeds and nutritional requirements of horses.  
Prerequisite: RDG094.

ANS202 Horsemanship II  
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring  
Advanced Horsemanship emphasizing correct horsemanship practices, stabling, training, healthcare and parasite control, horse anatomy and function, conformation and riding (cues, aids, gaits and maneuvers). The student must supply a horse and tack for this class. Prerequisite: ANS102.

ANS211 Advanced Horseshoeing  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
Advanced skills in shoeing horses to eliminate and/or correct lameness to the extent that the animal remains useful and pain free. Prerequisite: ANS111.

ANS213 Animal Genetics  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Principles of domestic animal genetics, including molecular, classical and population genetics. Prerequisite: BIO100 or higher.

ANS215 Anatomy and Physiology of Domestic Animals  
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
Functional anatomy and systemic physiology of domestic animals with emphasis on physiological systems of importance to animal production. Prerequisite: BIO100 or higher.

ANS216 Equine Anatomy and Physiology  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
Introduction to the structure and function of the equine. Includes cell structure, and anatomy and physiology of major systems including skeletal, muscular, circulatory and digestive systems. Prerequisite: ANS200.

ANS220 Artificial Insemination  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Spring  
Anatomy and physiology of reproduction, heat detection, semen handling, herd management and the techniques of artificial insemination.

ANS223 Training for Timed Events  
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring  
Fundamental concepts and basic horsemanship skills applied to training a timed event horse, including conformation and bloodlines, types and uses of equipment and training methods. Physical and mental conditioning of both horse and rider along with fundamentals needed to help the horse perform to its highest potential in a competition setting. May be taken three times for credit.

ANS226 Feeds and Feeding  
3 Credits (3 Lectures)  
Typically Offered: Fall  
Identification and preparation of feeds, digestion and utilization of various feed products, and computation of standard rations for livestock.

ANS231 Training the Roping Horse II  
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring  
Advanced training of the roping horse, both in the pen and from the roping box. Emphasis on correct horsemanship principles, as well as, physical and mental preparation of the horse and rider. The student must supply the horse and tack for this course. May be taken two times for credit. Prerequisite: ANS131 or instructor consent.

ICON LEGEND  
AGEC: Ⓞ  
Intensive Writing: IW  
 Programs of Study/Tech Prep: POS  
Reading Required: RDG094: Ⓞ  
SUN Course: ☀
# COURSE DESCRIPTIONS

## ANTHROPOLOGY (ASB)

### ASB101 Physical Anthropology and Archaeology: Bones, Stones and Human Evolution

3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Evidence and processes of human evolution and of culture change. Includes primates, fossil hominids and their tools, race, variation, heredity, environment and human biology, prehistoric culture and society. Field work activities may be required. Prerequisite: RDG094.

### ASB102 Cultural Anthropology

3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Principles and concepts of sociocultural anthropology and anthropological linguistics with illustrations from a variety of cultures around the world. Field work activities may be required. Prerequisite: RDG094.

### ASB201 Indians of the Southwest

3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Cultural geography and social institutions of contemporary Indian cultures of the American Southwest and their antecedents. Includes examining similarities and differences, gender roles, and the historic and contemporary relations of Southwestern Indian cultures and federal and state governments of Spain, Mexico and the U.S. Field work activities may be required. Prerequisite: RDG094.

## ARCHAEOLOGY (ARH)

### ARH200 Principles of Archaeology

3 Credits (3 Lectures)  
Typically Offered: Every other spring; consult CAC Class Schedule.  
History of archaeological research; survey of concepts, methods, and goals of archaeology as a subdiscipline of anthropology. Analysis and synthesis of archaeological data. Theories in archaeology, including theories of cultural evolution. Prerequisite: RDG094.

## ART (ART)

### ART100 Art Appreciation

3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Introduction to the history, vocabulary, materials and processes of art with an emphasis on painting, sculpture and architecture. Prerequisite: RDG094.

### ART101 Two-Dimensional Design

3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer  
A study of perception, emphasizing the elements and principles of design as a basis of all creative work in the visual arts with emphasis on two-dimensional media. Prerequisite: RDG094.

### ART102 Three-Dimensional Design

3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
A study of perception, emphasizing the elements and principles of design as a basis of all creative work in the visual arts, with emphasis on three-dimensional media. Prerequisite: RDG094.

### ART103 Beginning Jewelry and Metalwork

3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
Basic jewelry design and metalwork techniques for the beginner. Prerequisite: RDG094.
ART104 Advanced Jewelry and Metalwork
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Advanced jewelry design and metalwork techniques. May be taken more than four times for credit. Prerequisite: ART103.

ART105 Ceramics I
3 Credits (2 Lectures, 3 Labs) ❂ R
Typically Offered: Fall, Spring and Summer
An overview of hand building, wheel throwing, glazing, materials and concepts of ceramics as a foundation for further work in ceramic arts. Satisfactory/Unsatisfactory grading option available. Prerequisite: RDG094.

ART106 Ceramics II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced ceramic techniques including in-depth study of construction technique and/or surface treatment. May be taken up to four times for credit. Prerequisite: ART105.

ART107 Drawing I
3 Credits (2 Lectures, 3 Labs) ❂ ART 1111
Typically Offered: Fall, Spring and Summer
Introductory study of linear perspective, shading theory and composition using basic drawing media.

ART108 Intermediate Drawing
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Drawing with emphasis upon the creative use of different techniques as a means of expression. May be taken up to four times for credit. Prerequisite: ART107. Recommended: ART101.

ART109 Color Theory
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall
The study of color theory, color perception, psychology of color and their applications to visual design and composition.

ART201 Painting I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
An introduction to painting, techniques and subject matter with emphasis on skill building. Prerequisite: ART107. Recommended: ART101.

ART202 Painting II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer

ART203 Life Drawing
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
An introduction to drawing the human figure emphasizing form, structure and anatomy. May be taken up to four times for credit. Prerequisite: ART107.

ART204 Watercolor Painting
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
An introduction to the basic techniques of transparent watercolor with application of design and drawing principles in composition. May be taken up to four times for credit. Prerequisite: ART107. Recommended: ART101.

ART205 Intermediate Painting
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced projects in painting with emphasis on composition and personal stylistic development. May be taken up to four times for credit. Prerequisite: ART202.

ART206 Portrait Drawing
3 Credits (2 Lectures, 3 Labs) ❂
Typically Offered: Spring
Drawing the human figure with emphasis on the structure and anatomy of the face. May be taken up to four times for credit. Prerequisites: ART107, RDG094.
ART207 Art History I  
3 Credits (3 Lectures)  ART 1101  R
Typically Offered: Fall and Spring
A survey of the history of art from the Prehistoric Era through 1300 C.E. Prerequisite: RDG094.

ART208 Art History II  
3 Credits (3 Lectures)  ART 1102  R
Typically Offered: Fall and Spring
A survey of the history of art from 1300 CE to the present. Prerequisite: RDG094.

ART209 Visual Art, Music and Learning  
3 Credits (3 Lectures)  R
Typically Offered: Fall, Spring and Summer
An introduction to the effects of the arts on learning, student learning styles, visual culture and visual arts, and music theory and culture. Prerequisite: RDG094. Cross Listed: MHL209.

ART210 Ceramics Workshop  
2 Credits (2 Lectures)
Typically Offered: Summer
An introductory course in the technology, processes, techniques and aesthetics of ceramic art. Satisfactory/Unsatisfactory grading option is available. May be taken up to four times for credit. Prerequisite: ART105.

ART215 Printmaking  
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
An introduction to methods of producing fine art prints. May be taken up to four times for credit. Recommended: ART101, ART107 R.

ASTRONOMY (AST)  
AST101 Survey of Astronomy  
4 Credits (3 Lectures, 3 Labs)  R
Typically Offered: Fall and Spring
An introduction to the history of astronomy, use of astronomical instruments, celestial motion, space flight, planetary systems, structure and evolution of stars, galaxies and cosmology. Labs will include nighttime observing sessions. Prerequisites: RDG094, MAT092.

AUTOMOTIVE/DIESEL (AUT)  
AUT121 Auto Body Repairing and Refinishing I  
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Fall
An introduction to body repair techniques including surface preparation and painting procedures.

AUT122 Auto Body Repairing and Refinishing II  
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Fall and Spring
Emphasis on detailed body repair procedures and advanced painting techniques. Principles of wire feed welding, unibody construction and repair. Prerequisite: AUT121.

BIOLOGY (BIO)  
BIO090 Survey of Science for Success  
1 Credit (1 Lecture)  R
Typically Offered: Fall
An overview of various science disciplines, including biology, chemistry, environmental science, physical science, earth science and astronomy. Designed to help students see the various ways science is used in everyday life and to encourage students to pursue further courses in science. Satisfactory/Unsatisfactory grading option is available. Corequisite: RDG094.

ICON LEGEND
AGEC: Dual Enrollment:  IW
Intensive Writing: Programs of Study/Tech Prep:  POS
Reading Required: RDG094:  SUN Course:
BIO100 Biology Concepts
4 Credits (3 Lectures, 3 Labs) R
Typically Offered: Fall, Spring and Summer
Basic principles and concepts of biology. Exploration of methods of scientific inquiry and behavior of matter and energy in biological systems. Fieldtrips may be required. Prerequisite: RDG094.

BIO109 Natural History of the Southwest
4 Credits (3 Lectures, 3 Labs) R
Typically Offered: Fall and Spring
A study of the common plants and animals of the southwest, including identification, distribution, adaptations, behavior and ecology; including regional geography/climate. Introduction to basic field and laboratory techniques used in natural history studies with an emphasis on the Sonoran Desert. Field trips required at student’s expense. Prerequisite: RDG094.

BIO156 Human Biology for Allied Health
4 Credits (3 Lectures, 3 Labs) R
Typically Offered: Fall, Spring and Summer
An introductory course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, genetics and microbiology. Prerequisite: RDG094.

BIO160 Introduction to Human Anatomy and Physiology
4 Credits (3 Lectures, 3 Labs) R
Typically Offered: Fall, Spring and Summer
An introduction to and study of the structure and function of the human body. Structural organization, homeostasis, control mechanisms and the major organ systems of the body will be emphasized. Prerequisite: RDG094.

BIO181 General Biology I
4 Credits (3 Lectures, 3 Labs) R BIO1181 R
Typically Offered: Fall, Spring and Summer
Biological principles of structure and function at the molecular and cellular levels, and processes of scientific inquiry. CHM130 or one year of high school chemistry is recommended. Field trips may be required at student expense. Prerequisite: RDG094.

BIO182 General Biology II
4 Credits (3 Lectures, 3 Labs) R BIO1182 R
Typically Offered: Fall and Spring
Basic evolution and biological diversity, ecology, plant form and function, and animal form and function are explored through processes of scientific inquiry. Field trips may be required at student expense. Prerequisite: BIO181.

BIO201 Human Anatomy – Physiology I
4 Credits (3 Lectures, 3 Labs) R BIO2201 R
Typically Offered: Fall, Spring and Summer
Study of structure and function of the human body. Topics include a general introduction and basic orientation of the human body, basic chemistry for biology, cells, tissues, integumentary system, skeletal system, muscular system, nervous system and the special senses. Prerequisites: RDG094 and (BIO156 or BIO181 or one year of high school biology with a grade of “C” or better).

BIO202 Human Anatomy – Physiology II
4 Credits (3 Lectures, 3 Labs) R BIO2202 R
Typically Offered: Fall, Spring and Summer
Continuation of structure and function of the human body. Topics include endocrine, blood, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, acid-base and fluid/electrolyte balance, pregnancy and human development and human genetics. Prerequisites: BIO201 R RDG094.

BIO205 Microbiology
4 Credits (3 Lectures, 3 Labs) R BIO2205 R
Typically Offered: Fall, Spring and Summer
Structure and function of micro-organisms and the role they play in the environment and human disease, with emphasis on the medical importance of microbes. Laboratory work includes the handling and identification of micro-organisms. Prerequisites: RDG094 and (BIO156 or BIO181 or one year of high school biology with a grade of “C” or better; CHM130 R or higher with laboratory or one year of high school chemistry with a grade of “C” or better).
COURSE DESCRIPTIONS

BIO206 Biotechnology Instrumentation I
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Principles and methodologies of recombinant DNA technology, including preparation of solutions and growth media in a laboratory setting and genetic analyses. Prerequisite: BIO181. Recommended: Completion of BIO181 with a grade of "C" or better.

BIO207 Biotechnology Instrumentation II
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Principles and methodologies of protein expression, isolation, identification and purification, including immunological and cell culture techniques. Prerequisite: BIO206. Recommended: Completion of BIO206 with a grade of "C" or better.

BIO240 General Genetics
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Intensive introduction to the field of genetics including historical perspective, Mendelian insights and patterns of inheritance, exceptions to expected Mendelian ratios, quantitative genetics, non-Mendelian inheritance, pedigree analysis, molecular levels of gene expression and genetic control of metabolic pathways. This course also includes analytic dissection of molecular mechanisms behind DNA replication, transcription, translation and gene regulation in both prokaryotes and eukaryotes, population genetics, genetics of behavior and genetics of evolution and speciation. Prerequisite: BIO181. Recommended: Completion of BIO181 with a grade of "C" or better.

BIO299 Introduction to Co-Op: Biotechnology Internship
1 Credit (1 Internship - 45 hours)
Typically Offered: Fall, Spring and Summer
Students who wish to gain more experience in the field of biotechnology should be encouraged to do so by receiving credit for their work, especially in the case of long-term internship placement. Students may complete an internship each semester including summers for a total of six semesters. May be taken six times for credit. Prerequisite: BIO206. Recommended: Completion of BIO206 with a grade of "C" or better.

BUSINESS

BUS100 Introduction to Business
3 Credits (3 Lectures) POS R
Typically Offered: Fall, Spring and Summer
Business administration trends, technology, communication, ethics, economics, business organization and ownership including entrepreneurship, management and production, marketing, finances, laws and regulations and human resources management. Prerequisite: RDG094.

BUS101 Business Mathematics
3 Credits (3 Lectures) POS R
Typically Offered: Fall and Spring
A study of mathematical computations as applied in various business transactions including discounts, interest, payroll, bank reconciliation and basic business statistics. Prerequisites: MAT082 or higher; RDG094.

BUS120 Personal Money Management
3 Credits (3 Lectures) POS R
Typically Offered: Fall
A study of consumer decision-making in a technological society where individuals have limited time and income, including planning and budgeting for food, shelter, transportation, healthcare, insurance, savings, investments, debt and taxes. Prerequisite: RDG094.

BUS122 Small Business Management
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
Factors in planning, owning and managing a small business with use of case materials to develop entrepreneurship and managerial/marketing skills. Prerequisite: RDG094.

BUS123 Business Relations
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Interpersonal skills necessary for improving supervision and leadership in the workplace through a basic understanding of interactions among people. Prerequisite: RDG094.

ICON LEGEND
AGEC: Dual Enrollment: Programs of Study/Tech Prep: POS
Intensive Writing: IW SUN Course: R
Reading Required: RDG094: R

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BUS180 Introduction to Marketing
3 Credits (3 Lectures) POS

Typically Offered: Fall and Spring

An introduction to marketing, including product, principles, practices and total marketing process planning and analysis. Prerequisite: RDG094.

BUS190 Principles of Management and Leadership
3 Credits (3 Lectures)

Typically Offered: Fall and Spring

A comparative examination of classic and contemporary theories of management and leadership to include the social, ethical, legal and team-building implications of workplace issues. Prerequisite: RDG094.

BUS201 Legal Environment of Business
3 Credits (3 Lectures)

Typically Offered: Fall and Spring

An examination of the legal framework governing rules of conduct among businesses and the legal implications of establishing business policy. Prerequisite: RDG094.

BUS207 Business Communications
3 Credits (3 Lectures)

Typically Offered: Fall and Spring

Written and oral communication in organizations with emphasis on writing business letters, memos and reports; utilizing electronic and social media effectively in a business environment; speaking and listening skills; communication theory, critical analysis of appropriate writing; and communication in various business situations. Prerequisite ENG101.

BUS208 Business Statistics
3 Credits (3 Lectures)

Typically Offered: Fall and Spring

A study of business applications using descriptive and inferential statistics, measurement of relationships and statistical process control management techniques. Prerequisites: RDG094; MAT151; (CIS120 or instructor consent).

BUS250 Planning the Entrepreneurial Venture
3 Credits (3 Lectures)

Typically Offered: Fall and Spring

Research, develop and write detailed start-up business plans to create a successful business. Note: this course is a combination of BUS250A, BUS250B, BUS250C, and BUS250D.

BUS250A Entrepreneurship - Introduction
.75 Credit (.75 Lecture)

Typically Offered: Consult CAC Class Schedule.

Investigate business ideas, examine traits of successful entrepreneurs, assess business opportunities and feasibility, and evaluate legal structures and management infrastructure.

BUS250B Entrepreneurship - Market Planning
.75 Credit (.75 Lecture)

Typically Offered: Consult CAC Class Schedule.

Conduct research on a chosen product/service in relation to the industry, competition and other market considerations.

BUS250C Entrepreneurship - Financial Planning
.75 Credits (.75 Lecture)

Typically Offered: Consult CAC Class Schedule.

Project the financial situation of a business concept including needed start-up funds, pricing strategies and sources of financing using break-even analysis, basic cash accounting systems and financial ratios.

BUS250D Entrepreneurship – The Business Plan
.75 Credits (.75 Lecture)

Typically Offered: Consult CAC Class Schedule.

Finalizing the business planning activities required for the successful launching of a new venture.

ICON LEGEND

AGEC: Dual Enrollment:
Intensive Writing: Programs of Study/Tech Prep:
Reading Required: RDG094:
SUN Course:
BUS260 Applied Business Seminar
3 Credits (3 Lectures)
Typically Offered: Spring
A capstone course for business students completing degree requirements. Students develop career goals, interact and apply their skills as a team to research business problems and critique actual business situations within the community. Open to students who have successfully completed a minimum of 36 college credit hours, offered via ITV, face to face evening course during the Spring Semester only. Prerequisites: CIS120 and successful completion of 36 college credit hours.

CHEMISTRY (CHM)

CHM130 Fundamental Chemistry
4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 1130
Typically Offered: Fall, Spring and Summer
The basic aspects of chemistry, including matter, energy, measurement, atoms, molecules, ions, chemical bonding, chemical arithmetic and nuclear reactions. Includes one credit of in-person labs. Student will receive credit toward their degree for only CHM 130 or CHM 151, but not both. Prerequisites: MAT092, RDG094.

CHM138 Chemistry for Allied Health
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Introduction to general, organic and biological chemistry for health. Includes measurements, atomic structure, bonding, nomenclature, states of matter, solutions, reactions, hydrocarbons, functional groups, carbohydrates, lipids, proteins, enzymes and metabolic pathways. Prerequisites: BUS101 or MAT092 OR MAT101 or higher; RDG094.

CHM138LL Chemistry for Allied Health Lab
1 Credit (2 Labs, 1 Recitation - 45 hours total)
Typically Offered: Fall and Spring
Introduction to laboratory skills and activities related to general, organic and biological chemistry for allied health. Prerequisites: RDG094 and (BUS101 or MAT092 or MAT101 or higher). Corequisite: CHM138.

CHM151 General Chemistry I
4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 1151
Typically Offered: Fall and Spring
Chemistry topics including matter, energy, measurement, atoms, ions, molecules, chemical formulas and equations, chemical arithmetic, thermochemistry, states of matter, chemical bonding and solutions are covered. Includes one credit of in-person labs. Student will receive credit toward their degree for only CHM 130 or CHM 151, but not both. Prerequisites: RDG094; MAT121 or MAT122; CHM130 or CHM138 or one year of high school chemistry with a grade of "C" or better.

CHM152 General Chemistry II
4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 1152
Typically Offered: Fall and Spring
Topics such as chemical kinetics, spontaneity of chemical change, chemical equilibrium, precipitation reactions, acid and base equilibria, complex ions, oxidation-reduction reactions and nuclear reactions are covered. Includes one credit of in-person labs. Prerequisites: CHM151.

CHM235 General Organic Chemistry I
4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 2235
Typically Offered: Fall
A comprehensive study of organic chemistry with emphasis on reactivity and synthesis. Topics include the areas of structure and bonding, molecular properties, alkanes, cycloalkanes, stereochemistry, mechanisms for organic reactions, alkenes, alkyines, alkyl halides, conjugated dienes and alcohols. In-person lab experience includes laboratory techniques and practice with emphasis on separations, purification, synthesis, halide reactivity and spectroscopic identification of organic structures. Prerequisite: CHM152.

CHM236 General Organic Chemistry II
4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 2236
Typically Offered: Spring
A continuation of CHM235, CHM236 explores the general principles of organic chemistry with advanced continued emphasis on reactivity and synthesis. Topics covered are ethers and epoxies, aldehydes and ketones, carboxylic acids and their derivatives, carbohydrates, lipids, amines, amino acids, polymers and aromatic compounds. In-person lab experience includes additional techniques in organic chemistry; preparation, separation and identification of organic compounds, including polymers, benzoic acid, soaps and amines. Prerequisite: CHM235.
CHINESE (CHI)

CHI101 Elementary Chinese
5 Credits (4 Lectures, 1 Recitation)
Typically Offered: Fall
Modern spoken and written Chinese (Mandarin) for non-native speakers. Introduction to proper pronunciation, grammar, beginning conversation and the development of reading and writing skills. Survey of cultural aspects of the Mandarin Chinese language.

CHI102 Elementary Chinese II
5 Credits (4 Lectures, 1 Recitation)
Typically Offered: Spring
A continuation of CHI101 emphasizing modern spoken and written Mandarin Chinese for non-native speakers. Continued development of proper pronunciation, grammar, conversation and reading and writing skills. Survey of cultural norms, beliefs and traditions from areas where Mandarin Chinese is spoken. Prerequisite: CHI101.

CIVIL TECHNOLOGY (CET)

CET101 Introduction to Surveying for Heavy Equipment Operators
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Theory and application of plane surveying, including horizontal and vertical measurements, differential leveling, topographic mapping and ground safety.

CET125 Introduction to Earthmoving Methods and Operations
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Introduction to the process of earthmoving, including capabilities, limitations, uses and maintenance of heavy equipment employed in heavy construction and mining. Use mathematical formulas and calculations as well as computer software to determine owner costs and equipment requirements.

CET221 Basic Surveying and Grade Staking
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Fall and Spring
Theory and application of plane surveying, including horizontal and vertical measurements, differential leveling, topographic mapping and construction staking. Grade staking skills including percent, ratio, stake reading, hubs and lath, grade transfers, offsets, laser use and ground safety.

COMMUNICATIONS (COM)

COM100 Fundamentals of Human Communication
3 Credits (3 Lectures) COM 1100
Typically Offered: Fall, Spring and Summer
Concepts of the human communication process. Basic theory and practical skills in small group, interpersonal and public contexts. Prerequisites: ENG100, RDG094.

COM101 Interpersonal Communication
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Theoretical and practical examination of communication skills in interpersonal settings. Emphasis on the factors and skills necessary for the development of interpersonal communication competence. Prerequisite: RDG094.

COM202 Introduction to Group Communication
3 Credits (3 Lectures) COM 1102
Typically Offered: Fall and Spring
Principles and practices of effective communication in the small group setting, including problem solving and decision making processes, skill development for participation, leadership and teamwork. Prerequisite: RDG094.

COM206 Public Speaking
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Principles and practice of public speaking, with special attention given to the selection, organization, and presentation of material based upon audience analysis as well as acquisition of confidence and speaking poise. Prerequisites: ENG101, RDG094.
COM263 Intercultural Communication  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Basic concepts, principles, and skills for improving communication between persons from different minority, racial, ethnic and cultural backgrounds. **Prerequisite:** RDG094.

COURSE DESCRIPTIONS

COMPUTER BUSINESS APPLICATIONS (CBA)

CBA102A Workshop for MS Word – Introduction  
.5 Credit (.5 Lecture)  
Typically Offered: Workshop offered as needed.  
Introduction to MS Office Word using basic skills needed to create, format and edit business documents. **Prerequisites:** Basic Windows and file management knowledge.

CBA110A Computers for Beginners  
1 Credit (1 Lecture)  
Typically Offered: Workshop offered as needed.  
Introduction to microcomputers, Microsoft Windows operating system, Microsoft programs and accessories and Internet Explorer.

CBA110C MS Windows – Basic  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Introduction to Microsoft Windows operating system, programs, and file management.

CBA111A Internet Explorer  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
An introduction to the Internet using Internet Explorer. **Prerequisites:** Basic Windows and file management knowledge.

CBA112A MS Word – Basic  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Introduction to Microsoft Word covering the basics of creating business documents. **Recommended:** Basic Windows and file management knowledge.

CBA112B MS Word – Intermediate  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Create multi-paged documents and web pages with enhanced styles, charts and lists in MS Word. **Prerequisites:** CBA112A or instructor consent. **Recommended:** Basic Windows and file management knowledge.

CBA112C MS Word – Advanced  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Build advanced business documents that include macros, navigation, hyperlinks and forms in MS Word. **Prerequisites:** CBA112B or instructor consent. **Recommended:** Knowledge of computer basics and file management.

CBA113A MS Excel – Basic  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Introduction to MS Excel covering basic spreadsheets and charts. **Recommended:** Basic Windows and file management knowledge.

CBA113B MS Excel – Intermediate  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Use MS Office Excel financial functions, database tools and enhanced, specialty charts to process and display data. **Prerequisites:** CBA113A or instructor consent.

CBA113C MS Excel – Advanced  
1 Credit (3 Labs)  
Typically Offered: Open Entry/Closed Exit  
Use Data analysis, PivotTables and Macros in MS Excel to solve business problems. **Recommended:** File management and Operating system knowledge. **Prerequisite:** CBA113B or instructor consent.
| COURSE DESCRIPTIONS |

**CBA114A MS Access – Basic**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Introduction to MS Access and database basics. **Prerequisites:** Basic Windows and file management knowledge.

**CBA114B MS Access – Intermediate**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Analyze database designs; enhance queries, forms and reports; and create subforms and subreports in MS Access. **Prerequisite:** CBA114A.

**CBA114C MS Access – Advanced**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Create advanced queries, reports, macros, and modules and manage a database and its objects in MS Access. **Prerequisite:** CBA114B.

**CBA116A MS PowerPoint – Basic**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Introduction to creating, editing and presenting basic presentations in PowerPoint. **Prerequisites:** Basic Window and file management knowledge.

**CBA116B MS PowerPoint – Advanced**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Professional delivery of presentations, advanced graphics, tables, charts and templates. **Prerequisite:** CBA116A.

**CBA117A MS Publisher – Basic**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Create simple publications using MS Publisher. **Prerequisites:** Basic Windows and file management knowledge.

**CBA117B MS Publisher – Intermediate**  
1 Credit (3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Create customized publications, business forms, tables and web pages using MS Publisher. **Prerequisite:** CBA117A.

**CBA118 MS Outlook**  
1 Credit (1 Lecture) POS  
Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit  
Using Microsoft Outlook to send, receive and organize email, create and organize contacts, and schedule appointments and tasks. **Prerequisites:** Basic Windows and file management knowledge.

**CBA122A MS Word – Module 1**  
2 Credits (1 Lecture, 3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Basic features of Microsoft Word necessary to create business and personal documents. **Prerequisites:** Basic Windows and file management knowledge.

**CBA122B MS Word – Module 2**  
2 Credits (1 Lecture, 3 Labs) POS  
Typically Offered: Open Entry/Closed Exit  
Advanced features of Microsoft Word for collaboration, productivity, desktop and web publishing and creating forms and macros. **Prerequisite:** CBA122A.

**CBA133A Spreadsheet Applications in Excel**  
3 Credits (2 Lectures, 3 Labs) POS  
Typically Offered: Fall and Spring  
Create, format, and print both structured and “what-if” spreadsheets using formulas and functions, charting and analysis. Skills learned will cover the Core Level skills for Microsoft Certified Application Specialist (MCAS): Microsoft Office Excel 2007. **Prerequisites:** Basic Windows and file management knowledge; BUS101 OR MAT092.

**CBA133B Advanced Spreadsheet Applications in Excel**  
3 Credits (2 Lectures, 3 Labs) POS  
Typically Offered: Spring  
Use of advanced features of MS Excel to import and export data, use templates, generate reports, use macros, audit a worksheet and use analysis tools. **Prerequisite:** CBA133A.

**ICON LEGEND**

- AGEC: 🏛
- Intensive Writing: IW
- Programs of Study/Tech Prep: POS
- Reading Required: RDG094: ☐
- SUN Course: ☈

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CBA134A Database Management in Access
3 Credits (2 Lectures, 3 Labs)
Typically: Fall
Offered: 
Design and create relational databases. Query, report and produce forms on the data and publish to the Web. Skills learned will cover the Core Level skills for Microsoft Certified Application Specialist (MCAS): Microsoft Office Access 2007. Prerequisites: Basic Windows and file management knowledge.

CBA134B Advanced Database Management in Access
3 Credits (2.75 Lectures, 1 Lab)
Typically: Spring
Offered: 
Use of advanced features of software to customize a database, do advanced queries and reports, automate tasks and prepare supporting documentation. Prerequisite: CBA134A.

CBA210 Web Development Tools
3 Credits (2 Lectures, 3 Labs)
Typically: Spring
Offered: 
Theory, design and Web construction covering: information architecture, Web project management, scenario development, performance evaluations, third-generation Websites and browser incompatibility. Create and manage Websites using current tools such as Dreamweaver, Flash, Dynamic HTML and various multimedia and standardized CSS. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS120.

CBA211 JavaScript Programming
3 Credits (2 Lectures, 3 Labs)
Typically: Fall
Offered: 
Design client-side, platform-independent solutions using the JavaScript language; covering JavaScript programs, JavaScript object model, control program flow, validate forms, animate images, target frames and cookies. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120. CBA210.

CBA212 Adobe Flash Animation
3 Credits (2 Lectures, 3 Labs)
Typically: Fall
Offered: 
Production of high impact web animation, such as animated logo, navigation controls, long-form animation and web applications. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120. CBA210.

CIS110 Fundamentals of Computer Literacy
3 Credits (2 Lectures, 3 Labs) POS
Typically: Fall, Spring and Summer
Offered: 
Introduction to microcomputer technology, including terminology, software applications, operating systems, tools, basic set up and maintenance. Also includes Internet searches, and evaluation of websites' validity and reliability of information. Use Microsoft (MS) Word, MS Excel, MS Access and MS PowerPoint to analyze data, solve problems, and present solutions. Not designed for CIS degree or CIS Certificate seekers. Prerequisite RDG091.

CIS111 Introduction to the Internet
2 Credits (2 Lectures)
Typically: Fall and Summer
Offered: 
An introduction to the structure, tools and terminology of the Internet relating to web browsers, email, search engines, communications, security and e-commerce.

CIS112 Web Page Design Fundamentals
3 Credits (2 Lectures, 3 Labs)
Typically: Fall
Offered: 
Design and build web pages using HTML/XHTML and cascading style sheets.

CIS120 Survey of Computer Information Systems
3 Credits (2 Lectures, 3 Labs) C BA120
Typically: Fall, Spring and Summer
Offered: 
Survey of computer information systems, fundamental computer concepts, programming techniques, networking and emerging technologies. Hands-on experience with Microsoft Office application software with an emphasis on database and spreadsheets for problem solving. Prerequisite: RDG094.

CIS121 Microcomputer Operating System Fundamentals
3 Credits (2 Lectures, 3 Labs) R
Typically: Fall and Spring
Offered: 
Installations, administrations, upgrades, configuration and diagnostics of most recent microcomputer operating systems. Registry and Command-line techniques to optimize and customize a microcomputer operating system. May lead to Microsoft Certification. Prerequisite: RDG094.
CIS123 Introduction to Programming  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
Introduction to structured programming techniques and various logic tools including Flowcharting, pseudocode and other tools that represent algorithms. Problem analysis is based on the input/process/output cycle using appropriate case studies. Prerequisite: CIS120.

CIS129 Database Fundamentals  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Workshop offered as needed.  
Consult CAC Class Schedule.  
Fundamentals of relational database design, implementation and management, including referential integrity, concurrency, data validity, entity-relationships, Structured Query Language and database normalization. Prerequisite: CIS120.

CIS130 Networking Essentials  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall  
Introduction to networking principles. Topics include: seven-layered Open Systems Interconnection (OSI) Model of networking, physical and logical network topologies, networking protocols, network services, network fault tolerance and hardware/software devices used in a network. May lead to Network+ Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS121.

CIS135 Principles of Telephony and Telecommunications  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
The history of telecommunications and telephony technologies, including the underlying electronics, transmission media, voice, wireless, data communication solution functions and features. This course also covers wide area connectivity, Internet-enabled communications, telephony network management, policies and contracts. Prerequisite: CIS120.

CIS150 Windows Server  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
A study of server network operating systems including Active Directory, security policy, group policies, Internet Information Server (IIS), configure Domain Name Services (DNS), file and print services and building trust relationship between servers. Uses the most current version of the software. May lead to Microsoft Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120, CIS121.

CIS152 Network Infrastructure  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Spring  
Windows 2008 networking, naming services, connectivity and security services, managing IP routing, remote access, IP security, network address translation and virtual private networking. May lead to Microsoft Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS150.

CIS153 Network Security  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Spring  
Identify security risks and plan and design Windows 2008 security solutions by securing network resources, services, communications, remote access users and designing secure access to the Internet. May lead to Security+ Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS152.

CIS157 Computer Forensics and Investigation  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
Introduction to the acquisition, authentication, reconstruction, examination and analysis of data stored on electronic media. Topics include: ethics, rules of evidence, hardware and software tools, various operating systems, forensic lab setup and the investigational process. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120, CIS121.

CIS181 C#.NET  
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Fall  
Object-oriented programming language to create visual applications for Windows, MS Office, the web, controls and more. Created to work within the .NET framework. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS123.
CIS213 Linux Server
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall
The migration of other networks into Microsoft networks and the basics of networking using Linux operating systems. Focus on connecting different network operating systems and migration of users, data and security policies from one network to another. May lead to Linux Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS150.

CIS214 Application Development in Excel
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall
Application development in Microsoft Excel focusing on the programming behind developing detailed spreadsheet applications with games. Content includes Visual Basic for Applications (VBA) fundamentals, an enhanced review of Macros, XML and Excel objects. Satisfactory/Unsatisfactory grading option available. Prerequisites: CIS123 OR (CIS120 AND CBA133A). Recommended: CBA134A recommended for programming students.

CIS215 CISCO Routers
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
CISCO routers installation, setup and configuration. Various routing protocols such as BGP, EBGP, OSPF, and IGP will be used to configure and troubleshoot routers. May lead to CISCO Certified System Administrator Certification. Prerequisite: CIS150.

CIS216 Java Programming
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Spring
Thorough coverage of class construction, inheritance, Applets Exception Handling, String Buffer class and Swing object-oriented techniques. Course is also appropriate for those building on experiences in another programming language. May lead to Sun Program Developer Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS123.

CIS217 Application Development in Access
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
Applications development in Microsoft Access focusing on the programming behind developing database applications, including Visual Basic for Applications (VBA) fundamentals, Macros, Structured Query Language (SQL) and data source connectivity using ADO (ActiveX Data Objects). The course also covers an enhanced review of tables, queries, forms and reports. Satisfactory/Unsatisfactory grading option is available. Prerequisites: (CIS120 AND CIS123) OR (CIS120 AND CBA134A). Recommended: CBA134A recommended for programming students.

CIS218 C++ Programming
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Spring
Comprehensive coverage of C++ programming and data structure topics through a problem-solving approach. May lead to IBM Developer Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS123.

CIS219 Exchange Server
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall
Exchange messaging and collaboration platform that provides e-mail, calendaring, instant messaging, chat and conferencing. May lead to Microsoft Certification. Uses the most current version of the software. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS152.

CIS220 Security for Wireless Networks
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall
Identify security risks, plan and design wireless security solutions based on security models (transitional, enterprise, personal) and security policies - acceptable use policy, password management policy, public access network use policy and virtual private network (VPN) policy. Discuss authentication, encryption, passive discovery, active attacks, monitoring and maintenance. Supports preparation for Certification Wireless Service Providers (CWSP) certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS153.
**CIS233 Web Application Development Using PHP**  
3 Credits (2 Lectures, 3 Labs)  
**Typically Offered:** Spring  
A cutting edge Web development dedicated to covering the latest in emerging Internet and Web technologies. Design and maintain interactive and dynamic Web applications with the server-based scripting language PHP/MySQL. **Prerequisites:** CIS123, CIS150.

**CIS235 Oracle Forms and Reports**  
3 Credits (2 Lectures, 3 Labs)  
**Typically Offered:** Workshop offered as needed.  
**Consult CAC Class Schedule.**  
The tools and utilities used for information gathering and management, including forms, reports, database mining, data warehousing, database performance monitoring and more. **Prerequisite:** CIS129.

**CIS237 Oracle Administration**  
3 Credits (2 Lectures, 3 Labs)  
**Typically Offered:** Workshop offered as needed.  
**Consult CAC Class Schedule.**  
Internal structures and interactions of an Oracle database with emphasis on managing database capabilities in an effective, efficient manner, including SQL, database tuning, security, backup and recovery. Uses the most current version of the software. **Prerequisite:** CIS129.

**COMMUNITY PUBLIC HEALTH (CPH)**

**CPH100 Introduction to Public Health**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring and Summer  
Introduction to the varied disciplines of public health and applications of public health including analytical methods, biomedical basis, social and behavioral factors, environmental issues, medical care and the future of public health. **Prerequisites:** RDG094 and High School Diploma or equivalent.

**CPH178 Personal Health and Community Wellness**  
3 Credits (3 Lectures)  
**Typically Offered:** Consult CAC Class Schedule  
Analyze basic personal and community health problems as well as long-term benefits and strategies for maintaining a high level of wellness for living in today's world. Use current scientific information to promote individual and community health. **Prerequisites:** CPH100.

**CPH296 Public Health Internship**  
2 Credits (2 Internships - 90 hours)  
**Typically Offered:** Fall and Spring  
Evaluate real life situations in the community public health sector and the diverse roles and responsibilities of various public health officials and employees. Students will observe public health professionals applying ethics, public policy principles and best practices in daily operations and special case scenarios. Satisfactory/Unsatisfactory grading option is available. **Prerequisites:** CPH100 and CPH178.  
**Recommendations:** Good communication skills and an interest in Public Health.
COUNSELING/PERSONAL DEVELOPMENT (CPD)

CPD101 Orientation to Student Development
1 Credit (1 Lecture)
Typically Offered: Summer
Exploration of campus, college, academic resources for student success, and development of the characteristics and strategies of lifelong learning. Satisfactory/Unsatisfactory grading option is available. Recommended for students in the first-semester of college or transferring from another institution.

CPD110 Orientation to College
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Exploration of campus, college and academic resources for student success and development of the characteristics and strategies of lifelong learning. Includes career exploration and career planning.

CPD120 Career Awareness
2 Credits (2 Lectures)
Typically Offered: Consult CAC Class Schedule.
Designed to assist students in career exploration through an awareness of self and educational planning. Includes topics such as current occupational trends, personal/vocational skills and interests and career planning. Satisfactory/Unsatisfactory grading option is available. Corequisite: RDG094.

CPD125 Portfolio of Prior Learning
2 Credits (2 Lectures)
Typically Offered: Consult CAC Class Schedule.
An introduction to the concepts of experiential learning. Assist students with identifying and evaluating documentation of prior training and experiential learning outcomes applicable to degree requirements and to their career goals.

CPD164 Research Skills in the Digital Age
1 Credit (1 Lecture)
Typically Offered: Consult CAC Class Schedule.
Research strategies and how to incorporate them into the writing process. Students will learn about the types of information resources, the strategies for effectively using them and how to evaluate information for credibility. The course will also focus on the legal and ethical use of information, including guidelines for citing resources. Prerequisites: RDG094 and basic computer skills.

CPD170 Transfer Preparation
2 Credits (2 Lectures)
Typically Offered: Consult CAC Class Schedule.
Students will obtain knowledge and develop a plan to prepare for a successful transition to a university. The course includes selecting a degree/major, introduction to transfer resources, development of a personal transfer plan and general transition planning.

CPD220 Student Success Capstone
3 Credits (3 Lectures)
Typically Offered: Consult CAC Class Schedule.
This course serves as the capstone for CPD110 whereby the coordinated academic, personal and professional development efforts contained in the community college experience are made evident by means of the content within an individual student e-Portfolio. Students, with guidance, create an exemplary e-portfolio demonstrating their skills, knowledge and abilities upon graduation with a credential. Prerequisite: CPD110.

CULINARY ARTS (CUL)

CUL105 Food Safety Foundations
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Applied course in food safety and sanitation to identify and analyze the factors that cause foodborne illnesses through the study of proper purchasing, preparation, handling and storage. Prerequisite: RDG094.
**CUL108 Culinary Boot Camp**  
1 Credit (.75 Lecture, 1 Lab)  
Typically Offered: Fall and Spring  

Designed for the home cook or culinary apprentice, Culinary Boot Camp features the basics of cooking, including kitchen terms, knife skills and cooking techniques such as sauté, roast, broil and braise. Learn how to read and follow a recipe, sample and identify an array of spices, herbs, grains, vegetables and meats and plan and cook delicious meals. *May be taken three times for credit.*

**CUL110 Asian Cuisine**  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  

Discover the unique flavors, ingredients and culinary traditions of Asian cuisine through this hands-on class. Appreciate the differences between Chinese, Japanese, Thai and Vietnamese cooking ingredients and techniques. Learn to make your favorite Asian appetizers, soups, entrees and desserts.

**CUL112 Italian Cuisine**  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  

Discover the unique flavors, ingredients and culinary traditions of Italian cuisine through this hands-on class. Learn to make your favorite Italian appetizers, soups, entrees, pasta, bread, salads and desserts.

**CUL114 Mexican and Latin American Cuisine**  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  

Discover the unique flavors, ingredients and culinary traditions of Mexico and other Latin American countries through this hands-on class. Learn to make some of your favorite appetizers, soups, entrees, salads, breads and desserts.

**CUL121 Culinary Concepts**  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  

Development of knife skills and the principles and techniques of various cooking methods applied to a range of cuisines, from basic cooking to ethnic and specialty foods. Specialty topics will vary: presentation will be a combination of discussion, demonstration, and hands-on food preparation. *May be taken four times for credit.*

**CUL125 Sustainable Food Practices**  
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer  

Overview of the issues currently impacting the U.S. and Global food supply. Discussions on such topics as: local, seasonal, factory farms, artisan and native foods; environmental impact of farming; sustainability on a personal and industry level.

**CUL130 Culinary Principles and Applications I**  
3 Credits (1 Lecture, 6 Labs) POS RDG094  
Typically Offered: Fall and Spring  

Introduction to small and large quantity cooking, including principles, techniques and preparation with an emphasis on basic skills, food products, equipment and sanitation practices. *Requires 16 hours of supervised experience catering events outside of class. Prerequisites: MAT082 or higher, RDG094.*

**CUL142 Applied Food Science**  
4 Credits (3 Lectures, 3 Labs) RDG094  
Typically Offered: Consult CAC Class Schedule.  

The science of foods will be presented in lecture. Laboratory portion of the class applies the scientific method to enhance understanding of the principles of food preparation and production. *Corequisite: RDG094.*

**CUL160 Baking and Pastry I**  
3 Credits (1 Lecture, 6 Labs) POS RDG094  
Typically Offered: Fall and Spring  

Basic principles and techniques required for the commercial preparation of bakery products, including yeast-leavened breads, pies, tarts, quick breads, cookies and cakes. *Requires 16 hours of supervised experience catering events outside of class. Prerequisites: MAT082 or higher, RDG094.*

**CUL161 Cake Decorating**  
1 Credit (.75 Lecture, 1 Lab)  
Typically Offered: Fall and Spring  

Introduction to the art of cake decorating and how to design and create beautiful cakes using buttercream frosting. Instruction through demonstration and hands-on practice includes baking, leveling and preparing cakes for frosting; proper use of the pastry bag; designing flowers, leaves and borders utilizing a variety of pastry tips; and tinting buttercream frosting. *May be taken three times for credit.*
CUL162 Cakes, Fillings, and Frostings  
1 Credit (.75 Lecture, 1 Lab)  
Typically Offered: Fall and Spring  
Learn the fundamentals of preparing a great cake as a foundation for beautiful cake decorating. Prepare a variety of cakes; pair the cake with an appropriate filling, such as ganache, flavored syrup, fruit or custard. Prepare a variety of frostings, including royal icing and buttercream. Construct a special cake utilizing the various components learned in class. 
May be taken three times for credit.

CUL167 Introduction to Food Styling  
1 Credit (1 Lecture)  
Typically Offered: Consult CAC Class Schedule.  
Introduction to food styling trends and techniques including the history of food styling, current trends in the food industry and how to implement techniques to make food more visually appealing. Students create presentations and submit them as a digital photograph for critique.

CUL168 Introduction to Food Photography  
1 Credit (1 Lecture)  
Typically Offered: Consult CAC Class Schedule.  
Introduction to the basic principles of food photography and food styling techniques used in food marketing and advertising for businesses such as caterers, cake decorators, on-line sales, and restaurants. Students create presentations and submit them as a digital photograph for critique.

CUL170 Dining and Beverage Operations  
2 Credits (2 Lectures) POS R  
Typically Offered: Fall and Spring  
Theory and practice of food and beverage service; focus on menu planning and development, table and buffet service, customer relations, management and financial considerations of dining operations. Corequisite: RDG094.

CUL185 Catering Operations  
2 Credits (2 Lectures) R  
Typically Offered: Fall and Spring  
The theory and practice of planning and executing catering functions with emphasis on sales, marketing, menu development, pricing and controls, equipment, banquet and buffet service and different catering styles. Prerequisites: RDG094 and MAT082. Recommended: Complete CUL130 or CUL160 prior to taking CUL185. There is a strong emphasis on culinary math skills.

CUL205 HACCP Principles  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  
Practical application steps for the implementation of an HACCP food safety and sanitation program. May be taken once for degree or certificate and up to four times for recertification. Prerequisite: CUL105.

CUL230 Culinary Principles and Applications II  
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring  
Build on principles learned in Culinary Principles and Applications I and advance skills in preparing a variety of stocks, sauces, soups, fresh vegetables, herbs, meat, poultry and fish. Techniques and speed are refined and improved. Requires 16 hours of supervised experience catering events outside of class. Prerequisite: CUL130.

CUL260 Baking and Pastry II  
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall and Spring  
Build on principles and techniques introduced in Baking and Pastry I and learn advanced skills to produce a variety of bakery, pastry, savory and dessert items. Requires 16 hours of supervised experience catering events outside of class. Prerequisite: CUL160 OR HRM250.

CUL261 Advanced Cake Decorating  
1 Credit (.75 Lecture, 1 Lab)  
Typically Offered: Fall and Spring  
Decoration of cakes focusing on the preparation and use of fondant, royal icing and gum paste flowers. Create a variety of flowers and bows that can be used for special occasion and wedding cakes. May be taken three times for credit. Prerequisite: CUL161 or instructor consent.
CUL262 Wedding Cakes
1 Credit (.75 Lecture, 1 Lab)
Typically Offered: Fall and Spring
Assemble a simple wedding cake using a basic cake, filling, buttercream frosting, fondant and gum paste flowers. Design a special occasion cake considering factors such as flavor, texture, color, number of portions, advance preparation, transportation and pricing. May be taken three times for credit. Prerequisites: (CUL160, CUL161, CUL162 and CUL261) or instructor consent.

CUL263 Everything Chocolate
1 Credit (1 Lecture)
Typically Offered: Fall and Spring
Comprehensive hands-on chocolate course emphasizing the techniques necessary to make unique molded chocolate pieces and gourmet chocolate confections. Introduction to chocolate decorating techniques including tempering, coloring, cutting and using transfer sheets and working with modeling chocolate. Students will prepare products using different types of chocolate.

CUL264 Confectionary Show Pieces
1 Credit (.75 Lecture, 1 Lab)
Typically Offered: Fall and Spring
Create confectionary showpieces to demonstrate culinary artistry and advanced skills. Learn advanced techniques to prepare popular, edible confectionery decorations/showpieces, such as chocolate, marzipan, nougatine and simple sugar work. May be taken three times for credit. Prerequisites: (CUL160 and CUL263) or instructor consent. Recommended: CUL260.

CUL265 Artisan and Specialty Breads
1 Credit (.75 Lecture, 1 Lab)
Typically Offered: Fall and Spring
Basic production procedures for producing lean yeast doughs, working with pre-ferments and shaping techniques for forming artisan and specialty breads. May be taken two times for credit. Prerequisites: CUL160 or instructor consent.

CUL266 Advanced Pastry
1 Credit (.75 Lecture, 1 Lab)
Typically Offered: Fall and Spring
Advanced pastry baking skills focusing on enriched yeast dough and laminated dough. Learn to mix, laminate and form a variety of products using puff pastry and sweet dough, such as croissants, Danish and brioche. May be taken two times for credit. Prerequisites: (CUL160 and CUL260) or instructor consent.

CUL268 Nutrition and Special Needs Baking
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Introduction to the concepts of basic human nutrition, including the nutrients and their function, sources and requirements, digestion, absorption and metabolism. Apply this knowledge to baking and pastry production, manipulating and substituting ingredients to meet the goals of dietary restrictions such as lactose and glucose intolerance, food allergies, decreased sugar and fats for diabetic, cardiac and weight loss diets, and preparing delicious products for vegans. Explain the nutritional function of a food or ingredient as well as its functional role in the structure, taste, texture and visual appeal of baked goods. Prerequisite: CUL160.

CUL290 Commercial Cooking Practicum
2 Credits (2 Practica – 90 Hours)
Typically Offered: Fall, Spring and Summer
Apply skills and knowledge acquired in culinary arts course work to commercial quantity food planning, production and service for a variety of menu items; operation and maintenance of commercial cooking equipment; and safety and sanitation. Prerequisites: (CUL105 OR NTR105); CUL130; CUL160.

CUL292 Study Abroad: Italian Cuisine and Culture
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Summer
Study Italian cuisine and culture in three distinct regions of Italy with the Marco Polo Foundation for Mediterranean Culture and Tourism. Participate in hands-on cooking classes featuring the local produce, meats, cheeses and seafood of each region. Site visits and tours guided by experts in the Italian tourism industry enhance the cultural and culinary experience. Prerequisite: Instructor consent.
COURSE DESCRIPTIONS

DANCE (DAN)

DAN130 Introduction to Ballroom, Latin and Swing Dance
1 Credit (3 Labs)
Typically Offered: Fall and Spring
Introduction to counts, patterns and positions of Ballroom, Latin and Swing dances, with dance floor etiquette and appropriate music selection included. May be taken more than four times for credit.

DAN194 Introduction to Country and Swing Dance
1 Credit (3 Labs)
Typically Offered: Fall and Spring
Introduction to counts, patterns and positions of Country and Swing dances, with dance floor etiquette and appropriate music selection included. May be taken more than four times for credit.

DAN195 Jazz Dance
1 Credit (3 Labs)
Typically Offered: Fall and Spring
Introduction to positions, gestures, patterns, moves and performance of Jazz dance. May be taken more than four times for credit.

DIAGNOSTIC MEDICAL SONOGRAPHY (DMS)

DMS101 Introduction to Diagnostic Medical Sonography
3 Credits (3 Lectures)
Typically Offered: Spring
The basic sonographic job functions, scope of practice, positioning, principles of instrumentation and terminology used in Diagnostic Medical Sonography. Opportunities to meet with Sonographers on campus in a real ultrasound clinical setting enhance the learning experience. Prerequisite: Must be a current health care professional working in a clinical setting.

DMS120 Cross Sectional Imaging
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Diagnostic imaging correlation using coronal, axial, or transverse cross sectional planes to demonstrate human anatomy of the: head, neck and spine; chest; extremities; abdominal and pelvic cavities for Medical Imaging Professionals. Prerequisite: DMS or Radiologic Tech cohort student.

DMS130 Sonography Physics and Instrumentation I
2 Credits (2 Lectures)
Typically Offered: Fall
Introduction to the physical principles of ultrasound, including analysis of routine terminology and functions used in the creation of diagnostic ultrasound images and ARDMS testing requirements; utilization of ultrasound equipment and transducers for the production of sound waves and their interaction with tissue; workplace safety; quality assurance and quality control; patient wellbeing; bioeffects and risks. Prerequisite: DMS cohort student.

DMS131 Physics and Instrumentation Lab
1 Credit (3 Labs)
Typically Offered: Spring
Introduction to the physical principles of ultrasound in a lab setting, including analysis of image acquisition used to create diagnostic ultrasound images recommended by ARDMS. Utilization of ultrasound equipment and transducers for the production of sound waves and their interaction with tissue; workplace safety; quality assurance and quality control; patient history; technical worksheets; bioeffects and potential risks. Prerequisite: DMS cohort student.

DMS132 Abdominal Imaging I
3 Credits (3 Lectures)
Typically Offered: Fall
Introduction to Diagnostic Medical Sonography and Abdominal scanning including physiology, pathology, terminology, anatomy and techniques. Prerequisite: DMS cohort student.
DMS133 Abdominal Imaging Lab
1 Credit (3 Labs)
Typically Offered: Fall
Laboratory course designed to augment the didactic information presented in Abdominal Imaging (DMS132). Lab provides the environment for the student to gain basic competencies when scanning the entire abdominal contents including proper scanning technique, imaging terminology, anatomy, physiology and completion of technical worksheets. Prerequisite: DMS cohort student.

DMS135 Small Parts Imaging
1 Credit (1 Lecture)
Typically Offered: Spring
Introduction to advanced applications of sonographic small parts imaging. Topics include normal and abnormal presentations of the thyroid, breast, prostate, extremities, pediatric applications, interventional and emergency procedures, contrast agents and emerging modalities. Prerequisite: DMS cohort student.

DMS140 Sonographic OB/GYN Imaging
2 Credits (2 Lectures)
Typically Offered: Spring
Introduction to Diagnostic Sonography in obstetrics and gynecology (OB/GYN), including normal, abnormal, pathology of the non-gravid and gravid female pelvis. Prerequisite: DMS cohort student.

DMS149 Pathology for Medical Imaging
3 Credits (3 Lectures)
Typically Offered: Spring
Causes of disease and the impact on the body, including cultural implications in the prevention and treatment of disease. Role of diagnostic imaging in diagnosis, therapy and treatment of body systems. Prerequisite: DMS cohort student.

DMS150 Clinical Sonography Practicum I
2 Credits (2 Practica - 180 Hours)
Typically Offered: Fall
The initial rotation in a series of six, this novice DMS supervised practicum introduces students to policies and procedures in a clinical setting, including hospitals, MD offices and clinics and orientates students to imaging, department scanning protocols and abdominal scanning. Prerequisites: DMS cohort student; current CPR.

DMS151 Clinical Sonography Practicum II
3 Credits (3 Practica - 270 Hours)
Typically Offered: Spring
Second clinical rotation in a series of six. This beginner level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting. Students gain scanning competencies in the abdomen, pelvis and small parts under a high level of direct supervision within clinical sites, including hospitals, MD offices and clinics. Prerequisite: DMS cohort student.

DMS152 Clinical Sonography Practicum III
4 Credits (4 Practica - 360 Hours)
Typically Offered: Summer
The third clinical rotation in a series of six, this Advanced Beginner level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting. Students continue to gain scanning competencies in the abdomen, pelvis, Obstetrics and small parts under direct supervision in clinical sites which include hospitals, MD offices and clinics. Prerequisite: DMS cohort student.

DMS154 Abdominal Imaging II
2 Credits (2 Lectures)
Typically Offered: Spring
Reinforcement of beginning DMS and introduction to advanced applications of sonographic scanning in the abdominopelvic cavity. Topics include normal and abnormal presentations, pediatric applications, interventional and emergency procedures, use of contrast agents and emerging modalities. Prerequisite: DMS cohort student.

DMS158 Sonography Case Studies I
1 Credit (1 Lecture)
Typically Offered: Spring
The first in a three seminar series that introduces students to critical thinking through Diagnostic Medical Sonography case studies. Cases include anatomy, pathology, physics, imaging and terminology used in Diagnostic Sonography as well as discussions on imaging protocols and scanning guidelines. The lecture will be taught as a hybrid using a Blackboard format; field trips or guest lecturers may be included. Prerequisite: DMS cohort student.

DMS159 Sonography Case Studies II
2 Credits (2 Lectures)
Typically Offered: Summer
Case Studies II focuses on increasing students’ sonographic critical thinking skills using more complex patient pathology. Prerequisite: DMS cohort student.
COURSE DESCRIPTIONS

DMS234 Sonography Physics and Instrumentation II
2 Credits (2 Lectures)
Typically Fall
Offered:
Advanced application of sonographic physical principles and instrumentation; artifacts, bioeffects, quality control, hemodynamics and Doppler; new trends; equipment features and benefits; quality control, safety; and preparation for ARDMS examination. Prerequisite: DMS cohort student.

DMS242 High Risk OB/GYN Imaging
2 Credits (2 Lectures)
Typically Fall
Offered:
Advanced applications of OB/GYN imaging of the gravid and non-gravid patient; safety and bioeffects; new trends; high risk OB/GYN patients; interventional procedures; laboratory values and correlative imaging; preparation for ARDMS examination. Prerequisite: DMS cohort student.

DMS254 Clinical Sonography Practicum IV
4 Credits (4 Practica - 360 Hours)
Typically Fall
Offered:
The fourth clinical rotation in a series of six, this intermediate level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting, including hospitals, MD offices and clinics. Under limited supervision, students continue to gain scanning competencies in the abdomen, pelvis, obstetrics and small parts and vascular imaging studies in the clinical setting. Prerequisite: DMS cohort student.

DMS255 Clinical Sonography Practicum V
4 Credits (4 Practica - 360 Hours)
Typically Spring
Offered:
The fifth clinical rotation in a series of six, this advanced intermediate level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting, including hospitals, MD offices and clinics. Under minimal supervision, students continue to gain scanning competencies in the abdomen, pelvis, obstetrics and small parts and vascular imaging studies in the clinical setting. Prerequisite: DMS cohort student.

DMS256 Clinical Sonography Practicum VI
4 Credits (4 Practica - 360 Hours)
Typically Summer
Offered:
The sixth and final rotation, this advanced level practicum reinforces policies, procedures and protocols in a Diagnostic Sonography clinical setting, including hospitals, MD offices and clinics. Under minimal supervision, students gain competencies in abdomen, pelvis, obstetrics, small parts, vascular imaging, interventional and other studies and perform at the level of an entry level sonographer. Prerequisite: DMS cohort student.

DMS259 Sonography Case Studies III
2 Credits (2 Lectures)
Typically Spring
Offered:
Case Studies III focuses on students presenting cases of the complexity and caliber expected of an entry level sonographer. Prerequisite: DMS cohort student.

DMS260 OB/GYN Sonography Lab
1 Credit (3 Labs)
Typically Fall
Offered:
Applications of OB/GYN imaging of the female patient in a lab setting; safety and bioeffects; transabdominal and endovaginal scanning; technical worksheets; and preparation for ARDMS examination. Prerequisite: DMS cohort student.

DMS271 Concepts of Vascular Imaging
2 Credits (2 Lectures)
Typically Spring
Offered:
Vascular applications of sonography in the cerebrovascular, abdominal, OB/GYN, arterial and venous systems of the body including hemodynamics, Doppler, Color Flow, Duplex and triplex imaging protocols. Prerequisite: DMS cohort student.

DMS272 Vascular Imaging Lab
1 Credit (3 Labs)
Typically Spring
Offered:
Vascular applications of sonography in the cerebrovascular, abdominal, arterial and venous systems of the body in a lab setting. Prerequisite: DMS cohort student.

DMS273 Advanced Sonography Applications
3 Credits (3 Lectures)
Typically Fall
Offered:
Advanced applications and emerging trends of Sonography worldwide including interventional, surgical, portable, vascular, pediatric, musculoskeletal, breast, prostate/male pelvis, and ethical issues. Prerequisite: DMS cohort student.
DMS280 Physics & Instrumentation Review  
1 Credit (1 Lecture) 
Typically Offered: Spring  
Review of physical principles of ultrasound and instrumentation, including bioeffects, safety, artifacts, imaging and analysis of routine to create diagnostic ultrasound images in alignment with ARDMS examination content specifications. Prerequisite: DMS cohort student or DMS Program Director consent.

DMS281 Abdominal Imaging Review  
1 Credit (1 Lecture)  
Typically Offered: Summer  
Applications of abdominopelvic and small parts imaging review to include normal, abnormal, pathology, patient care, bioeffects, pediatrics, interventional and emergency procedures in alignment with ARDMS examination content outlines. Prerequisite: DMS cohort student or DMS Program Director consent.

DMS282 OB/GYN Review  
1 Credit (1 Lecture)  
Typically Offered: Summer  
Review of sonography in obstetrics and gynecology (OB/GYN), including normal, and abnormal pathology of the non-gravid and gravid female pelvis per ARMS examination content specifications. Prerequisite: DMS cohort student or DMS Program Director consent.

DMS289 Vascular Technology RVT Review  
1 Credit (1 Lecture)  
Typically Offered: Consult CAC Class Schedule.  
Registry review course for those planning to take the Registered Vascular Technologist certification examinations given by the American Registry of Diagnostic Medical Sonographers. Satisfactory/Unsatisfactory grading option is available. Prerequisite: DMS cohort student or DMS Program Director consent.

DMS290 Sonography Capstone Seminar  
2 Credits (2 Lectures)  
Typically Offered: Spring  
Capstone seminar prepares the student for workplace skills, research, employment, ARDMS examinations and ICD 10 coding and billing knowledge expected of entry level sonographers. Prerequisite: DMS cohort student.

DIE110 Introduction to Diesel Engines and Fuel Systems  
3 Credits (3 Lectures) R  
Typically Offered: Fall and Spring  
An introduction to diesel engines focusing on the theory of operation of the four main subsystems: basic engine, lubrication, cooling and fuel systems. Prerequisite: Current and valid driver license. Corequisite: RDG094.

DIE111 Introduction to Electricity and Electronics  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
Theory, operation and components of electrical and electronic circuits. Prerequisite: Current and valid driver license.

DIE112 Introduction to Mobile Hydraulics  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer  
Theory of operation of hydraulic and hydrostatic systems used in heavy equipment and truck applications, emphasizing the use of electrical and hydraulic schematics and service manuals. Prerequisite: Current and valid driver license.

DIE113 Introduction to Power Trains  
3 Credits (3 Lectures) R  
Typically Offered: Fall and Spring  
An introduction to power train systems used in heavy equipment focusing on the theory of operation and application of manual, power shift and hydrostatic transmissions. Prerequisite: Current and valid driver license. Corequisite: RDG094.

DIE114 Introduction to Power Train Repair and Diagnostics  
4 Credits (3 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
An introduction to diagnosis and repair of heavy equipment manual, power shift and hydrostatic transmission systems. Prerequisites: DIE113 and current and valid driver license.
DIE115 Introduction to Diesel Engine Repair and Diagnostics
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall and Spring
An introduction to troubleshooting, diagnosing and performing repairs on Diesel engines and engine subsystems.
Prerequisites: DIE110 and current and valid driver license.

DIE116 Introduction to Diesel Technology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Diesel technology knowledge and skills to prepare students for other heavy equipment technician courses, including fundamental concepts, standard safety procedures, tool use, identification and maintenance of equipment, precision measurement and electrical theory. Prerequisites: RDG094 and current and valid driver license.

DIE117 Workplace Success Principles, Practices and Strategies
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
An exploration of employer expectations, economic factors related to the success of a business and ethical workplace behavior for an employee that leads to productivity, success of the business and long term employment. Prerequisite: Current and valid driver license.

DIE118 Computer Systems for Equipment Technicians
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Basic fundamentals and applications of Caterpillar, Cummins, and Detroit technical mobile computer systems, including onboard computers, sensors, actuators and software. Use of Internet resources and manufacturer software emphasizing the correct use of technical information to develop troubleshooting skills. Prerequisites: DIE110, DIE111, DIE113 or instructor consent.

DIE132 Diesel Engines
12 Credits (10 Lectures, 6 Labs)
Typically Offered: Fall and Spring
The theory of operation, diagnostic procedures and service and repair techniques related to diesel engine systems used in heavy equipment and truck applications, emphasizing the use of technical service literature and an array of special engine tools. Safety is stressed. Prerequisite: Current and valid driver license.

DIE133 Heavy Equipment Chassis and Drives
12 Credits (10 Lectures, 6 Labs)
Typically Offered: Fall and Spring
Theory of operation, diagnostic procedures, service and repair techniques, related to chassis and drive trains used in heavy equipment and truck applications, emphasizing safety use of technical service literature, diagnostic software and reconditioning procedures. Prerequisite: Current and valid driver license. Corequisite: RDG094.

DIE196 Diesel Equipment Technology and HEO Internship I
3 Credits (Internship)
Typically Offered: Fall, Spring and Summer
Career advancement study that allow students to obtain college credit for hands-on work experience. Prerequisite: Enrolled in DIE, CFE, or HEO program.

DIE210 Advanced Diesel Engines and Fuel Systems
5 Credits (4 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
An in-depth study of modern diesel engines used in off and on-highway application, emphasizing computer controlled fuel systems and new emission standards. Prerequisite: DIE115.

DIE211 Advanced Electrical/Electronic Systems
3 Credits (1 Lecture, 6 Labs)
Typically Offered: Fall and Spring
An application of electrical/electronic principles and theories emphasizing electrical system anomaly diagnostics and repair/replacement of components. Prerequisite: DIE111.
DIE212 Advanced Mobile Hydraulics  
3 Credits (1 Lecture, 6 Labs)  
Typically Offered: Fall, Spring and Summer  
Application of the theoretical concepts, diagnostic procedures, service and repair techniques related to hydraulic and hydrostatic systems used in heavy equipment and truck applications, emphasizing the use of hydraulic schematics, test equipment and service manuals to diagnose and repair. Prerequisites: DIE211 or instructor consent.

DIE214 Advanced Power Train Repair and Diagnostics  
5 Credits (4 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer  
Modern power train systems used in on and off-highway equipment, emphasizing diagnostic and repair procedures applied to computer controlled power shift and hydrostatic transmission systems. Prerequisites: DIE113, DIE114.

DIE222 Mobile Refrigeration  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
Principles of operation for the various types of mobile air conditioning systems utilized in diagnosing, testing and reconditioning these systems. Prerequisite: Current and valid driver license.

DIE225 Preventive Maintenance  
2 Credits (1 Lecture, 3 Labs)  
Typically Offered: Fall and Spring  
The development of skills necessary to identify, prevent and repair mechanical problems as related to the maintenance of heavy earth-moving equipment. Prerequisite: Current and valid driver license.

DIE234 Diesel and Heavy Equipment Electricity/Electronics and Hydraulics  
12 Credits (10 Lectures, 6 Labs)  
Typically Offered: Spring  
The theory of operation, diagnostic procedures, service and repair techniques related to electrical and hydraulics systems used in heavy equipment and truck applications, emphasizing the use of electrical and hydraulic schematics, test equipment, and service manuals. Prerequisite: Current and valid driver license.

DIE235 Heavy Equipment Reconditioning and Operations  
8 Credits (4 Lectures, 12 Labs)  
Typically Offered: Fall  
The operation, maintenance and servicing of heavy equipment, emphasizing the use of technical service literature and an array of special tools. Prerequisite: Current and valid driver license.

DIE296 Diesel Equipment Technology and HEO Internship II  
3 Credits (Internship)  
Typically Offered: Fall and Spring  
Career advancement study that allows students to obtain college credit for advanced level hands-on work experience. Prerequisite: DIE196.

DRAFTING (DFT)  
DFT127 Autocad I  
3 Credits (2 Lectures, 3 Labs) POS  
Typically Offered: Fall and Spring  
Introductory course in Computer-Aided Drafting and Design (CADD) computer technology for creation and documentation of 2D drawings. Includes operation and capabilities of computers in CADD, drafting fundamentals, dimensioning, annotating, management of CADD files, printing and plotting.

DFT128 Autocad II  
3 Credits (2 Lectures, 3 Labs) POS  
Typically Offered: Fall, Spring and Summer  
Advanced Autocad two-dimensional applications and techniques. Prerequisite: DFT127 or instructor consent.

DFT130 Advanced Computer Aided Drafting Applications  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  
Advanced work in an area of individual interest within the scope of computer-aided drafting. May be taken three times for credit to fulfill a requirement choice for the CADD Certificate, one credit per enrollment. Prerequisite: DFT127.
COURSE DESCRIPTIONS

DFT131 Autocad III
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Basic Commands and Techniques including: wireframe, Surface and Solid Modeling using AutoCAD required to create, shade, render and print 3-Dimensional (3D) drawings.
Prerequisite: DFT127.

EARLY CHILDHOOD EDUCATION (ECE)

ECE101 Introduction to the Child Care Profession
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit
An introduction to the Child Care Profession, focusing on child development and appropriate learning environments for children from birth through age five. Content includes child care licensing and developmentally appropriate curriculum in early childhood settings.

ECE116 Guiding and Observing Children
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit
Positive guidance and discipline techniques to encourage self-discipline and enhance a positive self-image. Techniques to effectively observe and record child characteristics and behavior, with emphasis on appropriate use of observations.

ECE117 Guidance for Family Childcare
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Positive guidance and discipline techniques for family childcare providers that encourage self-discipline and enhance a positive self-image of children ages 0 to 12. This course has a bilingual component as an option and supplement.

ECE119 Making Learning Visible Through Documentation
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Documentation in Early Childhood Environments, including strategies to reflect on children's thinking, hypothesis development and the multiple relationships essential to learning environments.

ECE120B Providing a Healthy Environment
1 Credit (1 Lecture)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Procedures and practices designed to protect the health of young children in early childhood programs, with emphasis on the development of lifelong healthy habits and attitudes.

ECE120D Ensuring a Safe Environment for Children
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Practices and procedures to use when providing for the safety of children in early childhood programs.

ECE121 Health for Family Childcare
1 Credit (1 Lecture) POS
Typically Offered: Fall, Spring and Summer
Procedures and practices designed to protect the health of children in family childcare settings with emphasis on the development of lifelong health habits and attitudes. This course has a bilingual component as an option and supplement.

ECE122 Safety for Family Childcare
1 Credit (1 Lecture) POS
Typically Offered: Fall, Spring and Summer
Practices and procedures to use when providing for the safety of children in family childcare programs. This course has a bilingual component as an option and supplement.

ECE123 Nutrition for Family Childcare
1 Credit (1 Lecture) POS
Typically Offered: Fall, Spring and Summer
Introduction to nutrition with emphasis on methods of planning and implementing nutrition education and experiences in family childcare programs. This course has a bilingual component as an option and supplement.
ECE124 Active Learning in Math and Science
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Techniques for helping children to develop cognitive thinking skills, including mathematical concepts, and to develop an awareness and appreciation of the natural environment. Explore math and science problem solving processes used by young children.

ECE125A Nutrition
1 Credit (1 Lecture)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Introduction to nutrition, emphasizing methods of planning and implementing nutrition education and experiences in early childhood settings.

ECE128A Environments for Infants and Toddlers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Practical theories and principles for the arrangement of a safe, healthy environment for infants and toddlers, emphasizing indoor/outdoor environments, material selection and usage based on observation and participation in an infant/toddler care setting.

ECE129B Observation Skills in the Infant and Toddler Program
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Techniques and skills to effectively observe and record characteristics and developmental stages of infants and toddlers, including record keeping procedures, an overview of a variety of caregiving settings and an observation in an infant/toddler program.

ECE129C Recordkeeping Skills: Infant and Toddler Programs
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Recordkeeping procedures for the daily operations of an infant/toddler program, including an overview of caregiving settings and observations.

ECE130A Learning Environment for School-Agers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
The school-age child’s total learning environment, incorporating indoor, outdoor and community aspects, stressing the importance of well-organized learning centers, age-appropriate equipment and materials with consideration to the spaces where school-age programs are located.

ECE176 Early Childhood Development and Theories
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Theories, trends and research in human development from prenatal to age five with emphasis on the principles, characteristics and behaviors of physical, social, emotional and intellectual growth of children. Prerequisite: RDG094.

ECE177 Ages and Stages of Children 0-12
3 Credits (3 Lectures) POS
Typically Offered: Fall, Spring and Summer
Ages and stages of children ages 0 to 12, emphasizing the principles of physical, social, emotional and intellectual growth. This course has a bilingual component as an option and supplement.

ECE183 Curriculum and Learning Materials for Infants
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Practical theories and principles for designing infant curriculum with emphasis on responsive relationships, developmental stages, applied observation and providing developmentally appropriate, safe learning materials for infant exploration.

ECE184 Curriculum and Learning Materials for Toddlers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Practical theories and principles for designing toddler curriculum emphasizing responsive relationships, developmental stages, applied observation and providing developmentally appropriate, safe learning materials for toddler exploration.
ECE212 Creative Expressions for Young Children
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Practical methods for developing a creative environment for young children that encourages creativity and skill building for selecting materials, designing environments and planning activities.

ECE220 Managing Food, Health and Safety in Childcare Programs
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Plan, develop, implement and evaluate health, safety and food services for early childhood programs.

ECE221 ECE Program Financial Management
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Plan, develop and implement an accounting and financial system for an early childhood program.

ECE222 Managing and Evaluating ECE Programs
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Management and evaluation skills necessary to effectively operate a quality early childhood program.

ECE223 Planning and Promoting an ECE Program
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Design, plan and market an early childhood program to parents and the community, based upon a specific program philosophy.

ECE224 Supervision in Early Childhood Programs
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Personnel management in an early childhood program, including staffing, supervision and evaluation.

ECE225A Encouraging Self-Discipline in School-Age Children
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Positive guidance and discipline techniques that encourage children and youth to develop self-discipline and take responsibility for their actions.

ECE226A Cognitive Development of Infants and Toddlers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Theories, trends and principles of cognitive growth and development of infants and toddlers, and examination of the development stages and norms through observation and participation in an infant/toddler care program.

ECE226C Language Development of Infants and Toddlers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Theories, trends and principles of cognitive growth and language development of infants and toddlers and examination of developmental stages and norms through observation and participation in an infant/toddler care program.

ECE227B Guidance and Discipline of Infants and Toddlers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Social and emotional development of infants and toddlers, including positive guidance and discipline techniques through observation and participation in an infant/toddler program.
ECE227C Enhancing Social Competency of Infants and Toddlers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Social and emotional development of infants/toddlers, including appropriate experiences and environments to enhance development of social competency within a group through observation and participation in an infant/toddler program.

ECE228B Physical Development in Infancy/Toddlerhood
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Physical development of infants/toddlers, including observations and participation in infant/toddler activities, and customizing a program to meet specific children's needs.

ECE229 Professional Portfolio Preparation
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Preparation and compilation of a professional portfolio to be used for assessment (CDA credential), employment and educational opportunities. This course is intended to be the last course taken toward certificate completion. Prerequisite: Instructor consent.

ECE248 Early Childhood Program Philosophies
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Examination of a variety of Early Childhood Program philosophies culminating in the development of a personal program philosophy.

ECE254 Emergent Language and Literacy
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Understanding, assessing and enhancing language and literacy development for the young child.

ECE255 Communications for Family Childcare
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Methods of developing effective communication with parents in the family childcare program. Building an awareness of diverse family values and implementing a diverse curriculum. Skills to help parents and providers work together to understand the child's needs. This course has a bilingual component as an option and supplement.

ECE256 Math for School-Agers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Theories, research and concrete experiences related to mathematical reasoning and skills of the school-age child.

ECE257 The Business of Family Childcare
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
The multifaceted business aspects of providing family childcare. Fundamentals of a recordkeeping system and the principles of achieving a balance in work and family life while operating a family childcare business. This course has a bilingual component as an option and supplement.

ECE271 Creating Early Childhood Environments
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Methods to establish age-appropriate learning environments, incorporating indoor, outdoor and community aspects. Design and implement schedules, lesson plans and transitions to meet the needs of young children in a variety of early childhood settings. Prerequisite: ECE176.
COURSE DESCRIPTIONS

ECE272 Family Child Care Environments
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Create age-appropriate learning environments which incorporate indoor, outdoor and community aspects for family child care. Design and implement schedules, lesson plans and transitions to meet the needs of all children in a family child care setting. This course has a bilingual component as an option and supplement.

ECE276 Child Development
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Theories, trends and research in human development from prenatal through adolescence with emphasis on the principles, general characteristics and behaviors of physical, social, emotional and intellectual growth of children and adolescents. Prerequisite: RDG094.

ECE278 Effective Curriculum Design for Teachers of Young Children
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Methods of collecting and organizing resources to provide a play based early childhood curriculum. Planning and implementing a developmentally appropriate curriculum using observation and assessment tools. Prerequisite: ECE176.

ECE279 Curriculum for Family Childcare
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Plan and implement a developmentally appropriate curriculum for all children in family child care, including methods to collect and organize curriculum resources. This course has a bilingual component as an option and supplement.

ECE280 Inclusion of Children with Special Needs
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
The concepts of quality inclusion of children with special needs, including laws governing services to children with disabilities, individualized plans, typical and atypical child development, developmentally appropriate activities for children, and working collaboratively with families, service providers and multi-disciplinary teams. Prerequisite: ECE176.

ECE283 Valuing Families and Diversity
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Methods of developing effective communication skills which involve parents in the early childhood program, including building an awareness of diverse family values and implementing a diverse curriculum. Develop skills to help parents and staff work together to understand the child’s needs.

ECONOMICS (ECN)

ECN200 Contemporary Economic Issues
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Investigates the basic concepts and principles of economics, and how they operate within the American economic system. Highlights both Macroeconomics and Microeconomics in simplified terms; intended for those who will only take one course in economics. Prerequisite: RDG094.

ECN201 Principles of Macroeconomics
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A descriptive analysis of the structure and functioning of the American economy. Emphasis on basic economic institutions and factors that determine general levels of output, employment, income and prices. Prerequisite: RDG094.

ECN202 Principles of Microeconomics
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A descriptive analysis of the theory of consumer choice, price determination, resource allocation and income distribution. Includes non-competitive market structures such as monopoly and oligopoly and the effects of government regulation. Prerequisite: RDG094.


**EDU101 Tutor Certification I**  
2 Credits (1 Lecture, 3 Labs)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Preparation for students to become certified tutors while addressing the fundamental responsibilities of tutoring, the tutoring cycle, learning theories and orientations, critical thinking and tutoring ethics. **Prerequisite:** Minimum 3.0 CGPA. Corequisite: 25 hours of face-to-face or online tutoring.

**EDU102 Tutor Certification II**  
2 Credits (1 Lecture, 3 Labs)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Preparation for students to become professional tutors in the application of educational and assisted technologies, including the discoveries of neuroscience related to human learning in one-to-one and group tutoring sessions. **Satisfactory/Unsatisfactory grading option available. Prerequisites:** EDU101 and minimum 3.0 CGPA. Corequisite: 25 hours of face-to-face or online tutoring.

**EDU103 Substitute Teacher Survival Strategies**  
2 Credits (2 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Academic and behavioral strategies and other pertinent information needed to be a successful substitute teacher in today’s K-12 schools. **Satisfactory/Unsatisfactory grading option available.**

**EDU221 Introduction to Education**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
A survey of the profession of teaching, with emphasis on current trends and diversity, historical and legal perspectives, and societal influences. **Course includes observation and participation in preK-12 school environments. Prerequisite:** RDG094.

**EDU222 Introduction to Special Education**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Overview of Special Education theory and practice in the United States today, including the characteristics of students with specific disabilities and the effects on the individuals and their families. **Prerequisite:** RDG094.

**EDU225 Relationships in the Classroom**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
An introduction to pre-K-12 classroom settings and the relationships between teachers and their students. Focus is on class management and developing positive and appropriate individual relationships with students. **Prerequisite:** RDG094.

**EDU228 Behavior Management**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Individual student and group management in K-12 classrooms using proactive strategies. **Prerequisite:** RDG094.

**EDU230 Cultural Values in Education**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Examination of the effects of culture on the formation of the child's self-concept and learning styles; and the role of prejudice, stereotyping and cultural incompatibilities in education. **Prerequisite:** RDG094.

**EDU233 Global Issues in Education**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
A study of education from an international perspective, including the culturally-based formation of the child’s self-concept and learning style. A educational system comparison with another country or countries and an analysis of prejudice, stereotyping and cultural incompatibilities in specific educational systems. **Prerequisite:** RDG094.

**EDU240 Provisional Structured English Immersion**  
3 Credits (3 Lectures)  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Provisional endorsement course in Introduction to Structured English Immersion for teachers and administrators who are working in the K-12 school setting, or for students in the AAEE program. **Prerequisite:** RDG094.

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**GEN ED Course Codes:**  
- **AGEC:**  
- **Intensive Writing:**  
- **Reading Required:**  

**Programs of Study/Tech Prep:**  
- **Dual Enrollment:**  
- **SUN Course:**  

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EDU250 Structured English Immersion II
3 Credits (3 Lectures) 📚
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Structured English Immersion for teachers and administrators working in the K-12 school system: "the completion 45 hours."
Prerequisites: (EDU240 or equivalent) or (RDG094 and 15-hour Arizona Department of Education Approved Structured English Immersion Workshop).

EDU270 Education through Drama in the Elementary Classroom
3 Credits (3 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Hands-on opportunity to learn and teach drama based classroom activities that support learning in the elementary classroom. Develop an understanding of the research supporting the use of drama in the classroom. Cross Listed: THE270.

ELECTRICITY (ELC)

ELC122 Direct Current and Alternating Current Circuit Analysis
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Basic electricity theory as applied to circuits containing capacitance, inductance and resistance with either direct current or sinusoidal voltages applied.

ELC126 Residential Wiring
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Residential wiring according to the National Electrical Code, with emphasis on proper use of materials and techniques for safe electrical installation or extensions in single- and multi-family dwellings. Prerequisite: MAT092 or MAT111 with a grade of "C" or higher or placement into MAT121.

ELC128 Introduction to Programmable Logic Controllers
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Principles and applications of programmable logic controllers (PLCs) including numbering systems, control strategies and ladder logic. Prerequisite: ELC122. Corequisite: ELT223.

ELC200 Radio Frequency RF/High Vacuum HV
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
High vacuum and plasma systems to manufacture semiconductor devices, process foods, surface hardening, compact disk production and film deposition. Prerequisite: Sophomore and instructor consent.

ELC201 Solar Photo Voltaic I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Basic principles of photovoltaic (PV) or solar energy, including PV fundamentals, components, system sizing, troubleshooting strategies and safety hazards.

ELC202 Solar Photo Voltaic II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced principles of Solar Photo Voltaic (PV), including site surveys, SolarPV component size, analysis and creation of a customized system. Prerequisite: ELC201 and (MAT092 or MAT111 with a grade of "C" or higher or placement into MAT121).

ELC220 Active Circuits
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Basic semiconductor devices (transistors, diodes and Op-Amps) and circuit simulation software. Prerequisite: ELC124.

ELC221 Control Devices
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Electrical controls, instruments and devices for industrial equipment such as motor starting and speed control, voltage regulation and automatic controls for AC and DC machines. Prerequisite: ELC220.
ELC222 Active Circuits and Systems
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Theory and design of active circuits and systems used in electronic and electro-mechanical equipment, integration of active circuits into subsystems and complete electro-mechanical systems, analog-to-digital and digital-to-analog systems with reference to data acquisition and control. Prerequisite: ELC220.

ELC223 Integrated Circuit Devices
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Introduction to timers, counters, linear and digital circuits, operational amplifier circuits and systems, voltage regulators, digital number code systems, integrated circuit logic devices, multi-vibrators memory systems, analog-to-digital and digital-to-analog devices. Prerequisites: ELT128 and ELC220.

ELC228 Advanced Programmable Logic Controllers
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced principles and applications of programmable logic controls (PLCs), including advanced programming using math function blocks, bit manipulation blocks and subroutines. Course includes an introduction to networking of PLCs and HMI devices. Prerequisite: ELC128.

ELT130 Computer Upgrades and Operating Systems I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Apply previous A+ and Networking experience to actually upgrade computers and configure operating systems by doing hands-on projects in a lab-situated class. May be taken two times for credit.

ELT223 Microcontroller Fundamentals
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Microcontroller theory and operation, assembly and high level programming and interfacing. Prerequisite: ELT128. Recommended: Interest in programming.

ELT251 Instrumentation
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Alternative energy fields equipment usage, measurements and calculations.

ELT128 FPGA Fundamentals
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Theory and application of inverters, AND, OR, NAND and NOR gates, flip-flops, counters, timers and registers using Field Programmable Gate Arrays (FPGAs).

ELT260 Advanced FPGA Concepts
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced topics in Field Programmable Gate Array (FPGA) to include memory circuits, VHDL and coding methods for synchronous circuits, design of synchronous circuits and state machines and FPGA architectures. Prerequisite: ELT128.

ELT265 MicroBlaze1
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
MicroBlaze programming applications including hardware design components, Embedded Development Kit (EDK), and creating, programming and troubleshooting the MicroBlaze processor. Prerequisite: ELT260.

ELT270 MicroBlaze2
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced MicroBlaze programming applications which include creating a multicore MicroBlaze system and interfacing peripherals. Prerequisite: ELT265.

ELT275 Embedded Fundamentals
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Application of interfacing a microcontroller to FPGA and the programming languages C, VHDL and LabVIEW. Prerequisite: ELT270.
EMERGENCY MEDICAL SERVICES (EMS)

EMS100 CPR for Professionals
.5 Credit (.5 Lecture) POS
Typically Offered: Fall, Spring and Summer
This course is designed for healthcare professionals who provide health care to patients in a wide variety of settings, including hospital and out-of-hospital. CPR skills needed to assist victims of all ages, including ventilation with a barrier device, a bag-mask device and oxygen. Use of an automated external defibrillator (AED). Relief of foreign-body airway obstruction (FBAO). Intended for participants who provide health care to patients in a wide variety of settings, including in-hospital and out-of-hospital. Designed for certified or non-certified, licensed or non-licensed healthcare professionals. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Recommended: Students should recertify in CPR every two years to maintain certification/license as an EMT, Paramedic, Nurse or MD.

EMS101 First Care
.5 Credit (.5 Lecture)
Typically Offered: Fall, Spring and Summer
This course follows the current National Standard Curriculum and Arizona State Department of Health Services - EMS Division State statutes. The curriculum emphasizes an assessment-based format with the focus on airway control, and rescuer and patient safety. Infection control is addressed at every level of care. Skills include patient-assisted medications and use of the AED. This training program is a State-approved program with a medical director and is updated to State standards as required by the ADHS. Prerequisites: (EMS100 or equivalent), RDG091, (Vaccination record: TB, MMR, Tetanus), (CPR HCP card and age 18 or older) or current CPR Health Care Provider card.

EMS123 First Responder
3 Credits (3 Lectures) POS
Typically Offered: Fall, Spring and Summer
This course is designed for certified an EMT, Paramedic, Nurse, or MD.

EMS125 Emergency Medical Technician
8 Credits (7 Lectures, 2 Labs, .5 Practicum) POS
Typically Offered: Fall, Spring and Summer
This course follows the current National Standard Curriculum and Arizona State Department of Health Services - EMS Division State statutes. The curriculum emphasizes an assessment-based format with the focus on airway control, and rescuer and patient safety. Infection control is addressed at every level of care. Skills include patient-assisted medications and use of the AED. This training program is a State-approved program with a medical director and is updated to State standards as required by the ADHS. Prerequisites: (EMS100 or equivalent), RDG091, (Vaccination record: TB, MMR, Tetanus), (CPR HCP card and age 18 or older) or current CPR Health Care Provider card.

EMS190 Pediatric Education for Pre-Hospital Providers
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An interactive, scenario-based course designed for certified Emergency Medical Technicians (EMTs) who practice in the field. Trains providers to perform a rapid assessment of sick and injured children in a variety of circumstances and in accordance with recommendations by the American Academy of Pediatrics (AAP). Prerequisite: Advanced Life Support Provider (ALS)-IEMT, Paramedic, Nurse, or MD.

EMS191 Neonatal Resuscitation Program
1 Credit (1 Lecture)
Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit
Didactic and psychomotor skill education and training in techniques of newborn resuscitation. Discussion in causes, prevention and management of mild to severe neonatal asphyxia are carefully explained. Prior to course completion, students must present the instructor with a Neonatal Resuscitation course completion certificate from the American Academy of Pediatrics. Students pay testing fee online/directly to American Academy of Pediatrics. URL: www.aap.org/nrp. May be taken two times for credit. Prerequisite: EMS125 or equivalent.

EMS200 Basic EMT Refresher
2 Credits (2 Lectures)
Typically Offered: Fall, Spring and Summer
The EMT Refresher course incorporates the standards as adopted by the State of Arizona, DHS-BEMS Division and the U.S. Department of Transportation's National Highway Traffic Safety Administration 1994 and 1996 revisions. Prepares students for State recertification and NREMT re-registration. May be taken two times for credit. Prerequisites: Current basic EMT and CPR certifications.
**COURSE DESCRIPTIONS**

**EMS201 Basic EMT Renewal Challenge**

.5 Credit (.5 Lecture)

**Typically Offered:** Fall, Spring and Summer

Designed to support the Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (BEMS) recertification requirements for Emergency Medical Technician Basic (EMTB) according to the U.S. Department of Transportation (DOT) EMT-Basic National Curriculum and the Arizona EMT Basic Refresher Curriculum Guidelines. Does not meet National Registry of EMT (NREMT) refresher requirements for EMTs. Satisfactory/Unsatisfactory grading option is available. Course may be repeated for recertification. Prerequisites: Basic EMT and CPR certifications.

**EMS208 Intermediate Emergency Medical Technician**

11 Credits (7 Lectures, 12 Labs – 285 Hours)

**Typically Offered:** Fall, Spring and Summer

Designed to meet the U.S. Department of Transportation AZ Department of Health Services Office of Emergency Medical Services requirements for EMT-Intermediate. Provides advanced knowledge and skills related to hypoperfusion states, respiratory arrest or insufficiency, seizure states, cardiovascular emergencies, unconscious states of undetermined etiology, head injury with altered levels of consciousness and chest trauma. Current EMT certification for one year required. Comprehensive written, oral and practical evaluation on basic EMT skills. Prerequisites: Valid EMT certification; HCP CPR; DHS requirements.

**EMS235 Emergency Cardiac Care**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Designed to acquaint all levels of emergency care providers with basic electrocardiographic (ECG) rhythm analysis and interpretation and related care in a clinical and pre-hospital setting. Prerequisite: EMS125 or Division Chair consent.

**EMS236 Pharmacology in an Emergency Setting**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Designed for the Emergency Medical Technician dealing with the administration of emergency medications in the field as outlined in current paramedic legislation. In depth coverage of medications enumerated in the algorithms of patient care as defined by the American Heart Association (AHA), Advanced Cardiac Life Support (ACLS). Coverage of medications that interact or interfere with the AHA ACLS algorithms. Prerequisite: EMS125.

**EMS240 Advanced Cardiac Life Support**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Didactic and psychomotor skills training and validation in techniques of Advanced Cardiac Life Support (ACLS) according to the Current Standards and Guidelines of the American Heart Association (AHA). Includes endotracheal intubation, ECG arrhythmia recognition, synchronized, unsynchronized and automated defibrillation, cardiovascular pharmacology and electronic pacemaker. Designed for all health-care related professionals, clinical and pre-hospital. Course may be repeated for recertification. Prerequisite: Current American Red Cross or American Heart Association (AHA) Basic Life Support Healthcare Provider validation, or National Safety Council Green Cross Professional Rescuer, or Division Chair consent.

**EMS241 Advanced Cardiac Life Support (ACLS) Refresher**

.5 Credit (.5 Lecture)

**Typically Offered:** Fall, Spring and Summer

Designed for all levels of emergency medical technicians, nurses, physicians and physicians' assistants to assure maintenance of didactic and psychomotor skill training in techniques of Advanced Cardiac Life Support (ACLS) according to the 2005 Standards and Guidelines of the American Heart Association. Course includes endotracheal intubation, ECG arrhythmia recognition, synchronized and unsynchronized and automated defibrillation, cardiovascular pharmacology and electronic pacemaker. Prerequisites: Current CPR provider level and ACLS provider level.
**EMS242 Advanced Life Support Refresher Course**  
3.5 Credits (3.5 Lectures)  
**Typically Offered:** Fall, Spring and Summer  
Advanced life support, including initial, focused and continuing processes of assessment; identification and treatment of hypoperfusion states; field interventions; and drug analysis within the scope of the intermediate and advanced EMT and paramedic. Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the US Department of Transportation (US DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS) for recertification. *Prerequisite: Paramedic or IEMT Certification.*

**EMS245 Pre-Hospital Trauma Management/ PHTLS**  
1 Credit (1 Lecture)  
**Typically Offered:** Fall, Spring and Summer  
Designed to instruct pre-hospital care personnel in the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances basic emergency medical technology (EMT) skills by focusing on emergency care interventions including victim assessment, initial treatment, resuscitative techniques, victim stabilization, transportation of the victim to an emergency care facility and documentation. *Prerequisite: EMS125 or Basic EMT.*

**EMS255 Instructional Strategies for EMT Instructors**  
2 Credits (2 Lectures)  
**Typically Offered:** Fall, Spring and Summer  
Participative course to prepare all levels of EMT and/or nurses as instructors in EMT programs; includes writing objectives, preparing class and course schedules, reviewing AZDHS Rules and Regulations. *Prerequisite: AZ-DHS EMT, IEMT, CEP Certification or RN with two years of experience in ER nursing.*

**EMS272A Advanced Emergency Medical Technology/Paramedic, Module I**  
17.5 Credits (17.5 Lectures – 262.5 Hours)  
**Typically Offered:** Fall, Spring and Summer  
The first advanced course in the series for Emergency Medical Technicians explores the acute critical differences in physiology, pathophysiology and clinical symptoms as they pertain to pre-hospital emergency care. Course emphasizes developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. *Prerequisites: Certified EMT with one year of experience; FSC129; and entrance assessment.*

**EMS272B Advanced Emergency Medical Technology/Paramedic, Module II**  
8.5 Credits (8 Lectures, 2 Labs – 150 Hours)  
**Typically Offered:** Fall, Spring and Summer  
The second advanced course in the series for Emergency Medical Technicians explores acute critical differences in physiology, pathophysiology and clinical symptoms as they pertain to pre-hospital emergency care. Course emphasizes developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Topics include: drawing and recording blood, intubation, parenteral medications, dosage and side effects, injury prevention, standards of care and effective communication techniques. *Prerequisite: EMS272A. Corequisite: EMS272D.*

**EMS272C Advanced Emergency Medical Technology/Paramedic, Module III**  
8.5 Credits (8 Lectures, 2 Labs – 150 Hours)  
**Typically Offered:** Fall, Spring and Summer  
Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology and clinical symptoms, as they pertain to pre-hospital emergency care. Course emphasizes developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. *Prerequisite: EMS272B. Corequisite: EMS272E.*
EMS272D Advanced Emergency Medical Technology/Paramedic, Practicum I
6 Credits (6 Practica - 270 Hours clinical/vehicular)

Typically Offered: Fall, Spring and Summer

This emergency medical technician practicum provides hands-on application of EMS skills and knowledge in a supervised, pre-hospital emergency setting, with an emphasis on demonstrating diagnostic and advanced emergency treatment skills to care for acutely ill and seriously injured patients. Students further develop diagnostic and advanced emergency treatment skills, professional communications with patients, their families, hospital and fire personnel and improve speed and accuracy of delivery of lifesaving patient analysis and intervention care procedures. Prerequisite: EMS272A. Corequisite: EMS272B.

EMS272E Advanced Emergency Medical Technology/Paramedic, Practicum II
6 Credits (6 Practica - 270 Hours)

Typically Offered: Fall, Spring and Summer

This emergency medical technician practicum provides hands-on application of EMS skills and knowledge within a supervised, pre-hospital emergency setting, including patients with diverse physiology, pathophysiology and clinical symptoms. Course emphasizes demonstrating diagnostic and advanced emergency treatment skills to care for acutely ill and seriously injured patients. Prerequisite: EMS272B. Corequisite: EMS272C.

EMS275 Critical Care for Paramedics (CCEMTP)
5.25 Credits (5 Lectures, 1 Lab)

Typically Offered: Fall, Spring and Summer

Critical Care Emergency Medical Transport Program (CCEMTP) is designed to prepare paramedics and nurses to function as members of a critical care transport team. Students will gain an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment and develop skills to maintain the stability of hospital equipment and procedures during transport. Prerequisites: (Paramedic or Nurse), CPR, (BTLS or PHTLS), (PALS or PEP) and ACLS.

ENGINEERING (EGR)

EGR090 STEM Learning Success
1 Credit (1 Lecture)

Typically Offered: Fall

How to learn through effective time and stress management, and the application of study skills to basic presentations from various STEM (Science-Technology-Engineering-Mathematics) career fields and Learning Theory.

EGR092 Survey of Engineering and Science Professions
1 Credit (1 Lecture)

Typically Offered: Fall

A survey of the major science and engineering disciplines and the features of each profession, including basic project work, industry presentations and career development.

EGR102 Introduction to Engineering
3 Credits (2 Lectures, 3 Labs) EGR 1102 POS

Typically Offered: Fall and Spring

Comprehensive engineering problem solving, incorporating the design process; its scientific basis, hands-on teamwork, effective communication, ethical implications and the profession itself. Prerequisite: MAT182 OR MAT187.

EGR105 Beginning MATLAB Programming
2 Credits (2 Lectures)

Typically Offered: Fall and Spring

Use MATLAB to solve real-world science and engineering problems. Topics include an introduction to programming, strings, arrays, data structures, control flow, file management, data analysis, basic numerical analysis and graphing. Prerequisite: MAT151.

EGR110 Intermediate MATLAB Programming
2 Credits (2 Lectures)

Typically Offered: Fall and Spring

A continuation of EGR105 covering the design of problem-solving algorithms and their application to scientific and engineering solutions. Prerequisites: EGR105 and MAT187.
**EGR116 Introduction to Python Programming**  
2 Credits (2 Lectures)  
Typically Offered: Fall and Spring  
Basic Python programming language covering string manipulation, user input, calculations, graphing, variables, loops, conditional logic, variables, lists, text files, objects, methods, classes, Graphical User Interface (GUI) development and animation. Prerequisite: MAT151.

**EGR121 STEM Simulation Programming**  
2 Credits (2 Lectures)  
Typically Offered: Fall and Spring  
Use Visual Python to create simulations of physical systems. Topics include simulation programming, graphing and introductory numerical analysis; data acquisition, organization, analysis and visualization. Prerequisites: (MAT182 or MAT187) and (PHY111 or PHY121).

**EGR201 Statics**  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Introduction to engineering statics, including force systems, resultants, equilibrium of particles and rigid bodies. Course includes an introduction to centroids and centers of mass, area moments of inertia, distributed loading and friction. Prerequisites: EGR105, PHY121. Corequisite: MAT262.

**EGR202 Dynamics**  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Introduction to the kinematics of particles, systems of particles and rigid bodies; moving reference frames; dynamics of particles, systems of particles and rigid bodies; equilibrium, energy, linear momentum and angular momentum. Prerequisite: EGR201.

**ENGLISH (ENG)**

**ENG090 English Composition I**  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
An introduction to the writing process, emphasizing idea development, organization, and revision in sentences, paragraphs and short essays, as well as development of grammatical and mechanical skills.

**ENG090A English Composition I for English Language Learners**  
3 Credits (3 Lectures)  
Typically Offered: Consult CAC Class Schedule.  
An introduction to the writing process emphasizing idea development, organization and revision for English Language Learner (ELL) students. Proper use of standard American English grammar and mechanics in sentences and paragraphs is emphasized. Students may only take one: ENG090 or ENG090A.

**ENG095 Writing Center**  
1 Credit (3 Labs)  
Typically Offered: Fall, Spring and Summer  
Individualized materials and tutoring to aid students in improving writing skills. Satisfactory/Unsatisfactory grading only. May be taken more than four times for credit.

**ENG100 English Composition II**  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
An introduction to academic writing with an emphasis on generating ideas, expressing those ideas in essay form and using one’s writings to organize content, identify punctuation, grammar and spelling errors and to create effective strategies for their correction. Prerequisite: ENG090 or appropriate writing placement test score.

**ENG100A English Composition II for English Language Learners**  
3 Credits (3 Lectures)  
Typically Offered: Consult CAC Class Schedule.  
An introduction to academic writing for English Language Learner (ELL) students. Course emphasizes generating ideas, expressing those ideas in essay form and using written work to identify and correct punctuation, grammar and spelling errors in standard American English. Prerequisite: ENG090 or ENG090A.
ENG101 English Composition III  
3 Credits (3 Lectures)  
Typically Offered:  Fall, Spring and Summer

Study of analytical skills integral to the writing of complex arguments through the development of an original thesis, supportive ideas and advanced research. Emphasis on writing as a process of reflective cognition and revision. Prerequisites: ENG100 and RDG094.

ENG102 English Composition IV  
3 Credits (3 Lectures)  
Typically Offered:  Fall, Spring and Summer

Emphasis on critical thinking, close reading, analysis and advanced research skills through the development, writing and revision of complex arguments. Prerequisite: ENG101.

ENG121 Applied Technical Writing  
3 Credits (3 Lectures)  
Typically Offered:  Fall and Spring

Business, professional and technical writing styles including syntax and document design necessary in the production of letters, reports, resumes and other forms of business communication. Prerequisites: ENG090 and RDG091.

ENG200 Introduction to Creative Writing  
3 Credits (3 Lectures)  
Typically Offered:  Fall

An introduction to the craft of various literary forms (creative non-fiction, poetry and fiction) emphasizing readings, composing practice and revising various creative pieces for an audience. Prerequisite: RDG094.

ENG203 Advanced Composition  
3 Credits (3 Lectures)  
Typically Offered:  Spring

Designed to help transfer students further develop their critical reading, writing and research abilities. Emphasis is placed on the methods of discourse students will need to know in their own disciplines and areas of interest. Prerequisite: ENG102.

ENG205 Introduction to the Study of Language  
3 Credits (3 Lectures)  
Typically Offered:  Fall

Learn how language works by focusing on grammatical, social and biological aspects of language. Learn about speech sounds and sound patterns (phonetics and phonology), how words are formed (morphology), and how sentences are organized (syntax). Also, learn how language is acquired (psycholinguistics), how words and phrases are understood (pragmatics and semantics), how language changes (historical linguistics), and how language impacts our society (sociolinguistics). Prerequisite: RDG094.

ENG250 English for Chinese Graduate Students and Educators  
1 Credit (1 Lecture)  
Typically Offered:  Fall

Improvement of oral and written English proficiency via Distance Learning/Blackboard to graduate students and faculty in China. May be taken more than four times for credit.

ENGLISH AS A SECOND LANGUAGE (ESL)

See ENG and RDG for additional English Language Learner course options.

ESL089 ESL Multi-level Studies  
3 Credits (3 Lectures)  
Typically Offered:  Fall, Spring and Summer

English language listening, speaking, reading and writing skill development, levels of Beginning Literacy - ELAA V. Learners are assessed upon entry to determine English skill levels and placed in the appropriate learning level. The course content varies according to skills that align to the six levels and standards of the Arizona Department of Education Adult Education Standards for English Language Acquisition for Adults (ELAA). Learners progress at their own pace and may repeat the course to continue in the next level as they progress toward completion of all six ELAA levels. Course may be taken multiple times for credit as long as students demonstrate an appropriate level of improvement based on assessment scores. If a student does not improve and maintain that level of improvement after six sessions, he/she will not be permitted to continue to register for ESL classes. Prerequisite: Pretest to determine existing skill level.
COURSE DESCRIPTIONS

ENTERTAINMENT INDUSTRY TECHNOLOGY (EIT)

EIT100 History of Rock n' Roll
3 Credits (3 Lectures) \( \text{R} \)
Typically Offered: Fall and Spring
A survey of the history and development of rock music noting how cultural, social, political and economic conditions have affected its evolution. Prerequisite: RDG094.

EIT101 Introduction to Entertainment
3 Credits (3 Lectures) \( \text{R} \)
Typically Offered: Fall and Spring
An introduction to the live entertainment event industry, including survey of industry, job descriptions and employment opportunities, technical requirements and basic operation of various live performance and other venues. Prerequisite: RDG094.

EIT120 Entertainment Law
3 Credits (3 Lectures)
Typically Offered: Spring
An introduction to legal aspects of the entertainment industry, including performance rights, songwriting and personal appearance contracts, copyright law and trademarks. Prerequisite: EIT101.

EIT130 Live Audio Production I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
An introduction to concepts and technical skills required for live event sound reinforcement. Topics include the operation of basic sound systems, including consoles, amplifiers, speakers, processors and microphones. Prerequisite: EIT101.

EIT140 Introduction to Lighting
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
Introduction to the technical aspects of concert and theatrical lighting, including basic design, color theory, instrument types, power distribution, control, safety, and the proper hanging, connection, focus and control of instruments and accessories such as gobos, color scrollers, mirrored fixtures and moving lights. Prerequisite: EIT101.

EIT151 Digital Audio Workstation
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Use of Pro Tools mixing and automation software in conjunction with editing and recording, including computer operation, troubleshooting and file management.

EIT153 Recording Engineering I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
Introduction to basic topics in the operation of a 24-track audio recording studio, including audio theory, recording console signal flow, microphone placement, multi-track recording and mixing techniques. At the completion of the course, students will record and mix simple recording sessions. Prerequisite: EIT151.

EIT170 Performance Skills
1 Credit (3 Labs)
Typically Offered: Fall and Spring
Private coaching and practice for pop genre soloist or ensemble that concentrates on proper tone production, technique, style, stage presence and communication skills, incorporating live sound reinforcement and lighting design in the development of a live audience performance. May be taken four or more times for credit.

EIT171 Songwriting I
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Fall
Introduction to the basics of songwriting; including lyrics, rhythmic, melodic and harmonic development, form and emotional content. Prerequisite: MTC100.

EIT203 Entertainment Capstone Project
2 Credits (6 Labs)
Typically Offered: Spring
A capstone experience for the entertainment professional, including planning, preparing and developing a specific entertainment project by selecting materials, setting up and monitoring a budget, and overseeing a complete compact disk, project portfolio, or a full concert performance. May be taken four times for credit, once per each of the four EIT tracks. Prerequisite: Completion of first three semesters of EIT tracks with a grade of “C” or better in each course.
EIT221 Entertainment Marketing and Promotion
3 Credits (3 Lectures)
Typically Fall
Offered:
Entertainment business marketing and promotion elements, specifically the creation of publicity materials, designing the process for developing media relations, a press kit and creating a publicity campaign. Prerequisite: EIT120.

EIT222 Artist Management
3 Credits (3 Lectures)
Typically Fall
Offered:
The responsibilities and relationships with performers and managers, as well as third party business associates in the music industry will be explored. Topics include managing independent and contracted artists and the manager's role in touring, personal appearances, concert performances/recording, arranging bookings, maintaining contracts, setting up and monitoring budgets. Students will learn to locate, initiate and then manage performers. Prerequisite: EIT120.

EIT223 Events/Venue Management
3 Credits (3 Lectures)
Typically Spring
Offered:
Hands on and theoretical knowledge needed to work in the events and management arena. The course provides practical training in the organization and management of special music events and venue management. Prerequisite: EIT120.

EIT231 Live Audio Production II
3 Credits (2 Lectures, 3 Labs)
Typically Spring
Offered:
A continuation in concepts and technical skills required for live event audio reinforcement. Topics include advanced sound system setup and operation, in-depth operation of program and monitor consoles, system equalization, flown speaker arrays and musical production considerations. Prerequisite: EIT130.

EIT232 Equipment Maintenance
3 Credits (2 Lectures, 3 Labs)
Typically Spring
Offered:
Introduction to basic concepts and techniques for maintaining and repairing sound and lighting equipment. Topics include basic maintenance, preventative maintenance, troubleshooting, soldering, wiring standards, calibration and testing of a wide variety of sound, lighting and performance-related equipment.

EIT241 Concert Lighting
3 Credits (2 Lectures, 3 Labs)
Typically Fall
Offered:
An in-depth study of concert lighting to include full lighting design and lighting instrument hanging and focus for numerous concert arrangements, specifically choir concert, band/orchestra and dance lighting. Topics include using computer lighting effects, color scrollers, mirrored fixtures and moving lights. Fieldtrips required to off-campus area theatres to examine and evaluate an array of lighting venues. Prerequisite: EIT140. Corequisite: EIT242.

EIT242 Rigging
3 Credits (2 Lectures, 3 Labs)
Typically Fall
Offered:
Introduction to the technical aspects of rigging for theater and concerts, including single and double purchase counterweight systems, block and tackle, cable and chain rigging, powered hoist systems and portable scenic and lighting trusses. Prerequisite: EIT140. Corequisite: EIT241.

EIT254 Recording Engineering II
3 Credits (2 Lectures, 3 Labs)
Typically Fall
Offered:
A continuation in concepts and technical skills required in recording engineering in a 48-track audio recording studio. Topics include advanced audio theory, signal-processing equipment, advanced musical recording session procedures, production and engineering. At the completion of the course, students should be able to record and mix advanced multi-track recording sessions. Prerequisite: EIT153.

EIT255 Recording Engineering III
3 Credits (2 Lectures, 3 Labs)
Typically Spring
Offered:
A continuation in the study of recording studio procedures learned in EIT254. Topics include mixing techniques, time code synchronization of various machines, album sequencing and editing, and commercial production. Upon completion, students should be able to conduct any type of recording session and understand the working procedures in a professional recording studio. Prerequisite: EIT254.

EIT261 Acting for the Camera
3 Credits (2 Lectures, 3 Labs)
Typically Fall and Spring
Offered:
Develop an actor's approach to the special demands of acting in front of a camera. Emphasis is placed on the development of specific performance skills used for television and film acting. A capstone portfolio includes a variety of audition shorts. Prerequisite: THE101 or instructor consent. Cross Listed: THE261.
**EIT272 Songwriting II**
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Spring
Advanced songwriting techniques as a continuation of Songwriting I, including poetic and lyrical rhythm and meter, counterpoint, harmonic development, form and total song development to maximize emotional content. Prerequisite: EIT171.

**EIT296 Entertainment Internship**
3 Credits (Internship – 135 Hours)
Typically Offered: Fall
Students work in entertainment industry internships designed to fit the students’ selected track, interests and skills. The student may take only one internship for each of the four tracks of the Entertainment Industry Technology program. May be taken four times for credit, once per each of the four EIT tracks. Prerequisite: Complete all year one EIT courses in appropriate EIT track with a grade of “C” or better in each course.

**ENVIRONMENTAL SCIENCE (ENV)**

**ENV101 Environmental Science**
4 Credits (3 Lectures, 3 Labs) RD
Typically Offered: Fall, Spring and Summer
The systematic, scientific study of the environment and the effects of human activities on the environment. Field trips may be required at student’s expense. Prerequisite: RDG094.

**FIRE SCIENCE TECHNOLOGY (FSC)**

**FSC106 Introduction to Emergency Services**
3 Credits (3 Lectures) POS
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
An overview of fire protection and emergency services delivery at the local and national levels, including: career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; fire service laws and regulations; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and an introduction to The National Incident Management Systems (NIMS).

**FSC108 Fundamentals of Fire Prevention**
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Organization and function of a fire prevention bureau including familiarization with state and local laws and ordinances, codes and principles of fire prevention, the inspector's job and public relations. Fundamentals of fire prevention, including techniques, procedures, regulations and enforcement. Course includes discussion of hazards in ordinary and special occupancies, field trips, and lectures from industry.

**FSC111 Emergency Driver Operator**
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Fall, Spring and Summer
Emergency vehicle operator training including: the problems facing operators, the personal qualities of emergency vehicle operator candidates, legal responsibilities of operators, and physical forces involved in driving an emergency vehicle. Students must be employed/a member of public safety. Prerequisites: FSC117, FSC118 and Program Director consent.

**FSC117 Fire Apparatus and Equipment**
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Principles of care, maintenance and operation of fire apparatus and pumps. Course includes pump construction and accessories, pumping techniques, power development and transmission. Driving, troubleshooting and producing effective fire streams are emphasized.
**FSC118 Fire Hydraulics**  
*3 Credits (3 Lectures)*  
**Typically Offered:** Fall, Spring and Summer  
Review of basic mathematics, hydraulic laws and formulas as applied to the fire service. Application of formulas and calculations to hydraulic problems, water supply variables and discharge requirements for pumps. *Recommended: FSC117.*

**FSC119 Fire Service Ethics**  
*3 Credits (3 Lectures)*  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Explore the ethical and moral obligations of fire service professionals who deal with the quality of internal and external customer service.

**FSC126 Urban Technical Rescue: Rope Rescue I**  
*2 Credits (2 Lectures)*  
**Typically Offered:** Fall, Spring and Summer  
The basic uses of rope rescue equipment according to the standards of the State of Arizona for Rope 1. *Students must be employed/a member of public safety. Students sponsored by agencies are required to provide their own equipment. Prerequisite: Program Director consent.*

**FSC129 Hazardous Materials First Responder Operations**  
*3 Credits (3 Lectures) POS*  
**Typically Offered:** Fall, Spring and Summer  
Basic methods of recognition and identification based upon the chemical and physical properties of hazardous materials; basic safety procedures when utilizing specific types of protective clothing and equipment; basic tactical information relating to scene management. Course includes confined space operations in accordance with the National Fire Protection Agency Association (NFPA).

**FSC130 Fitness for Firefighters/CPAT**  
*1.5 Credits (1.5 Lectures)*  
**Typically Offered:** Consult CAC Class Schedule.  
Skills and abilities required for entry level position in the fire service including physical ability and stamina. Students have the opportunity to take the International Association of Fire Fighters (IAFF) Candidate Physical Ability Test (CPAT) at the end of the course. *Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.*

**FSC134 Fitness & Conditioning for Firefighters**  
*3 Credits (3 Lectures)*  
**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit  
Overview of all aspects of fitness for current and prospective firefighters, including physical fitness and workout techniques as they apply to performing specific firefighting tasks. *Prerequisite: Students must sign and submit CAC Liability Waiver to Fire Science Program Director (located on CAC FSC website). Recommendations: Students should be in good physical condition and have no existing health conditions which may preclude them from fully participating in the course.*

**FSC140 Firefighter I and II**  
*13 Credits (12 Lectures, 3 Labs)*  
**Typically Offered:** Fall and Spring  
Introductory fire science course primarily designed for the fire department recruit. Course includes firefighting skills, equipment and administrative policies; fire department operations; personnel policies; and International Fire Service Accreditation Congress Practical Skills Testing. *Prerequisites: EMS100, EMS125, FSC129, FSC134; Students must sign and submit CAC Liability Waiver to Fire Science Program Director (located on CAC FSC website). Recommendations: Students should be in good physical condition and have no existing health conditions which may preclude them from fully participating in the course.*

**FSC180 Wildland Fire, Module 1**  
*3 Credits (3 Lectures) POS*  
**Typically Offered:** Fall and Spring  
Wildland Fire Module 1 is designed for individuals with little or no experience in the wildland environment and provides preparation for performing as a beginning-level Wildland firefighter on an engine or hand crew. This course of instruction will provide an introduction to wildland fire prevention, fire behavior, suppression methods, equipment considerations, safety and incident command. This course encompasses the National Wildfire Coordinating Group content: S-110, S130/S190, S133, S134 and L-180. NWCG Certificate will be awarded after successful completion of the course and examination.

**General Information:**
1. Student is responsible for obtaining textbook package from the SPC-CAC book store.
2. On the first day of class, CAC provides the course tools and equipment.
3. Students are required to complete instructor-facilitated homework assignments that include the successful completion of online independent study courses.

**FEMA Website:** [http://training.fema.gov/IS/NIMS.asp](http://training.fema.gov/IS/NIMS.asp)  
**Courses:** National Incident Management System NIMS: IS-100.b - (ICS 100) Introduction to Incident Command Systems.

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**ICON LEGEND**

- **AGEC:**  
- **Intensive Writing:** *IW*  
- **Reading Required:** *RDG094:*  
- **Dual Enrollment:**  
- **Programs of Study/Tech Prep:** *POS*  
- **SUN Course:**  

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FSC181 NWCG Advanced Firefighter Training, S-131  
.5 Credit (.5 Lecture)  
Typically Offered: Fall, Spring and Summer  
Advanced firefighter training. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC180.

FSC182 NWCG Portable Pumps and Water Use, S-211  
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer  
Combined self-paced/field exercise format providing training for a portable water pump operator, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading options available.

FSC183 NWCG Wildland Power Saws, S-212  
1.5 Credits (1.5 Lectures)  
Typically Offered: Fall, Spring and Summer  
Skill course designed to instruct prospective chain saw operators in the requirements of the wildfire power saw operator position, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available.

FSC184 NWCG Supervisory Concepts and Techniques, S-281 (L-281)  
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer  
Instruction in basic supervision applicable to the single resource boss in the Incident Command System (ICS) and non-operations first-level supervisors, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available.

FSC185 NWCG Basic Incident Command System, I-200  
1 Credit (1 Lecture)  
Typically Offered: Fall and Spring  
Designed to introduce Wildland Firefighters to the principles of the Incident Command System (ICS) associated with incident-related performance in wildfires. This course is part one in a series of seven to meet the requirements to obtain NWCG certification for Engine Boss, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC180.

FSC186 NWCG Crew Boss (Single Resource), S-230  
1.5 Credits (1.5 Lectures)  
Typically Offered: Fall, Spring and Summer  
Instruction to produce student proficiency in the performance of all duties associated with the single resource crew boss, which includes preparation, mobilization, assignment, tactics and safety, and demobilization at wildfires. This course is required to obtain the NWCG Engine Boss qualification, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: NWCG S-131 OR FSC181.

FSC187 NWCG Engine Boss (Single Resource), S-231  
.5 Credit (.5 Lecture)  
Typically Offered: Fall, Spring and Summer  
Skill course required for Engine Boss, to produce student proficiency associated with the single resource engine boss. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: NWCG S-131 OR FSC181.

FSC188 NWCG Ignition Operations, S-234  
2 Credits (2 Lectures)  
Typically Offered: Fall, Spring and Summer  
Combined classroom/field exercise providing an entry-level training in the functional roles and responsibilities connected with firing operations at wildfire situations. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: NWCG S-290 OR FSC191.
**COURSE DESCRIPTIONS**

**FSC189 NWCG Interagency Incident Business Management, S-260/S-261**
2 Credit (2 Lectures)

Typically Offered: Fall and Spring

Interagency incident business management skills to meet general training needs of all firefighter positions and required to obtain National Wildfire Coordinating Group (NWCG) Certification for Engine Boss. This Course is also a requirement for the completion of the CAC Wildland Firefighter I Certificate. Satisfactory/Unsatisfactory grading option is available.

**FSC190 NWCG Basic Air Operations, S-270**
1.5 Credits (1.5 Lectures)

Typically Offered: Fall and Spring

Basic firefighter air operations, including aircraft types and capabilities. Aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft and requirements for helicopter take-off and landing areas. This course is required to obtain National Wildfire Coordinating Group (NWCG) certification for Engine Boss and required for Wildland Firefighter I Certificate completion. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC181 or NWCG S-131.

**FSC191 NWCG Intermediate Wildland Fire Behavior, S-290**
2 Credits (2 Lectures)

Typically Offered: Fall and Spring

Prepares prospective supervisors to undertake safe and effective fire management operations. This course is required to obtain National Wildfire Coordinating Group (NWCG) Certification for Engine Boss and required for the CAC Wildland Firefighter I Certificate. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC180 or NWCG 130/190.

**FSC192 Initial Attack Incident Commander**
1 Credit (1 Lecture)

Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit

Incident commander focuses on six instructional units: Foundation Skills; Intelligence Gathering and Documentation; Sizing Up the Incident; Developing a Plan of Action; Post-fire Activities; Evaluating Incident Objectives and Managing the Incident. Discussion and exercise format culminate in unit tests and performance based evaluations. Prerequisite: FSC180.

**FSC193 Followership to Leadership**
1 Credit (1 Lecture)

Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit

A self-assessment opportunity for individuals preparing to step into a leadership role while working through a series of problem solving events in small teams. Training includes: leadership values and principles, transition challenges for new leaders, situational leadership, team cohesion factors, ethical decision-making and after action review techniques. Prerequisite: FSC180.

**FSC202 Supervisory Training for Firefighters**
3 Credits (3 Lectures)

Typically Offered: Fall, Spring and Summer

Administrative and personnel methods applied to fire safety, department organization and personnel management. Includes fire service planning and relationships with other city depts.

**FSC203 Fire Operations in the Wildland/Urban Interface**
2 Credits (2 Lectures)

Typically Offered: Fall and Spring

Designed for structural and wildland firefighters who make tactical decisions when confronting wildland fire that threatens life, property and improvements in the wildland/urban interface. This course fulfills the requirements for S215 NWCG. Prerequisite: FSC181.

**FSC204 Firefighting Tactics and Strategy**
3 Credits (3 Lectures)

Typically Offered: Consult CAC Class Schedule.

Methodical approaches for coordinating personnel, equipment and apparatus on an emergency incident with emphasis on building construction, firefighter safety and the functions of command. Commander preparation and application of concepts involved in the development and deployment of on-scene strategic or tactical plans, while utilizing simulation exercises. Prerequisite: FSC140.

**FSC204A Regional Incident Command/Mutual Aid Training**
4 Credits (4 Lectures)

Typically Offered: Consult CAC Class Schedule.

Methods of coordinating personnel, equipment and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fire utilizing demonstration and simulation. This course also covers the eight functions of Command and is designed for rural Pinal County fire agencies. Prerequisite: FSC140 or equivalent, or three years of firefighter experience.
**FSC205 Command Strategies for Major Emergencies**  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Methods of managing major emergency incidents to include major wildland fires, complex hazardous materials incidents and multi-casualty medical incidents. Management of incidents with multi-agency coordination and the incorporation of federal, state and local resources while utilizing simulation exercises. Students must be employed as a member of public safety. Prerequisites: FSC204 or equivalent course, and Program Director consent.

**FSC208 Firefighter Safety and Building Construction**  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
Actions necessary to provide for the safety of firefighters operating on the fireground. Effects that fire and heat may have on various types of building construction resulting in the loss of structural integrity. Includes signs and symptoms of structural damage. Prerequisite: FSC140 or current firefighter.

**FSC209 Fire Origin, Cause & Determination**  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
Methods of determining points of fire origin, path of travel and fire cause. Includes recognizing and preserving evidence, interviewing witnesses, arson laws, types of arson fires, court testimony, reports and records.

**FSC220 Fire Officer Leadership**  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit  
Supervisory capabilities which include leadership skills and management styles. Also includes stress management, communication and motivational skills, and roles of the company officer. The course addresses ethics, use and abuse of power at the company officer level, creativity in the fire service environment and management of the multiple roles of the company officer. This course is required for IFSAC certification as a Fire Officer I. Students must be employed as a member of public safety. Prerequisites: FSC202 and Program Director consent.

**FSC238 Vehicular Extrication and Victim Stabilization**  
2 Credits (2 Lectures)  
Typically Offered: Fall, Spring and Summer  
Participative course designed for Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations. Students must be employed as a member of public safety. Prerequisites: Basic EMT certification or equivalent, nurse with emergency department and Program Director consent.

**FSC250 Ladder Company Officer**  
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer  
Overview of all aspects of ladder company operations including activities, expectations and responsibilities required of the ladder captain. Students must be employed as a member of public safety. Prerequisite: Program Director consent.

**FSC252 Engine Company Officer**  
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer  
Overview of all aspects of engine company operations including the activities and responsibilities performed by the captain as well as mechanisms for developing a personal supervisory style. Students must be employed as a member of public safety. Prerequisites: Firefighter, either volunteer or paid, and Program Director consent.

**FSC255 Fire Instructor I**  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit  
A course designed to train firefighters and emergency services instructors to teach a fire related class with basic instructional knowledge and from a prepared lesson plan. Students must be employed as a member of public safety. Prerequisite: FSC140 or Program Director consent.
FSC256 Fire and Emergency Services
Instructor Level II
1.5 Credits (1.5 Lectures)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
Knowledge for the Student/Instructor to develop, modify and recognize lesson plan types and formats; create lesson plans; develop guidelines for the use of audiovisual equipment. Students must be employed as a member of public safety. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC255.

FRENCH (FRE)
FRE101 Elementary French I
4 Credits (4 Lectures, 1 Lab) FRE1101
Typically Offered: Fall
The basic skills of listening, understanding, speaking, reading, and writing French, with a survey of cultural aspects of the French language.

FRE102 Elementary French II
4 Credits (4 Lectures, 1 Lab) FRE1102
Typically Offered: Spring
Refinement of basic communication skills in French, emphasizing reading, writing, speaking and listening exercises. Survey of cultural norms, beliefs and traditions from areas where French is spoken. Prerequisite: FRE101 or successful completion of 1 year of high school French.

FRE201 Intermediate French I
4 Credits (4 Lectures, 1 Lab) FRE2201
Typically Offered: Fall
Development of reading, writing, speaking and listening skills and proficiency in French at the novice intermediate level. Continuation of understanding, appreciation and sensitivity to cultural norms, values and beliefs in areas where French is spoken. Prerequisites: RDG094 and (FRE102, or 2 years high school French, or instructor consent, or CLEP score 54 or higher).

FRE202 Intermediate French II
4 Credits (4 Lectures, 1 Lab) FRE2202
Typically Offered: Spring
Continued development of speaking, writing, listening and reading proficiency in French at the intermediate level. Continued study and appreciation of cultures of the French-speaking world. Prerequisite: FRE201 or three years high school French or instructor consent.

GENERAL EDUCATION DEVELOPMENT (GED)
GED089 GED Multi-level Studies
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Development of reading, writing, math, science, social studies and other academic knowledge and skills. Students are assessed upon entry to determine readiness for passing the General Educational Development (GED) tests. The course content varies according to the skills needed for test preparation. Levels and standards align with Arizona Department of Education Adult Education ABE/ASE Standards. Course may be taken multiple times for credit as long as students demonstrate an appropriate level of improvement based on assessment scores. If a student does not improve and maintain that level of improvement after four sessions, he/she will not be permitted to continue to register for GED classes. Prerequisite: Pretest to determine existing skill level.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)
GIS101 Introduction to Geographic Information Technologies
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Introduction to geospatial technologies, including remote sensing, Global Positioning System (GPS), Geographic Information Systems (GIS), statistical analysis, map overviews, map projections and cartography.
COURSE DESCRIPTIONS

GIS102 Map and Image Interpretation
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall
Reading, analysis and interpretation of maps/remote sensing images used by geoscientists, including topographic, geologic and other geoscience maps for basic air photo interpretation. Students will detect, identify, and analyze objects or features from film and digital aerial photography and other types of high resolution remotely sensed images. The laboratory portion of this course focuses on manual and digital image interpretation for land cover mapping, forestry, agriculture, and geology and planning applications. May be taken two times for credit. Prerequisite: MAT101 or MAT162.

GIS111 Introduction to GIS
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Introduction to desktop Geographic Information Systems (GIS) technology using ArcGIS software to produce multidimensional spatial maps.

GIS112 Intermediate GIS
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Development of intermediate level knowledge and skills in Geographic Information Systems (GIS), including statistical applications, spatial databases, spatial analysis and related technology and overview of spatial data. Prerequisites: GIS101, GIS102 and GIS111.

GIS113 Advanced GIS
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Advanced data and spatial analysis techniques in Geographic Information Systems, using ArcGIS. Prerequisite: GIS101, GIS102, GIS111 and GIS112.

GIS150 GIS and Global Positioning Systems (GPS)
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Exploration into the functionality and relationship between Geographic Information Systems (GIS) and Global Positioning Systems (GPS), including how to prepare, manage and retrieve GIS data for mobile devices.

GIS196 GIS Internship I
3 Credits (3 Internships – 135 Hours)
Typically Offered: Fall, Spring and Summer
Students work in GIS internships to help students select GIS specialty track, refine GIS skills and gain teamwork skills. Prerequisites: GIS101, GIS102 and GIS111 completed with a grade of “C” or better.

GIS210 GIS Programming
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Application of programming languages to GIS data to analyze data, creates user interfaces, create web services and achieve the full potential of ArcGIS software. Prerequisite: CIS181 or (CIS216 or CIS218 or any computer programming course).

GIS230 Applied GIS: The Environment
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
Use Geographic Information Systems (GIS), the leading technique used in ecosystem analysis, to analyze data types, sources and applications; to integrate the physical and topographic information in a landscape with characteristics of the biotic components of the environment; and to address environmental systems and problems. This course focuses on GIS applications to analyze and interpret ecological data. Use GIS to interpret spatial information in relation to land use and to create a decision matrix to plan, manage and restore land for more effective land use and success in environmental restoration efforts. Prerequisite: GIS113.

GIS231 Applied GIS: Transportation Systems
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Spring
Geographic Information Systems (GIS) applications to transportation includes 1) modeling techniques such as shortest path, location and allocation, vehicle routing and traffic assignment; 2) integration modeling and planning; and 3) exploration of other transportation systems pertaining to utilities such as pipeline networks and electrical transportation and distribution systems. Apply GIS principles to transportation using state-of-the-practice computing technology for transportation planning in a GIS environment. Prerequisite: GIS113.

ICON LEGEND
AGEC:  Dual Enrollment:  
Intensive Writing:  IW  Programs of Study/Tech Prep:  POS  
Reading Required: RDG094:  R  SUN Course:  

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GIS232 Applied GIS: Communities
3 Credits (2 Lectures, 3 Labs)

Typically Offered: Fall

Explore GIS fundamentals as applied to a range of disciplines focusing on municipalities, including 1) city and county government agency data; crime, election, building, assessment and zoning data; 2) techniques for displaying data in map form; and 3) GIS theory, data collection and input, data management, spatial analysis, visualization, map preparation and presentation. Prerequisite: GIS113.

GIS250 Remote Sensing I
4 Credits (3 Lectures, 3 Labs)

Typically Offered: Fall and Spring

Introduction to digital remote sensing and satellite imagery analysis, including: fundamental principles of remote sensing with an emphasis on the theoretical and applied realms of the discipline; physics of electromagnetic radiation, digital photogrammetry, image interpretation, spatial resolution, airborne and space-borne sensors and image classification; and reinforcement of concepts through laboratory exercises and field work. Prerequisite: GIS102.

GIS251 Remote Sensing II
4 Credits (3 Lectures, 3 Labs)

Typically Offered: Fall and Spring

Use remote sensing tools to create aerial photography and data for Geographic Information Systems (GIS) based natural resource mapping and monitoring. Explore non-photographic systems used for natural resource management, including satellite-borne sensors, radar, LiDAR, video, digital cameras and various airborne multi-spectral and hyperspectral sensors. Data from these systems and aerial photography provide key inputs to GIS. Prerequisite: GIS250.

GIS296 GIS Internship II
3 Credits (3 Internships - 135 Hours)

Typically Offered: Fall, Spring and Summer

The GIS Internship II is designed for GIS A.A.S. Degree seeking students as their capstone course in which they apply their GIS knowledge and skill in a real-world setting based on their selected GIS track, interests and skills. This internship requires 135 hours of applied work in a work setting. Prerequisites: GIS113, (DFT131 or GIS241), (GIS230 or GIS231 or GIS232), (GIS102 or AGB124), GIS196 and instructor consent. This is the GIS A.A.S. Degree capstone course and all GIS AAS Degree coursework must be completed prior to enrollment in this course.

GIS299 GIS Research Methods
4 Credits (3 Lectures, 3 Labs)

Typically Offered: Fall and Spring

Introduction to GIS focused research methods useful for academic and professional investigations of information practices and technologies. By examining the applications, strengths and major criticisms of geospatial methodologies drawn from both the qualitative and quantitative traditions, this course stresses developing skills and knowledge to make various decisions and the steps involved in crafting and executing a research methodology, as well as the ability to create critically assessed GIS-based research. Prerequisite: GIS232 or GIS251.

GEOGRAPHY (GEO)

GEO101 Introduction to Cultural and Historical Geography
3 Credits (3 Lectures) \[ \[ \]

Typically Offered: Fall and Spring

Historical and contemporary spatial variations among cultural groups and spatial functioning of society. Illustrations from a variety of cultures showing how culture is constructed, contested, and contextualized. Prerequisite: RDG094.

GEOGRAPHY (PHYSICAL) (GPH)

GPH111 Introduction to Physical Geography
4 Credits (3 Lectures, 3 Labs) \[ \]

Typically Offered: Fall and Spring

Spatial and functional relationships among climates, landforms, soils, water and plants. Prerequisite: RDG094.

GEOLOGY (GLG)

GLG101 Physical Geology
4 Credits (3 Lectures, 3 Labs) \[ GLG 1101 \[ \]

Typically Offered: Fall and Spring

Basic principles of geology. Earth materials, external processes, internal processes, mineral and energy resources, and planetary geology. Prerequisites: MAT092 and RDG094.
GLG102 Historical Geology
4 Credits (3 Lectures, 3 Labs) ❖ R
Typically Offered: Fall and Spring
Rocks, fossils, organic evolution, geologic time, plate tectonics, earth’s origin and the major time periods of earth history. Prerequisites: MAT092 and RDG094.

GLG110 Environmental Geology
4 Credits (3 Lectures, 3 Labs) ❖ R
Typically Offered: Fall and Spring
Geological studies as they apply to interactions between humans and the Earth, including geologic processes and hazards, resources and global change. Prerequisites: MAT092 and RDG094.

HEALTH CAREERS CENTER (HCC)

HCC100 Introduction to Healthcare
3 Credits (3 Lectures) POS ❖ R
Typically Offered: Fall, Spring and Summer
Introduction to healthcare, medical terminology and the human body, personal and workplace safety, behaviors for success, communication and healthcare skills, and securing and maintaining employment. Prerequisite: RDG094.

HCC110A Medical Terminology A
3 Credits (3 Lectures) ❖ R
Typically Offered: Fall, Spring and Summer
Study of medical terminology and its application to assigned body systems. Prerequisite: RDG094.

HCC110B Medical Terminology B
3 Credits (3 Lectures) ❖ R
Typically Offered: Fall, Spring and Summer
Study of medical terminology and its applications to assigned body systems and specialties. Prerequisite: RDG094.

HCC111 Healthcare Law and Ethics
2 Credits (2 Lectures) POS ❖ R
Typically Offered: Fall, Spring and Summer
Introduction to the foundations of law and ethics in healthcare, legal issues for healthcare practitioners, and professional, social and interpersonal healthcare issues. Prerequisite: RDG094.

HCC112 Interpersonal Skills
2 Credits (2 Lectures) POS ❖ R
Typically Offered: Fall, Spring and Summer
Communication skills, basic principles of psychology, developmental stages of the life cycle, hereditary, cultural, and environmental influences on behavior and professional issues. Prerequisite: RDG094.

HCC113 Math and Dosage Calculations for Health Occupations
1 Credit (1 Lecture) ❖ R
Typically Offered: Fall, Spring and Summer
Mathematical concepts and dosage calculations required in a variety of health occupations. Prerequisites: MAT082 and RDG094.

HCC116 Medical Terminology Accelerated
3 Credits (3 Lectures) POS ❖ R
Typically Offered: Fall, Spring and Summer
Study of medical terminology and its applications to all body systems and assigned specialties. Fast-paced for students with medical backgrounds. Prerequisite: RDG094.

HEALTH INFORMATION MANAGEMENT (HIM)

HIM115 Health Information Technology I
3 Credits (3 Lectures) ❖ R
Typically Offered: Fall
The fundamental concepts in Health Information, including healthcare system, root foundations of the profession, healthcare data and information systems, structures and information management methodologies as well as classification systems, terminologies and vocabularies. At the end of this course, students will be familiar with the healthcare system, accreditation, certification and licensure standards. Prerequisite: RDG094.
HIM117 Health Information Technology II
3 Credits (3 Lectures)
Typically Offered: Spring
The fundamental concepts in Health Information including healthcare informatics data management and use to include an overview of statistics, research and epidemiology, performance management, patient safety, data analysis, registries and law. At the end of this course, students will have a thorough understanding of the management and uses of data. Prerequisite: HIM115.

HIM121 Legal Aspects of Health Information
2 Credits (2 Lectures)
Typically Offered: Spring
Continued study of law and ethical concepts including the medical legal system, criminal vs. civil law, statutory law, contracts, administrative law, medical malpractice and the lawful principles related to patient care and Health Information Management. Prerequisites: HCC111, HIM115. Corequisite: HIM117.

HIM131 Introduction to Insurance and Insurance Billing I
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Introductory course to insurance systems, billing processes, clinical vocabularies, ethical and legal issues and computer applications used to complete these processes. Prerequisite: RDG094.

HIM138 ICD Coding
3 Credits (3 Lectures)
Typically Offered: Fall
Fundamental coding techniques using the International Classification of Diseases (9th Revision) Clinical Modification (ICD-9-CM) and provides hands-on practical skills for student learning and skills building. Emphasis is placed on specificity and the application of professional standards in the assignment of codes to diagnoses and procedures using coding rules. Prerequisite: RDG094. Corequisite: HCC111.

HIM139 ICD Coding for ICD-10 CM & PCS
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Fall and Summer
Coding nomenclature using ICD-10-CM and PCS implemented nationwide and effective 2013. Code sets for ICD-10 require higher level anatomy and physiology knowledge and increased levels of specificity. This course is only open to HIM students, graduates and credentialed coders familiar with ICD-9. Prerequisites: HIM138 and HCC116.

HIM158 CPT Coding
3 Credits (3 Lectures)
Typically Offered: Spring
Fundamental coding techniques using the Current Procedural Terminology (CPT) and the HCPCS coding system and providing hands-on practical skills for student learning and skills building. Emphasis is placed on specificity and the application of professional standards in the assignment of codes to diagnoses and procedures using coding rules. Prerequisite: HIM138.

HIM160 Health Information Technology Seminar
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Summer
Further application of skills learned using AHIMA’s Virtual Lab and through project management. In addition, students will be given the opportunity to visit traditional and non-traditional healthcare facilities. Students will keep records of all projects and experiences and discuss them at a weekly one-hour seminar. The final exam constitutes a comprehensive report of the students' experiences. Prerequisite: HIM117.

HIM161 Introduction to Insurance and Insurance Billing II
3 Credits (3 Lectures)
Typically Offered: Spring
Real world scenarios for student application of knowledge and skills building in data content, insurance systems, billing processes, clinical vocabularies, ethical and legal issues, and computer applications. Prerequisite: RDG094.
HIM175I Practicum – Coding and Reimbursement
4 Credits (4 Practica – 180 hours)
Typically Offered: Summer
Practical experience of 180 hours, under supervision of an instructor, with an emphasis on applying medical coding principles and procedures to medical records. Prerequisite: Instructor consent.

HIM200 Healthcare Reimbursement
2 Credits (2 Lectures)
Typically Offered: Fall
Builds on fundamental concepts in reimbursement methodologies, including clinical coding, coding compliance, reimbursement systems and revenue cycle management. At the end of this course students will be familiar with reimbursement reporting requirements. Prerequisite: HIM158.

HIM205 Healthcare Statistics and Research
2 Credits (2 Lectures)
Typically Offered: Fall
Emphasizes developing student’s knowledge and skills with data collection methods, computation, organization and presentation of reported health statistics. Expands on Institutional Review Board (IRB) processes and policies. Prerequisites: HIM160 and MAT101 or higher.

HIM208 Advanced Coding
2 Credits (2 Lectures)
Typically Offered: Fall
Continued study in intermediate coding concepts and advanced student skill training utilizing all coding methodologies. Students perform coding functions using real medical records and both the manual system and an encoder/grouper. Prerequisites: HIM138 and HIM158.

HIM210 Supervision and Quality
2 Credits (2 Lectures)
Typically Offered: Spring
Enhances the student’s ability to perform qualitative and quantitative analysis of data for peer review, quality assessments, and the development of improvement programs in healthcare facilities and organizations for reporting and accreditation requirements. Prerequisite: HIM205.

HIM215 Health Information Systems
3 Credits (3 Lectures)
Typically Offered: Spring
Continued study in the areas of data storage, retrieval and security as well as information systems and communication technologies. This course promotes the application of analysis, design, evaluation, selection, acquisition and utilization of health information systems in healthcare organization settings. Prerequisites: CBA113A and HIM160. Corequisite: CBA114A.

HIM275Q Health Information Technology Practicum
4 Credits (4 Practica – 180 Hours)
Typically Offered: Summer
Through a practical externship of at least 180 hours, students apply knowledge and skills learned in the Health Information Technology program in a health care facility setting under the direction of a Registered Health Information Technician (RHIT) or Registered Health Information Administrator (RHIA). Prerequisites: HIM215, (all program requirements completed prior to enrollment in HIM275Q) and HIT Program Director consent.

HEALTH KNOWLEDGE AND SKILLS (HKS)

HKS155 Introduction to Phlebotomy
3 Credits (2 Lectures, 3 Labs) ❋
Typically Offered: Summer
An introduction to the basic knowledge and practical experience necessary for the safe and successful collection of blood specimens. Students have the opportunity for practical experience in a hospital setting. Prerequisites: High School Diploma or GED; Immunizations required; and RDG094. Corequisite: HKS255.
COURSE DESCRIPTIONS

HKS255 Phlebotomy Practicum
3 Credits (3 Practica – 135 hours)
Typically Offered: Summer
An application of basic phlebotomy training to provide safe and successful collection of blood specimens. Students have the opportunity for practical experience in an outpatient blood collection site or hospital setting. Corequisite: HKS155.

HEALTH PATIENT MANAGEMENT (HPM)

HPM105 Pharmacy Techniques
3 Credits (3 Lectures)
Typically Offered: Spring
An overview of pharmacy. History of pharmacy, pharmacy terminology, role and responsibilities of a pharmacy technician in comparison to that of the pharmacist, and ethical and legal information. Theory of procuring, manipulating, calculating and preparing drugs for dispensing.

HPM125 Nursing Assistant
6 Credits (4 Lectures, 6 Labs)
Typically Offered: Fall and Spring
Entry-level nursing skills, supervised clinical experience, and basic anatomy, physiology, nutrition and medical terminology pertinent to nursing assistants in nursing homes or hospitals. Potential students convicted of a felony may not apply for state certification or licensure until five years after the absolute discharge of sentence. (All court-ordered terms of probation or parole must be completed at least five years prior to the date of application.) Prerequisites: HS diploma or GED, RDG094 and Registration Packet must be completed.

HPM136 Business Skills for Massage Therapy
3 Credits (3 Lectures)
Typically Offered: Spring
Career options in the massage field, including entrepreneurial opportunities, medical applications and spa work. Insurance billing and preparation for taking the national certification examination. Prerequisite: RDG094.

HPM140 Medical Assisting Skills I
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Medical record, medical asepsis and the OSHA Standard, sterilization and disinfection, vital signs, the physical examination, eye and ear assessment and procedures, physical agents to promote tissue healing, gynecologic, prenatal and pediatric examinations, minor office surgery and administration of medication. Prerequisites: RDG094 and instructor consent.

HPM141 Medical Assisting Skills II
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Cardiopulmonary procedures, colon procedures, radiology and diagnostic imaging, introduction to the clinical laboratory, urinalysis, phlebotomy, hematology, blood chemistry and serology, and microbiology. Prerequisites: RDG09 and instructor consent.

HPM150 Chiropractic Assistant Training
2 Credits (2 Lectures)
Typically Offered: Fall
Introduction to administrative and clinical chiropractic procedures. This course is a requirement in the massage therapy program and is available as continuing education for chiropractic assistants.

HPM151 Study of Acupuncture for Healthcare Professionals
1 Credit (1 Lecture)
Typically Offered: Fall
Introduction to acupuncture principles and practices that are part of patient care in a chiropractic medical practice. This course is required in the massage therapy program and is available as continuing education for chiropractic assistants.

HPM152 Study of Physiotherapy for Healthcare Professionals
1 Credit (1 Lecture)
Typically Offered: Fall
Introduction to physiotherapy principles and practices that are part of patient care in a chiropractic medical practice. This course is a requirement in the massage therapy programs and is available as continuing education for chiropractic assistants.

ICON LEGEND

AGEC: Dual Enrollment: Programs of Study/Tech Prep: POS
Intensive Writing: IW SUN Course:
Reading Required: RDG094: 

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HPM160 Applied Anatomy for Massage Therapy
3 Credits (3 Lectures) 📚
Typically Offered: Fall
Study of bones, joints and muscles while developing palpation skills with practical application in concurrent massage class experience. Prerequisite: RDG094.

HPM162 Basic Pharmacology for Health Occupations
3 Credits (3 Lectures) 📚
Typically Offered: Fall, Spring and Summer
Introduction to drug sources, uses and classifications including purpose, side effects, cautions, interactions and patient education. Prerequisite: RDG094.

HPM164 Pharmacy Certification Review
2 Credits (2 Lectures) 📚
Typically Offered: Spring
Preparation for taking the national pharmacy certification exam necessary for placement in the field and verification of competency. Prerequisite: RDG094.

HPM169 Clinical Laboratory Assistant Basics I
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall
This course defines the role of the clinical laboratory assistant in the healthcare delivery system: infection control principles, safety practices, procedures to collect specimens, methods for preparing blood and body fluid specimens for analysis, and the performance of basic tests at the clinical assistant level will be discussed. An overview of quality control protocols and potential pre-analytical errors will be provided. Prerequisites: Phlebotomy Certificate and instructor consent.

HPM170 Clinical Laboratory Assistant Basics II
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Spring
An introduction to the basics of six areas of the clinical laboratory; Immunology, Clinical Chemistry, and Donor Room (collection, screening, and component processing) are discussed as well as a focus on specific Hematology, Urinalysis, and Microbiology testing at the clinical assistant level. Prerequisite: HPM169.

HPM171 Administrative Medical Procedures
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall
Medical business practices, basic practice finances, managed care/insurance and procedural and diagnostic coding.

HPM173 Pathophysiology
3 Credits (3 Lectures) 📚
Typically Offered: Fall, Spring and Summer
Pathological conditions and terminology, causes, incidence, signs, symptoms, diagnosis, treatment and special considerations associated with the major diseases of the body systems studied. Prerequisite: RDG094.

HPM175C Medical Assistant Degree Practicum
4 Credits (4 Practica – 180 Hours)
Typically Offered: Contact CAC Class Schedule
Supervised, unpaid practical experience of 180 hours in an ambulatory health care setting performing both administrative and clinical procedures. This course is required for the Medical Assistant A.A.S. Degree. Students must receive a grade of C or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's consent may retake this course only once with instructor consent. Prerequisites: Mandatory requirements specific to HPM175C must be met before enrollment; all program courses must be successfully completed before enrolling in HPM175C and instructor consent.

HPM175E Medical Assistant Certificate Practicum
4 Credits (4 Practica – 180 Hours)
Typically Offered: Contact CAC Class Schedule
Practical experience of 180 hours in a medical facility, under the supervision of a physician, where the students apply clinical principles and procedures in a situation with actual patient contact. This course is required for the Medical Assistant Certificate. Prerequisite: Instructor consent.
HPM175H Practicum – Pharmacy Technician
4 Credits (4 Practica - 180 Hours)
Typically Offered: Contact CAC Class Schedule
Practical experience of 180 hours under the supervision of a pharmacist performing a variety of technical duties related to preparation and dispensing of drugs according to standard procedures. Students must receive a grade of “C” or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor’s permission may retake this course only once with instructor permission. Prerequisites: Mandatory requirements specific to HPM175H must be met before enrollment; all program courses must be successfully completed before enrollment and instructor consent.

HPM175L Practicum – Massage Therapy (Relaxation Massage)
1 Credit (1 Practicum – 45 Hours)
Typically Offered: Fall and Spring
Practicum consisting of 45 hours of hands-on experience with emphasis on relaxation (Swedish) massage under the supervision of an instructor. Students must receive a grade of “C” or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: HPM180; Mandatory requirements specific to HPM175L must be met before enrollment and instructor consent.

HPM175M Practicum – Massage Therapy (Therapeutic Massage)
1 Credit (1 Practicum – 45 Hours) POS
Typically Offered: Fall and Spring
Practicum consisting of 45 hours of hands-on experience with emphasis on therapeutic massage under supervision of an instructor. Students must receive a grade of “C” or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor’s permission may retake this course only once with instructor permission. Prerequisites: HPM181; Mandatory requirements specific to HPM175M must be met before enrollment; instructor consent.

HPM175N Practicum – Massage Therapy for Special Populations
1 Credit (1 Practicum – 45 Hours)
Typically Offered: Fall and Spring
Practicum consisting of 45 hours of hands-on experience with emphasis on massage for special populations under supervision of an instructor. Students must receive a grade of “C” or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: HPM281; Mandatory requirements specific to HPM175N must be met before enrollment and instructor consent.

HPM175O Practicum – Massage Therapy (Spa Treatments and Hydrotherapy)
1 Credit (1 Practicum – 45 Hours)
Typically Offered: Fall and Spring
Practicum consisting of 45 hours of hands-on experience with emphasis on spa treatments and hydrotherapy under supervision of an instructor. Students must receive a grade of “C” or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: HPM282; Mandatory requirements specific to HPM175O must be met before enrollment and instructor consent.

HPM175P Clinical Laboratory Assistant Practicum
3 Credits (3 Practica - 135 Hours)
Typically Offered: Summer
Practical experience of 135 hours under the supervision of a laboratory technologist performing a variety of clinical skills including phlebotomy, waived testing, basic procedures, documentation and the use of information systems. Students must receive a grade of C or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor’s permission may retake this course only once with instructor permission. Prerequisites: Phlebotomy certificate; all program courses must be successfully completed before enrollment; mandatory requirements specific to HPM175P must be met before enrollment and instructor consent.

HPM180 Therapeutic Massage I
3 Credits (3 Lectures) POS
Typically Offered: Fall and Spring
Introduction to massage history, benefits and contraindications, draping, hygiene and safety, relaxation (Swedish) massage techniques and benefits, and business and ethics.
HPM181 Therapeutic Massage II
3 Credits (3 Lectures) POS
Typically Offered: Fall and Spring
Corporate chair massage, sports massage, Trager massage, range of motion and stretching, proper body mechanics, hygiene, safety, draping and professional decorum.

HPM210 Review for Registered Medical Assistant Examination
3 Credits (3 Lectures)
Typically Offered: Spring
A comprehensive approach to reviewing both administrative and clinical competencies for the medical assistant A.A.S. degree graduate preparing to take the Registered Medical Assistant (RMA) Medical Assistant Certification Examination offered by the American Medical Technologists (AMT). Prerequisite: Medical Assistant graduate with an Associate of Applied Science Degree.

HPM280 Therapeutic Massage III
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Muscle-specific and condition-specific massage designed to aid in the rehabilitative process including carpal tunnel syndrome, thoracic outlet syndrome, sciatic, low back and neck pain.

HPM281 Therapeutic Massage IV
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Special populations massages including pregnant women, lymphatic massage, geriatric massage and foot reflexology along with the proper use of body mechanics, hygiene, safety, draping and professional decorum.

HPM282 Therapeutic Massage V
3 Credits (3 Lectures) POS
Typically Offered: Fall and Spring
This course consists of 30 hours of spa technology (balneotherapy) and 15 hours of hydrotherapy.

HEAVY EQUIPMENT OPERATIONS (HEO)

HEO100 Introduction to Heavy Equipment Operations
5 Credits (1 Lecture, 12 Labs)
Typically Offered: Summer
Basic heavy equipment operation knowledge and experience, including theory, safety and operation of various types of equipment used in the industry, as well as workplace ethics, time management and teamwork. Prerequisites: Current and valid driver license and instructor consent.

HEO121 Heavy Equipment Operations I
5 Credits (3 Lectures, 6 Labs)
Typically Offered: Fall and Spring Summer
Introduction to the use of heavy equipment with emphasis on safety, preventive maintenance and grade stake interpretation. Prerequisite: Valid driver license.

HEO122 Heavy Equipment Operations II
5 Credits (3 Lectures, 6 Labs)
Typically Offered: Spring
Expanded operation of heavy equipment to include interpreting blueprints, staking and estimating costs, using technology to conduct research and construct more complex projects. Prerequisites: HEO121 and a valid driver license.

HEO127 Heavy Equipment Reconditioning
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Fall and Spring
Fundamentals of heavy equipment reconditioning procedures. Prerequisite: Valid driver license.

HEO128 Diesel Equipment Service and Repair
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Fall, Spring and Summer
Service and repair of diesel and heavy equipment. Prerequisite: Current and valid driver license.
HEO221 Advanced Heavy Equipment Operations III
5 Credits (3 Lectures, 6 Labs)
Typically Offered: Fall
Advanced instruction and application of heavy equipment operation comprehensive skills, knowledge and abilities. Prerequisites: HEO122 and valid driver license.

HEO222 Applied Heavy Equipment Construction
5 Credits (3 Lectures, 6 Labs)
Typically Offered: Fall, Spring and Summer
Heavy Equipment Operator capstone construction project and introduction to job seeking techniques. Prerequisites: HEO122 or instructor consent; current and valid driver license.

HEO223 Commercial Driver License Preparation
3 Credits (3 Lectures)
Typically Offered: Spring
Preparation for taking the Arizona Department of Motor Vehicle’s written examination, the pre-trip vehicle inspection procedures, vehicle maneuvering control skills and on-road driving test. Prerequisite: HEO121 or DIE110.

HISTORY (HIS)

HIS101 United States History I
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
A survey of the significant phases of the history of the United States from pre-European contact to the Civil War and Reconstruction, stressing the political, military, social and economic development of the new republic. Field trips may be required. Prerequisite: RDG094.

HIS102 United States History II
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
A survey of United States history after Reconstruction to the present, emphasizing the origins and development of the problems confronting a great industrialized world power and the issues arising from the two world wars. Field trips may be required. Prerequisite: RDG094.

HIS103 History of Western Civilization I
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
Western world development from its beginnings to the early 18th century, centered on the cultural, scientific, religious and political contributions of the great western civilizations. Field trips may be required. Prerequisite: RDG094.

HIS104 History of Western Civilization II
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
Western world development from early 18th century to modern day, stressing its cultural, intellectual, military and political conflicts and contributions. Prerequisite: RDG094.

HIS105 Arizona History
3 Credits (3 Lectures) R
Typically Offered: Every other spring; consult CAC Class Schedule.
Survey of Arizona history from the Spanish Exploration period through the Mexican Republic, American territorial status and United States statehood to the present. Includes the evolution of state government and politics and the contributions of the cultural, religious and ethnic groups making up Arizona culture. Field trips may be required. Prerequisite: RDG094.

HIS106 Mexican-American History
3 Credits (3 Lectures) R
Typically Offered: Fall
Examination of the origins and development of Mexican-American peoples and their contributions to the cultural, social, economic and historical development of the United States. Emphasis on social, economic, and political trends from the Mexican American War to the present. Prerequisite: RDG094.

HIS107 African-American History I
3 Credits (3 Lectures) R
Typically Offered: Fall
A survey of African-American life and history in the United States from 1619-1865. Emphasizes how enslaved Africans lived, worked, socialized and defined themselves in antebellum America, as they developed and sustained a new cultural community that was an amalgamation of African-American community and familial values and traditions. Prerequisite: RDG094.
HIS108 Eastern Civilization – Beginnings to 1850
3 Credits (3 Lectures) \( \text{IW} \)
Typically Offered: Fall
An examination of the characteristics and development of civilizations, religions and philosophies of the Far East and Southeast Asia from ancient times to the mid-nineteenth century. Prerequisite: RDG094.

HIS201 Women in United States History
3 Credits (3 Lectures) \( \text{IW} \)
Typically Offered: Spring and Summer
The history of women in American society from colonial times to the present with an emphasis on female leadership, social movements, race, ethnicity, social class, work, religion and the changing definitions of women’s roles. Field trips may be required. Prerequisite: RDG094.

HIS208 Eastern Civilization – 1850 to Modern Times
3 Credits (3 Lectures) \( \text{IW} \)
Typically Offered: Spring
An examination of the characteristics and development of civilizations, religions and philosophies of the Far East and Southeast Asia from the mid-nineteenth century to modern times. Prerequisite: RDG094. Corequisite: ENG102

HNR202 Honors Seminar II
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
Honors students and faculty work closely together on in-depth projects outside of the regular curriculum. The Honors Project is developed and research is shared through in-depth discussion, analysis and presentation of findings. Required for Honors students in the 18-hour academic transfer program. Must be taken concurrently with each content course taken for Honors credit. Prerequisites: HNR204, ENG101 and Honors cohort student. Corequisites: HNR205, ENG102 and each content course for Honors credit.

HNR203 Honors Seminar III
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
Honors students and faculty work closely together on in-depth projects outside of the regular curriculum. The Honors Project is developed and research is shared through in-depth discussion, analysis and presentation of findings. Required for Honors students in the 18-hour academic transfer program. Must be taken concurrently with each content course taken for Honors credit. Prerequisites: HNR204, ENG101 and Honors cohort student. Corequisites: HNR205, ENG102 and each content course for Honors credit.

HNR204 Honors Colloquium I
3 Credits (3 Lectures, 3 Recitations) \( \text{IW} \)
Typically Offered: Fall and Spring
The Honors Colloquium is required for Honors students in the 18-hour program. Honors Colloquium I is the first course requirement in the honors sequence designed for the academic transfer student. HNR204 may be taken either Fall or Spring semester, but must be taken independently of other Honors courses. The course provides a forum for reading and analyzing Daniel J. Boorstin’s *The Discoverers: A History of Man’s Search to Know His World and Himself*, an academic text which examines the significance and chronology of major events and movements in Western civilization, as well as the contributions of certain individuals and societies or groups. Application, analysis and synthesis are encouraged in oral and written responses. In addition, the course offers the opportunity for the Honors student to complete a proposal for an in-depth study/research project in an area of interest, monitored by the colloquium professor and a mentor who has uncommon knowledge or ability in the area of the student’s interest. Also, the course provides enrichment activities of cultural significance. Prerequisite: RDG094. Corequisite: ENG101.


**HNR205 Honors Colloquium II**

3 Credits (3 Lectures, 3 Recitations) [IW](#) [R](#)

**Typically Offered:** Fall and Spring

The Honors Colloquium is required for Honors students in the 18-hour program. Honors Colloquium II is the second course requirement in the Honors course sequence designed for the academic transfer student. The course provides a forum for reading and analyzing Daniel J. Boorstin's *The Creators: A History of Heroes of the Imagination*, an academic text which examines human accomplishment in the fields of architecture, music, painting, sculpting and writing. Application, analysis and synthesis are encouraged in oral and written responses. In addition, the course offers the opportunity for the Honors student to complete and present an in-depth study/research project in an area of interest, monitored by the colloquium professor and a mentor who has uncommon knowledge or ability in the area of the student’s interest. Also, the course provides enrichment activities of cultural significance. **Prerequisites:** HNR204 and RDG094. Corequisite: ENG102 [R](#).

**HNR255 Leadership Development**

3 Credits (3 Lectures) [R](#)

**Typically Offered:** Fall and Spring

A theoretical and applied study of leadership within the context of service. Approaches the study of the humanities as they relate to leadership theory, ethics and management. **Prerequisite:** RDG094.

**HOSPITALITY MANAGEMENT (HRM)**

**HRM100 Introduction to Hospitality**

3 Credits (3 Lectures) [R](#)

**Typically Offered:** Fall, Spring and Summer

An introduction to and career exploration of the hotel, restaurant, recreation, tourism and related industries. **Recommended:** RDG094.

**HRM101 Facilities Management**

3 Credits (3 Lectures) [R](#)

**Typically Offered:** Spring

The principles of property/facilities management with focus on lodging and food service operations. Concepts of the physical plant and engineering systems are introduced. Environment and energy conservation issues are discussed. **Prerequisite:** RDG094.

**HRM102 Management of Guest Services**

3 Credits (3 Lectures) [R](#)

**Typically Offered:** Fall

Front office procedures from the reservations process to check-out, including customer service, account settlement, revenue management, interoffice communication and human resource supervision. **Prerequisite:** RDG094.

**HRM103 Managing Food Service Operations**

3 Credits (3 Lectures) [R](#)

**Typically Offered:** Fall and Spring

The principles of commercial food service operations with a systemic concept to operations approach. **Prerequisite:** RDG091.

**HRM106 Supervision in the Hospitality Industry**

3 Credits (3 Lectures) [R](#)

**Typically Offered:** Fall

Concepts of supervision principles and effective management within the hospitality industry including diverse workforce management, leadership and regulatory environment awareness. **Prerequisite:** RDG094.

**HRM208 Hospitality Law**

3 Credits (3 Lectures)

**Typically Offered:** Spring

Legal principles that govern the hospitality industry including basic contracts, administrative law, and government regulations of legal concerns resulting from owner-customer relations and the establishment and operation of a place of public accommodation. **Prerequisite:** HRM100.
HUMANITIES
(HMC, HMS)

HMC115 Introduction to Brazilian Culture
3 Credits (3 Lectures) R
Typically Offered: Spring
A focused study of the people of Brazil involving a survey of culturally significant aspects of that country. Prerequisites: RDG094 and ENG100.

HMC201 International Travel Experience
3 Credits (3 Internships)
Typically Offered: Fall and Spring
This course provides CAC students who receive a CAC International Studies Scholarship to earn credit for international exchanges. During their stay at a foreign university, students tailor their foreign study to their particular major and design a study that focuses on a specific aspect of their major which supports firsthand observation. The independent study specific requirements will be negotiated between the student and the instructor. Prerequisite: ENG100. Only students selected to receive a CAC International Studies scholarship to study at a foreign college or university for one semester may enroll. The independent study will be directed by a CAC instructor and the course syllabus must meet the approval of the CAC International Studies Program Director.

HMC250 Humanities in the Western World I
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
The culture, ideas and values of western civilization with an emphasis on the intellectual and artistic achievements in art, architecture, music, literature and/or philosophy up to 1400. Prerequisites: RDG094 and ENG100. Recommended: Sophomore status.

HMC251 Humanities in the Western World II
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
The culture, ideas and values of western civilization with an emphasis on the intellectual and artistic achievements in art, architecture, music, literature and/or philosophy from 1400 to 1800. Prerequisites: RDG094 and ENG100. Recommended: Sophomore status.

HMC252 Humanities in the Western World III
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
The culture, ideas and values of western civilization with an emphasis on the intellectual and artistic achievements in art, architecture, music, literature and/or philosophy from 1400 to 1800. Prerequisites: RDG094 and ENG100. Recommended: Sophomore status.

HMS200 Comparative Cultures and Society
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A focused study of a given country and its people, involving a survey of culturally significant aspects of that country. The selected country will vary.

INTERDISCIPLINARY STUDIES (IDS)

IDS100 Service Learning I
3 Credits (2 Lectures, 1 Internship)
Typically Offered: Fall and Spring
Participation in service to the community that incorporates academic skills and knowledge to produce meaningful, real-world results. May be taken two times for credit. Prerequisite: ENG101 ☐.
LIT101 Introduction to Literature  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Introduction to fiction, poetry, and drama, including literary analysis of various genres, literary devices and production and reception of literature by various audiences. Prerequisite: RDG094.

LIT201 American Literature I  
3 Credits (3 Lectures)  
Typically Offered: Fall  
The chief literary works produced in America from the colonial period through the Civil War. Prerequisite: RDG094. Corequisite: ENG102.

LIT202 American Literature II  
3 Credits (3 Lectures)  
Typically Offered: Spring  
Survey of a diverse range of American literary works from the Civil War to modern times, emphasizing literary history, criticism and socio-cultural and historical contexts. Prerequisite: ENG101. Corequisite: ENG102.

LIT203 English Literature I  
3 Credits (3 Lectures)  
Typically Offered: Fall  
Major English literary works from Old English to 1800. Prerequisite: ENG101. Corequisite: ENG102.

LIT204 English Literature II  
3 Credits (3 Lectures)  
Typically Offered: Spring  
The chief English literary works from the Romantic period to the Modern period. Prerequisite: ENG101. Corequisite: ENG102.

LIT206 World Literatures  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Introduction to literary works from diverse global cultures, focusing on illuminating both the universality and diversity of human experience. Prerequisite: RDG094.

LIT232 African American Literature  
3 Credits (3 Lectures)  
Typically Offered: Fall  
Exploration of major literary works written by African Americans beginning with the 1700s through the present, including textual analysis, socio-cultural, political and/or historical context. Prerequisite: ENG101. Corequisite: ENG102.

LIT233 American Ethnic Literature  
3 Credits (3 Lectures)  
Typically Offered: Consult CAC Class Schedule.  
Exploration of identity through a survey of American ethnic writers. Focus on textual analysis, socio-cultural, political and/or historical context. Prerequisite: ENG101. Corequisite: ENG102.

LIT234 U.S. Latino/a Literature and Culture  
3 Credits (3 Lectures)  
Typically Offered: Consult CAC Class Schedule.  
United States Latino/a authored literature from the sixteenth century to the present day, including fiction, poetry, essays, drama and memoirs. Prerequisites: RDG094; ENG100 or test into ENG101.

LIT254A Literature and Film  
3 Credits (3 Lectures)  
Typically Offered: Fall  
Narrative mediums of literature and film through the study of select literary works and their film adaptations. Examines film as both an interpretation of literature and as the unique product of artistic, historical and sociocultural forces. Prerequisite: ENG102.
LIT254B Literature and Film  
3 Credits (3 Lectures)  
Typically Offered: Spring  
Narrative mediums of literature and film through the study of select literary works and their film adaptations. Examines film as both an interpretation of literature and as the unique product of artistic, historical and sociocultural forces. To receive credit for this course, the topic must vary significantly from LIT254A. Prerequisites: LIT254A and instructor or Division Chair consent.

LIT255 The Horror Novel  
3 Credits (3 Lectures)  
Typically Offered: Fall  
A survey of the horror novel as a narrative medium for historical, sociological and cultural commentary from the genre's early influences to the modern era. Prerequisite: ENG101. Corequisite: ENG102.

LIT256 Science Fiction Literature and Film  
3 Credits (3 Lectures)  
Typically Offered: Spring  
A survey of the science fiction literature and film as a narrative medium for historical, sociological and cultural commentary from the genre's early influences to the modern era. Prerequisite: ENG101. Corequisite: ENG102.

LIT278 Native American Literatures  
3 Credits (3 Lectures)  
Typically Offered: Consult CAC Class Schedule.  
An introduction to literature written by and about Native peoples of the Americas, including myths, legends, the oral tradition, fiction, memoir, drama and poetry. Prerequisites: RDG094 and (ENG100 with grade of "C" or better or test into ENG101).

LIT291 Children’s Literature for Educators  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  

MANUFACTURING ENGINEERING TECHNOLOGY  
(MET)

MET110 Introduction to Quality Assurance  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall and Spring  
An introduction to quality assurance, quality improvement and quality improvement tools including: Statistical Process Control (SPC) software and hardware applications. Related topics include: International Standards Organization Quality Standards (ISO 9000) and Theory of Constraints (TOC). Writing technical papers with an oral presentation is included.

MET125 Principles of Fabrication  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer  
Principles and applications of common metal removal processes and sheet metal fabrication including drilling, turning, milling, shearing, and bending. Recommended: Experience using hand tools.

MET127 Manufacturing Process and Materials  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Production processes, materials, techniques, systems and applications used in industry. Resources and systems of production management from manual, mechanized, automated and integrated stages are presented.
MET132 Fluid Power Hydraulics - Pneumatics
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Fluid theory, production, consumption, control and application of the transmission of energy through hydraulic and pneumatic components, including valves, actuators, pumps and circuits. Prerequisite: MAT092.

MET150 VB.NET for Engineering
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Object Oriented Programming techniques in Visual Basic (VB.NET) used to control external peripherals such as motors, lights and electromechanical equipment through the Universal Serial Bus (USB) port, including flowcharting, pseudocoding, coding, testing and documenting programs in accordance with specifications. Recommended: Computer programming experience.

MET221 Electro-Mechanical Technology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Mechanical concepts and basic electro-mechanical systems, including electronic circuits incorporating electro-mechanical and electro-optical transducers and auxiliary devices. Prerequisites: ELC122 and MAT092.

MET226 Electro-Mechanical Systems
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Diagnostics, troubleshooting, design, maintenance, schematic reading and preventive maintenance of electric, hydraulic, pneumatic and vacuum systems of industrial machines. Prerequisites: ELC220 and MET221.

MET230 Semiconductor I Seminar
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Semi-conductor Manufacturing Technician Fabrication Cleanroom employment seminar. Corequisite: CHM130 or higher.

MET232 Solids Modeling – SolidWorks
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
CAD modeling, solid part generation, assembly of parts and working drawing creation. Applications of CAD/CAM in Computer Integrated Manufacturing.

MET261 LabVIEW I Programming
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
LabVIEW I focuses on using LabVIEW programming concepts, techniques, features, VIs and functions to create test and measurement analysis and report generation applications.

MET262 LabVIEW 2 Programming
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
LabVIEW 2 focuses on programming concepts, techniques, features, VIs and functions used to create tests and measurements, data acquisition, instrument control, data logging, measurement analysis and report generation applications. Prerequisite: MET261.

MET263 LabVIEW 3 Programming
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Develop professional user interfaces, applications and document VIs effectively using LabVIEW software. Use the four fundamental areas of LabView software development, specifically design, implement, test and deploy. Prerequisite: MET262.

MET264 LabVIEW FPGA Applications
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Learn LabVIEW field-programmable gate array (FPGA) applications to extend LabVIEW to other user interfaces. Emphasis on design and compiling processes. Prerequisite: MET263.
COURSE DESCRIPTIONS

MET265 LabVIEW Overview
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Fall, Spring and Summer
The LabVIEW Overview prepares students for the Certified LabVIEW Associate Developer (CLAD) Certification Exam by reviewing key skills, knowledge and abilities embedded in the LabVIEW course series. Prerequisite: MET264.

MET290 Material, Safety and Equipment Overview for Nanotechnology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
An overview of the materials, safety and equipment issues encountered in the practice of "top down" and "bottom up" nanofabrication. The course focuses on safety, environmental and health issues related to equipment operation and materials handling as well as cleanroom protocol. Prerequisites: CHM130 and MAT151.

MET291 Basic Nanotechnology Processes
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
A hands-on introduction to the processing involved in "top down," "bottom up" and hybrid nanofabrication. The course details a step-by-step description of the equipment, facilities processes and process flow needed to fabricate devices and structures. Prerequisite: MET290.

MET292 Materials in Nanotechnology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
An in-depth, hands-on exploration of nanofabrication materials including chemical bonding, crystal structure and identification and prevention of defects. The relationship between material structure, properties and processing is emphasized. Prerequisite: MET291.

MET293 Patterning for Nanotechnology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Hands-on treatment of all aspects of advanced pattern transfer and pattern transfer equipment, including probe techniques, stamping and embossing, electron beam and optical contact and stepper systems. Prerequisite: MET292.

MET294 Materials Modification in Nanotechnology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Examine the contribution of nanomaterials to a wide range of industries. Specific material properties and processes will be examined for their contribution to the field of composites, biotechnology and energy applications. Prerequisite: MET293.

MET295 Characterization, Testing of Nanotechnology Structures and Materials
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Examine a variety of techniques and measurements essential for testing and controlling material fabrication and final device performance. Characterization includes optical, physical and electrical approaches. Prerequisite: MET294.

MASS COMMUNICATIONS (MSC)

MSC101 Media and Society
3 Credits (3 Lectures) R
Typically Offered: Fall and Spring
An introduction to mass communications and the importance media play in shaping the societal and cultural experiences of humans. Demonstrates how communication changes with technology, from the printing press to electronic books. Prerequisite: RDG094.

MSC102 Writing for the Print Media I
3 Credits (3 Lectures) JRN 2201 R
Typically Offered: Fall and Spring
Beginning reporting with practice in organizing and writing basic news stories, culminating in producing stories for the college newspaper. Prerequisite: RDG094.
MSC107 Basic Script Writing  
*3 Credits (3 Lectures)*

**Typically Offered:** Fall and Spring

Script theory and application in preparing a final, full-length script, emphasizing techniques for visual and oral media production. *Prerequisites: ENG102 and MSC101.*

MSC109 TV/Video Production  
*3 Credits (2 Lectures, 3 Labs)*

**Typically Offered:** Fall and Spring

Review of basic video and television broadcasting equipment. *Prerequisite: Enrollment in a CAC course with an MSC prefix or instructor consent.*

MSC110 Publications  
*3 Credits (2 Lectures, 3 Labs)*

**Typically Offered:** Fall and Spring

Preparing copy and photographs for campus publications. *May be taken four times for credit. Prerequisite: RDG094.*

MSC120 Graphic Design and Adobe InDesign  
*3 Credits (2 Lectures, 3 Labs)*

**Typically Offered:** Fall and Spring

Aesthetics and composition for graphic design. Use Adobe InDesign software and design guidelines to create ten design projects: logos, business cards, greeting cards, postcards, CD covers, brochures, posters, advertisements, newsletters and magazines. Each student will end the course with a complete electronic portfolio.

MSC122 Introduction to Web Design  
*3 Credits (2 Lectures, 3 Labs)*

**Typically Offered:** Fall and Spring

Create professional quality web designs with Adobe Dreamweaver or comparable software and other tools. *Prerequisite: RDG094.*

MSC125 Introduction to Illustrator  
*3 Credits (2 Lectures, 3 Labs)*

**Typically Offered:** Fall and Spring

An introduction to the use of Adobe Illustrator design tool and placing of illustration in a web or print design. *Prerequisite: RDG094.*

MSC130 Digital Photography and Photoshop  
*3 Credits (3 Lectures)*

**Typically Offered:** Fall, Spring and Summer

Multiple elements of digital cameras and the software program Adobe Photoshop. Learn new computer skills, how to use a digital camera, the aesthetic principles of photo composition, and the fundamentals of manipulating photos by computer.

MSC130 Digital Photography and Photoshop  
*3 Credits (3 Lectures)*

**Typically Offered:**** Spring

A survey of the prominent figures and movements in photography as well as advancements in photographic technology and processes from 1827 to present. *Prerequisites: ENG100 and RDG094.*

MSC180 Basic Photojournalism  
*3 Credits (3 Lectures)*

**Typically Offered:** Fall and Spring

An introduction to visual storytelling, emphasizing composition, lighting, photo editing skills and legal and ethical issues. Fully adjustable Digital Single Lens Reflex (DSLR) camera required. *Prerequisite: MSC130.*

MSC202 Writing for the Print Media II  
*3 Credits (2 Lectures, 3 Labs)*

**Typically Offered:** Fall and Spring

Advanced reporting of feature stories, interviews, reviews, columns and editorials. *Prerequisite: MSC102.*

**ICON LEGEND**

- AGEC:  
- Intensive Writing: IW  
- Programs of Study/Tech Prep: POS  
- Reading Required: RDG094: R  
- SUN Course:
MSC205 Portfolio Preparation
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Spring
Use digital photography and graphic design to prepare a portfolio of original artwork for professional use. May be taken two times for credit. Prerequisite: ART101.

MSC220 Advanced Graphic Design
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Advanced Graphic Design expands experience with computer software, presents more complex design guidelines and type face rules and offers complex design assignments. Students will pursue more individualized advanced projects. Prerequisite: MSC120.

MSC230 Advanced Digital Photography and Adobe Photoshop
3 Credits (3 Lectures) POS
Typically Offered: Fall, Spring and Summer
Advanced Digital Photography expands experience with computer software, presents more complex photographic instruction and offers complex assignments. Students will pursue individualized projects. Prerequisite: MSC130.

MATHEMATICS
(MAT)

MAT082 Basic Arithmetic
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A review of the fundamental concepts of algebra. This course provides a strong base for success in future algebra courses. Prerequisite: MAT082. Recommended: RDG091.

MAT090 Math Help 911
1 Credit (1 Lecture)
Typically Offered: Fall and Spring
Instructional assistance to strengthen students’ math concepts and study skills for their 082, 086 or 092 math course(s). May be taken six (6) times for credit. Note: Students typically take two 8-week sessions per semester.

MAT092 Introductory Algebra
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
A review of the basic skills of arithmetic and algebra, with the emphasis on developing sound algebraic and problem solving skills. Prerequisite: MAT086. Recommended: RDG091.

MAT100 Math Help 411
2 Credits (2 Lectures)
Typically Offered: Fall and Spring
Customized practice of math concepts and study skills; complements MAT121, 141, and/or 151. May be taken three times for elective credit only with instructor consent. For elective credit only. Prerequisite: MAT092.
MAT101 Essential Mathematics  
4 Credits (4 Lectures)  
Typically Offered: Consult CAC Class Schedule.  
A review of the basic skills of mathematics with emphasis on developing sound mathematical skills in arithmetic, algebra, geometry and problem-solving. Prerequisites: MAT092 and RDG091.

MAT111 Math for Electricians  
2 Credits (1.5 Lectures, 2 Labs)  
Typically Offered: Fall, Spring and Summer  
Introduction to math principles for electricians including basic arithmetic, algebra and fundamental trignometry with an emphasis on real world scenarios and problem solving skills. Apply key mathematical concepts while developing an awareness of basic electrical terms and practices. Prerequisites: ELC126; ELC202; Alternative Energy/Electrical cohort member.

MAT121 Intermediate Algebra, Standard  
4 Credits (4 Lectures)  
Typically Offered: Fall, Spring and Summer  
Operations/properties of real numbers, exponents and complex numbers; factoring, solution/application of linear and quadratic equations; operations on rational and radical expressions. Prerequisite: MAT092. Recommended: RDG091.

MAT122 Intermediate Algebra, Accelerated  
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer  
Operations/properties of real numbers, exponents and complex numbers; factoring, solution/application of linear and quadratic equations; operations on rational and radical expressions. Prerequisite: MAT092. Recommended: RDG091.

MAT141 College Mathematics, Standard  
4 Credits (4 Lectures)  
Typically Offered: Fall, Spring and Summer  
General mathematics including personal finance, set theory, linear programming, exponential growth and decay, probability and statistics. Prerequisites: RDG094; MAT101 or higher.

MAT151 College Algebra, Standard  
4 Credits (4 Lectures)  
Typically Offered: Fall, Spring and Summer  
Accelerated algebra that includes the topics: equations, functions, transformations, linear and quadratic functions and inequalities, systems of linear equations and inequalities, exponential and logarithmic functions, polynomials, rational functions, sequences and series. Prerequisites: MAT121 and RDG094.

MAT162 Applied Statistics  
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring  
Graphical and quantitative description of data; binomial, normal and t distributions; one and two sample hypothesis tests and confidence intervals; simple linear regression and correlation. Prerequisites: RDG094; MAT121 or higher.

MAT182 Trigonometry with Algebra Review  
4 Credits (4 Lectures)  
Typically Offered: Fall and Spring  
A comprehensive coverage of trigonometry and selected topics from college algebra, including measurements of angles, trigonometric functions and inverse trigonometric functions, trigonometric equations and identities, graphing of trigonometric functions, solutions of triangles, applications, complex numbers, polar coordinates, DeMoivre's theorem, logarithms, exponential functions, partial fraction decomposition, conic sections, sequences and series. Prerequisites: RDG094 and MAT151.

MAT187 Pre-Calculus  
5 Credits (5 Lectures)  
Typically Offered: Fall and Spring  
Pre-Calculus topics include: angles and their measures, properties and graphs of trigonometric functions, trigonometric equations and identities, solutions of triangles, applications, polar coordinates, quadratic equations, logarithmic and exponential functions, systems of equations, partial fractions, conic sections, sequences and series. Prerequisites: RDG094, MAT121 with a grade of "B" or higher.
COURSE DESCRIPTIONS

MAT201 Math for Elementary Teachers I
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Numbers and operations, including algebraic reasoning and problem solving. Prerequisite: MAT141 or MAT151.

MAT202 Math for Elementary Teachers II
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Measurement, geometry, probability, and data analysis using appropriate technologies; problem solving, reasoning, and proofs are integrated throughout the course. Prerequisite: MAT141 or MAT151.

MAT211 Brief Calculus, Standard
4 Credits (4 Lectures)
Typically Offered: Fall and Spring
Foundations of differential and integral calculus, including applications to business and economics. Not open to students with credit in MAT221 or MAT231. Prerequisite: MAT151.

MAT212 Brief Calculus, Accelerated
3 Credits (3 Lectures)
Typically Offered: Consult CAC Class Schedule.
Foundations of differential and integral calculus including applications to business and economics. Not open to students with credit in MAT221 or MAT231. Prerequisite: MAT151.

MAT215 Math for Business Analysis
4 Credits (4 Lectures)
Typically Offered: Fall and Spring
A study of mathematics focused on solving business-related problems by applying the concepts of linear programming, optimization, statistics, probability and multivariable calculus. Prerequisite: MAT211 or MAT212.

MAT221 Analytical Geometry and Calculus I
4 Credits (4 Lectures)
Typically Offered: Fall, Spring and Summer
An introduction to analytic geometry, limits, continuity, differential and integral calculus of single variable functions and related applications. Prerequisites: MAT187 or (MAT151 and MAT182).

MAT231 Analytical Geometry and Calculus II
4 Credits (4 Lectures)
Typically Offered: Fall and Spring
Techniques of integration for both proper and improper integrals with applications of physics and social science, elements of analytic geometry and the analysis sequences and series. Prerequisites: MAT221.

MAT241 Analytical Geometry and Calculus III
4 Credits (4 Lectures)
Typically Offered: Fall
Multivariable calculus including vectors, vector-valued functions, partial differentiation, multiple integration and an introduction to vector fields. Prerequisite: MAT231.

MAT262 Ordinary Differential Equations
3 Credits (3 Lectures)
Typically Offered: Spring
An introduction to first and higher order ordinary differential equations with applications. Prerequisite: MAT231.

MAT275 Modern Differential Equations
4 Credits (4 Lectures)
Typically Offered: Spring
Designed for engineering students this introduction to first and higher order ordinary differential equations with applications focuses on problem solving using MATLAB. Students may not receive credit for both MAT262 and MAT275. Prerequisite: MAT231.
MUSIC HISTORY AND LITERATURE
(MHL)

MHL100 Music Appreciation
3 Credits (3 Lectures) R

Typically Offered: Fall, Spring and Summer

Music history and literature with emphasis on listening to and evaluating all types of music, noting the influence of the major composers and the media through which music is produced. Attendance at live musical events in a variety of venues will be encouraged. Prerequisite: RDG094.

MHL207 Survey of Jazz/Popular Music
3 Credits (3 Lectures) R

Typically Offered: Fall, Spring and Summer

Survey of popular music, noting unique musical styles of the associated composers and performers. Impact of popular music on social and historic events of the past century. Prerequisite: RDG094.

MHL209 Visual Art, Music and Learning
3 Credits (3 Lectures) R

Typically Offered: Fall, Spring and Summer

An introduction to the effects of the arts on learning, student learning styles, visual culture and visual arts, and music theory and culture. Prerequisite: RDG094. Cross Listed: ART209.

MUSIC PERFORMANCE
(MUP)

MUP104 Concert Choir
1 Credit (3 Labs)

Typically Offered: Fall and Spring

Concert Choir, a major performance ensemble, is dedicated to the performance of varied choral literature from all historical periods, styles and ethnic origins which perform for community concerts, graduations and at least one major CAC concert each semester. May be taken more than four times for credit. Prerequisite: Ability to match pitch.

MUP105 Voice Class
2 Credits (2 Recitations)

Typically Offered: Fall and Spring

An introduction to the basics of proper vocal technique, including breath management, tone production, tone quality, resonance, vocal physiology, vocal registration, vocal health and management, and how to practice. These principles will be practiced by singing in class, both in group and solo situations. May be taken two times for credit.

MUP107 Band
1 Credit (3 Labs)

Typically Offered: Fall and Spring

A performing organization open to Central Arizona College students and Pinal County residents. The ensemble performs a wide range of standard concert band literature as well as lighter works. Experience is gained by performing concerts on campus. May be taken four times for credit. Prerequisite: Instructor consent.

MUP109B Private Instruction: Brass
1 Credit (1 Recitation)

Typically Offered: Fall and Spring

Private instruction on a brass instrument that concentrates on proper tone production, articulation, technique and performance of a variety of repertoire. May be taken four times for credit. Prerequisite: Instructor consent. Recommended: MUP107 and/or MUP112.
MUP109D Private Instruction: Percussion
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
Private instruction on percussion instruments that concentrates on appropriate mallet selection, tone production, technique and performance of a varied repertoire. May be taken four times for credit. Prerequisite: Instructor consent. Recommended: MUP107 and/or MUP112.

MUP109G Private Instruction: Guitar/Bass Guitar
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
Private instruction on guitar/bass guitar that concentrates on learning to play and read music, chords and a varied repertoire. Student must supply instrument and perform in a public recital. May be taken four times for credit.

MUP109P Private Instruction: Piano Keyboard
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
Performance of piano keyboard repertoire, technical skills, and keyboard theory including scales, progressions, transposition, improvisation and harmonization commensurate with student's level of achievement. May be taken four times for credit.

MUP109V Private Instruction: Voice
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
An opportunity for creative self-expression and for the creativity of other human efforts as reflected through art songs and other music studied. Private instruction on consonants and vowels, correct posture, diaphragmatic breathing and music theory skills to produce proper vocal production in the performance of a variety of styles and vocal repertoire. May be taken more than four times for credit. Prerequisite: MUP105.

MUP109W Private Instruction: Woodwind
1 Credit (1 Recitation)
Typically Offered: Fall and Spring
Private instruction on a woodwind instrument that concentrates on proper tone production, articulation, technique and performance of a varied repertoire. May be taken four times for credit. Prerequisite: Instructor consent. Recommended: MUP107 and/or MUP112.

MUP110 Piano Class
2 Credits (.5 Lecture, 2 Labs, 1 Recitation)
Typically Offered: Fall and Spring
Class instruction of piano keyboard repertoire, technical skills and keyboard theory commensurate with student's level of achievement. May be taken four times for credit.

MUP112 Jazz Ensemble
1 Credit (3 Labs)
Typically Offered: Fall and Spring
A performing organization open to Central Arizona College students. The jazz styles of swing, rock and Latin are studied and performed. An emphasis is placed on learning and developing improvisational skills. Experience is gained by performing for the college, schools and community. May be taken four times for credit. Prerequisite: Instructor consent.

MUP116 Introduction to Handbells
1 Credit (1 Lecture)
Typically Offered: Fall and Spring
An introduction to concepts and technical skills required to ring handbells. Topics include basics of reading music, handbell history, ringing stop techniques and rhythms.

MUP117 Jazz Choir
2 Credits (6 Labs)
Typically Offered: Fall and Spring
Jazz Choir, a major performance ensemble, is an auditioned group of musicians who perform vocal jazz literature for CAC and community organizations. The concerts are varied and represent a broad perspective of the American vocal jazz genre. Singers represent the college as performers in public functions throughout Arizona and at vocal jazz festivals throughout the United States, in addition to an annual spring recruitment tour. May be taken more than four times for credit. Corequisite: MUP104.
MUP118 Bell Choir Ringers  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
An ensemble designed for the intermediate to advanced musician seeking to learn new instruments and to study great music specifically composed and arranged for handbells. Repertoire performed at public functions as well as college concerts. May be taken four times for credit. Prerequisite: Instructor consent.

MUSIC THEORY AND COMPOSITION (MTC)

MTC100 Music Fundamentals  
3 Credits (3 Lectures)  
Typically Offered: Fall  
Music fundamentals, including melody, harmony and rhythm, and development of basic music skills, including accurate performance, development of music literacy and acquisition of basic musical understanding, basic theory and structure of music.

MTC101 Aural Fundamentals  
.5 Credit (2 Labs)  
Typically Offered: Fall  
An introduction to the fundamentals of tonal aural problems and rhythms taught through sight singing and ear training. Corequisite: MTC100.

MTC102 Theory of Music I  
3 Credits (3 Lectures)  
Typically Offered: Spring  
Concepts of music theory taught through ear training and written work to include structure of tonality through Roman numeral analysis. Prerequisite: MTC100. Corequisite: MTC103. Recommended: MUP109P or MUP110.

MTC103 Aural Skills I  
.5 Credit (2 Labs)  
Typically Offered: Spring  
A study of tonal aural problems and rhythms taught through sight singing and ear training. This is a continuation of Aural Fundamentals. Prerequisite: MTC101. Corequisite: MTC102.

MTC204 Theory of Music II  
3 Credits (3 Lectures)  
Typically Offered: Spring  
Concepts of music theory taught through ear training and written work to include non-dominant seven chords and to conclude with ninth, eleventh and thirteenth chords. Prerequisite: MTC102. Corequisite: MTC205. Recommended: MUP109P or MUP110.

MTC205 Aural Skills II  
.5 Credit (2 Labs)  
Typically Offered: Fall and Spring  
An advanced study of tonal and aural problems and rhythms taught through sightsinging and ear training. This is a continuation of Aural Skills I. Prerequisite: MTC103. Corequisite: MTC204.
COURSE DESCRIPTIONS

NURSING
(NUR)

NUR121 Introduction to Nursing Transitions
8 Credits (4 Lectures, 12 Labs)
Typically Offered: Fall and Spring
Within the framework of transitions theory, the focus is on individuals and families in defined practice settings. Included is the situational transition of the individual to the nursing student role, and the patient's admission to and movement within the healthcare system as it relates to health-illness and developmental transitions. This course provides the opportunity for the practice of nursing in real and simulated structured situations. Prerequisites: Nursing cohort student; BIO201; BIO202; eligible for ENG101 and MAT121; C.N.A. or L.P.N. licensure from the Arizona State Board of Nursing. Corequisite: NUR126.

NUR122 Nursing in Health Illness Transitions
8 Credits (4 Lectures, 12 Labs)
Typically Offered: Fall and Spring
Focus on individuals and families with commonly occurring health concerns as they transition across the lifespan. Identification and application of nursing therapeutics in defined practice settings to assist patients making health-illness and situational transitions. Prerequisites: ENG101, NUR121, NUR126, PSY101.

NUR126 Principles of Pharmacology and Drug Dosages
2 Credits (2 Lectures)
Typically Offered: Fall and Spring
Introduction to the principles of pharmacology as applied to health-related disciplines with a nursing focus. Discussion of pharmacological principles, lifespan considerations, legal, ethical and cultural considerations. Introduction to patient education and drug therapy, including over-the-counter and herbal remedies. Medication administration concepts and intensive study and practice in calculating dosages and concentrations of solutions used in health occupations. Prerequisites: Nursing cohort student; BIO201; BIO202; eligible for ENG101 and MAT121; C.N.A. or L.P.N. licensure from the Arizona State Board of Nursing. Corequisite: NUR121.

NUR145 Pharmacology
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Introduction and foundational study of drugs and therapeutic substances applied to nursing. Includes classifications, prototypes, therapeutic actions, side effects, interactions and ethical-legal aspects of drug therapy. Medication administration concepts and dosage calculations are included. Prerequisites: NUR121, NUR126.

NUR150 Nursing Professional Transitions
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
This optional course provides leadership, professional development and specialized course content to prepare first year nursing students to transition into the LPN role. Upon the successful completion of this course, the first year nursing student is eligible to take the NCLEX-PN exam. Prerequisites: Admitted Nursing Cohort student; NUR121, NUR122, NUR126 and NUR145.

NUR221 Nursing in Developmental Transitions
8 Credits (4 Lectures, 12 Labs)
Typically Offered: Fall and Spring
Nursing care of the patient across developmental stages in the lifespan. Gordon's functional health patterns and Meleis transitions theory are used as the framework to examine healthy and unhealthy transitions and nursing therapeutics, which promote healthy developmental transitions. Prerequisites: ENG102, NUR122, NUR145 and PSY203.

NUR222 Nursing in Organizational Transitions
8 Credits (4 Lectures, 12 Labs)
Typically Offered: Fall and Spring
Focus on the patient with complex health problems and their family/caregiver(s) and perform higher-level nursing skills. Application of evidence-based clinical practice and Meleis transitions theory within organizational settings. Prerequisites: NUR121, NUR122, NUR221 and SOC100. Corequisites: (MAT121 or higher), Humanities (3) and PAC or DAN course (1 credit).
NUTRITION/DIETETICS
(NTR)

NTR100 Contemporary Issues
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
The identification and application of current nutrition information and its impact on health and wellness. *May be taken four times for credit.*

NTR104 Nutrition
3 Credits (3 Lectures) ✎
Typically Offered: Fall, Spring and Summer
An introductory study of the optimal diet for health and fitness, principles of basic nutrition and nutritional needs throughout the life cycle. Prerequisite: RDG094

NTR104L Personal Wellness Lab
1 Credit (3 Labs)
Typically Offered: Fall and Spring
A scientific investigation into one's own personal health and wellness status

NTR105 ServSafe Certification
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An applied course in food safety and sanitation to identify and analyze the factors which cause foodborne illnesses through the study of proper purchasing, preparation, handling and storage.

NTR123 Nutrition Throughout the Life Cycle
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Examines the role of nutrition during every stage of life; common problems and concerns and nutritional adequacy with an emphasis on birth through age eighteen. Prerequisite: NTR104 or NTR141 or NTR200.

NTR127 Breastfeeding and Human Lactation
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An introduction to breastfeeding principles for the healthcare professional including the decision to breastfeed, basic anatomy and physiology of milk production and consumption, normal breastfeeding, feeding behaviors, growth patterns, nutritional needs and breastfeeding concerns.

NTR129 Introduction to Healthcare for Nutrition Professionals
3 Credits (3 Lectures) ✎
Typically Offered: Fall, Spring and Summer
Fundamentals common to all healthcare occupations with an emphasis on nutrition. Prerequisite: RDG094.

NTR130 Diabetes Overview
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An introduction to diabetes, risk factors for developing diabetes, detection methods and management techniques.

NTR131 Introduction to Diabetes
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
An introduction to diabetes, types of diabetes tools for management, complications, recommended therapies and lifestyle modifications.

NTR134 Healthy Weight for Kids
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Overviews the challenges and strategies that can help children achieve and maintain a healthy weight as a means to reduce the incidence of chronic health conditions, including diabetes, heart disease and others.
COURSE DESCRIPTIONS

NTR135 Healthy Weight for Adults
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An overview of the behavior management and treatment strategies that can help adults achieve and maintain a healthy weight as a means to reduce the incidence of chronic health conditions, including diabetes, heart disease and others.

NTR136 Management of Gestational Diabetes
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An overview of gestational diabetes; management techniques, potential complications, nutritional management and strategies for monitoring.

NTR137 Carbohydrate Counting
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
A-Z guide to carbohydrate counting for people with diabetes. Addresses the basic concepts as well as more advanced issues related to tight blood glucose control.

NTR141 Nutrition and Wellness
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Concepts, procedures and techniques to achieve the optimal diet for health and fitness, principles of basic nutrition, nutritional needs throughout the life cycle and a scientific investigation into one’s own personal health and wellness status. Prerequisite: RDG094.

NTR142 Applied Food Science
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Applied scientific principles of food preparation and production. Students must purchase ingredients for assignments. Prerequisite: RDG094.

NTR150 Overview of Nutrition Professions
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Overview of the career opportunities in the fields of nutrition, dietetics, foodservice management, wellness and nutrition communication.

NTR156 Foundations of Dietary Manager Internship
2 Credits (2 Lectures)
Typically Offered: Fall and Spring
Identify rotation facilities and Registered Dietitian preceptor to successfully complete a dietary manager's internship. The course emphasizes the legal and ethical aspects specific to internships for nutrition professionals. Satisfactory/Unsatisfactory grading option is available. Corequisites: NTR104 and CUL105.

NTR157 Foundations of Dietetic Technician Internship
2 Credits (2 Lectures)
Typically Offered: Fall and Spring
Identify rotation facilities and Registered Dietitian required to successfully complete a dietetic technician internship. The course emphasizes the legal and ethical aspects specific to dietetic technicians. Satisfactory/Unsatisfactory grading option is available. Students must receive a grade of ‘A’ to proceed to NTR296. Prerequisites: Complete all Dietetic Technician A.A.S. degree general education requirements and instructor consent.

NTR191 Nutrition Counseling Skill Development
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Comprehensive skill development of step-by-step nutrition counseling. Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.

NTR196 Dietary Manager Internship
3 Credits (3 Internships – 150 Hours)
Typically Offered: Fall, Spring and Summer
Supervised application of food production, food service management and nutritional care principles in clinical and community environments. Prerequisites: NTR156, NTR223 and NTR240.

ICON LEGEND
AGEC: Dual Enrollment: Intensive Writing: Programs of Study/Tech Prep: Reading Required: RDG094: SUN Course:
NTR200 Human Nutrition
3 Credits (3 Lectures) 📚
Typically Offered: Fall, Spring and Summer
The scientific principles of human nutrition emphasize nutrient metabolism, the relationships between diet and disease, and the importance of nutrition in health promotion and disease prevention. Prerequisite: RDG094.

NTR201 Nutrition Literacy
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Develop the skills and knowledge to assess Nutrition Literacy; defined as the ability to access, explain and use health-related information and services to make sound, thoughtful health decisions and to tailor counseling and education materials to maximize client understanding. Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.

NTR222 Nutrition Assessment
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
The anthropometric, biochemical, clinical, dietary and behavioral evaluation and assessment of nutritional status throughout the life cycle. Prerequisites: NTR123, NTR129 and (CHM130 or CHM138 or higher CHM course).

NTR223 Food Service Management
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Current management theories related to institutional food service emphasizing quality improvement and evaluation of service, meal planning, recipe development, safe and sanitary food procurement and production methods, facility layout and design, staffing, marketing and financial management. Prerequisite: CUL105 OR NTR105.

NTR232A Food and Culture
1 Credit (1 Lecture) 📚
Typically Offered: Fall, Spring and Summer
Customs and cultures as they relate to food as well as to knowledge, attitudes and behaviors in promoting wellness. Prerequisite: RDG094.

NTR240 Clinical Nutrition
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
In-depth study of the role of nutrition in the prevention and treatment of diseases. Prerequisites: NTR141 or NTR104 or NTR200.

NTR247 Weight Management Theory
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Comprehensive analysis of physiological, psychological and environmental influences on body weight. Researching various weight management theories, discerning between behavioral and non-behavioral methods. Assessing appropriate weight management strategies. Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.

NTR272 Certified Breastfeeding Counselor
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Provides the necessary skills to educate and support the breastfeeding mother with greater details about breastfeeding issues and special challenges/situations.

NTR290 LIFESTEPS® Leader Training
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Provides hands-on skill development in the application of behavioral techniques and the delivery of behavioral feedback that can be used in a variety of nutrition education settings. Also, basic information on nutrition, physical activity and group facilitation and dynamics as they relate to obesity and weight management as well as a detailed overview of the LIFESTEPS® Weight Management Program.

NTR295 Dietetic Technician Professional Practice Internship
1 Credit (1 Internship – 60 Hours)
Typically Offered: Fall, Spring and Summer
Competencies required for the Dietetic Technician A.A.S. specifically in the areas of ethics, scope of practice, professional development, legislation and communication. Satisfactory/Unsatisfactory grading option is available. Prerequisites: All 22 credits of general education requirements for Dietetic Technician A.A.S. Degree completed and instructor consent.

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NTR296 Dietetic Technician Internship
6 Credits (6 Internships – 390 Hours)

Typically Offered: Fall and Spring

The application of life cycle nutrition, assessment, disease prevention and medical nutrition therapy in clinical, community and food service management settings. Satisfactory/Unsatisfactory grading option is available. Prerequisites: Dietetic Technician A.A.S. degree requirements completed with a "C" or better and Program Director or instructor consent.

OFFICE AUTOMATION SYSTEMS (OAS)

OAS101 Keyboard – Alphabetic
1 Credit (3 Labs)

Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit

Mastery of essential microcomputer keyboard skills. Emphasis on alphabetic material using the touch technique.

OAS103 Keyboard – Speed/Accuracy
1 Credit (3 Labs)

Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit

Improve keyboard speed and accuracy. Emphasis on alphabetic, numeric and symbol material using the touch technique.

OAS104 Ten-Key Pad
1 Credit (3 Labs)

Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit

Key numeric data using touch technique on the computer numeric ten-key pad.

OAS125 Proofreading and Editing
3 Credits (3 Lectures)

Typically Offered: Fall, Spring, Summer and Open Entry/Closed Exit

Analyze and correct communication, forms, reports and other documents by applying proofreading methods and markings, checking for consistency of facts, correcting data and following standard practices. Prerequisite: ENG100.
PHILOSOPHY
(PHI)

PHI101 Introduction to Philosophy
3 Credits (3 Lectures) PHI 1101
Typically Offered: Fall and Spring
Representative problems and theories regarding the nature of reality and the acquisition of knowledge including examination and development of personal philosophical positions. Prerequisite: RDG094.

PHI103 Introduction to Logic
3 Credits (3 Lectures) PHI 1103
Typically Offered: Every other spring; consult CAC Class Schedule.
Introduction to Logic includes techniques for reasoning deductively and inductively, avoiding fallacies and using language accurately. Application of formal and informal techniques to the development, analysis and evaluation of arguments. Prerequisites: MAT101 or higher, RDG094.

PHI105 Introduction to Ethics
3 Credits (3 Lectures) PHI 1105
Typically Offered: Fall
Major philosophical theories of conduct with an emphasis on the application of normative ethical theory to contemporary topics. Prerequisite: RDG094. Corequisite: ENG102.

PHI112 World Religions
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A survey of the major world religions focusing on the founders, history, system of beliefs, concepts of God/gods, private and public worship and sacred scriptures. Prerequisite: RDG094.

PHYSICAL EDUCATION
(PED)

PED100 History and Philosophical Foundations of Sport and Physical Education
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
The historical and philosophical foundations of sport and physical education, current and future directions of instruction, administration and research.

PED101 History of Intercollegiate Athletics
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
Examination of the origins and development of intercollegiate athletics and the relationship with the academic institutions that house these programs. Emphasis on amateurism, academics, finance and commercialism from the 1920’s to the present. Prerequisite: RDG094.

PED102 Management of Sport
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A comprehensive overview of sport management; fundamentals and history; structure, policy and the governance of sport; sport economics and finance; sport marketing; and professional relations in sport. Corequisite: RDG094.

PED103 Foundations of Exercise
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Fundamentals of basic biomechanics, motor learning/control/development, exercise physiology, exercise metabolism, physiology of training, nutrition and sports psychology.

PED104 Anatomical Kinesiology
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Muscles, bones, joints and nerves and how they produce movement. Applying kinesiology to improve and maintain the muscular strength, endurance, flexibility and overall health of individuals. Corequisite: RDG094.
PED105 Women and Sport in the U.S.
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer
The history of women in sports from the early 1900s to present with an emphasis on Olympic, intercollegiate and professional competition and the role gender has played in determining access to participation and leadership roles. Prerequisite: RDG094.

PED108 Introduction to Athletic Training
3 Credits (3 Lectures) POS  
Typically Offered: Fall and Spring
Basic concepts of the prevention and treatment of athletic injuries and the primary importance of appropriate rehabilitation. Corequisite: RDG094.

PED109A Athletic Training Practicum I
2 Credits (2 Practica – 90 Hours)  
Typically Offered: Fall and Spring
An introduction to practical work experience in the athletic training setting. Corequisite: PED108.

PED109B Athletic Training Practicum II
2 Credits (2 Practica – 90 Hours)  
Typically Offered: Fall and Spring
Clinical application of practical work experience in the athletic training setting. Prerequisite: PED109A.

PED109C Athletic Training Practicum III
2 Credits (2 Practica – 90 Hours)  
Typically Offered: Fall and Spring
Clinical application of practical work experience in the athletic training setting. Prerequisite: PED109B.

PED109D Athletic Training Practicum IV
2 Credits (2 Practica – 90 Hours)  
Typically Offered: Fall and Spring
Clinical application of practical work experience in the athletic training setting. Prerequisite: PED109C.

PED112 Introduction to Strength Training
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
A comprehensive guide to the design and implementation of strength and conditioning programs.

PED114 Introduction to Coaching
3 Credits (3 Lectures)  
Typically Offered: Fall, Spring and Summer
An introduction to philosophies of coaching youth, high school and collegiate athletics, emphasizing both competitive and recreational settings.

PED115 Coaching Methods I
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Fall, Spring and Summer
An overview of coaching methods, emphasizing both competitive and recreational settings and practical applications of concepts. Satisfactory/Unsatisfactory grading option is available. Prerequisite: PED114.

PED202A Team Sports Officiating – Baseball
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer
Fundamentals of baseball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PED202B Team Sports Officiating – Basketball
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer
Fundamentals of basketball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PED202C Team Sports Officiating – Football
1 Credit (1 Lecture)  
Typically Offered: Fall, Spring and Summer
Fundamentals of football officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.
PED202D Team Sports Officiating – Soccer
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Fundamentals of soccer officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PED202E Team Sports Officiating – Softball
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Fundamentals of softball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PED202F Team Sports Officiating – Volleyball
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Fundamentals of volleyball sport officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PED209 Introduction to Rehabilitation Techniques
3 Credits (3 Lectures) POS
Typically Offered: Fall and Spring
A comprehensive guide to the design, implementation and supervision of rehabilitation programs for the individual who is preparing for a career in treating sports-related injuries. Prerequisite: PED104, PED108.

PED215 Coaching Methods II
3 Credits (1 Lecture, 6 Labs)
Typically Offered: Fall, Spring and Summer
In-depth examination of coaching, emphasizing methods and concepts in both competitive and recreational settings. Satisfactory/Unsatisfactory grading option is available. Prerequisite: PED115.

PHYSICAL EDUCATION ACTIVITY (PAC)

PAC100 Strength and Conditioning for Varsity Sports
1 Credit (3 Labs)
Typically Offered: Fall and Spring
Activity course focusing on the pre-season, in-season and off-season strength and conditioning programs for the varsity athlete. Programs will vary by sport. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: Varsity athlete.

PAC100B Introduction to Yoga Techniques
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
An in-depth study into the eight limbs of yoga, including the physical poses, breathing and meditation techniques, along with yoga's history and philosophy. Different yoga styles will be introduced. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

PAC101A Basic and Beginning Techniques of Golf
1 Credit (3 Labs)
Typically Offered: Fall and Spring
The basic elements of the game of golf, the rules of golf, golf course etiquette and basic golf play. Requires students to travel to off-campus golf course. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC101J Basic and Beginning Techniques of Weight Training
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
The basic lifts and explanation of muscle groups affected. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.
PAC101K Basic and Beginning Techniques of Yoga  
1 Credit (3 Labs)  
Typically Offered: Fall, Spring and Summer  
A slow and relaxed form of stretching where breathing (pranayama) and positions (asanas) are performed. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC101L Basic and Beginning Techniques of Karate  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
The art of Chinese karate emphasizing defense techniques against basic kicks, punches and grab attacks. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC101M Basic and Beginning Techniques of Basketball  
1 Credit (3 Labs)  
Typically Offered: Spring  
The basic skills of the game of basketball, the rules and techniques for basketball as well as general basketball play. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC101R Aerobic Weight Training I  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
Basic circuit weight training in conjunction with an aerobic exercise such as running in place, rope jumping or using exercise bikes. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

PAC101V Basic and Beginning Techniques of Volleyball  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
Basic volleyball skills, including the rules and techniques for volleyball players in various positions as well as general volleyball play. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC102A Intermediate Golf  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
A concentrated approach to golf skills with emphasis on individual skill level. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC101A or appropriate experience.

PAC102J Intermediate Weight Training  
1 Credit (3 Labs)  
Typically Offered: Fall, Spring and Summer  
Weight training techniques for use throughout the life cycle. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC102K Intermediate Yoga and Fitness  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
Learn intermediate yoga poses, breathing techniques and meditation exercises. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

PAC102L Intermediate Karate  
1 Credit (3 Labs)  
Typically Offered: Fall and Spring  
Intermediate martial art forms and techniques; the study of anatomy, physiology and physics as related to karate. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: PAC101L.

PAC103 Special Activity (Adaptive)  
1 Credit (3 Labs)  
Typically Offered: Consult CAC Class Schedule.  
A special physical education activity class for the student who is unable to participate in the regular physical education program. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC104 Police Officer Physical Training  
3 Credits (2 Lectures, 3 Labs)  
Typically Offered: Consult CAC Class Schedule.  
Advanced principles of aerobic exercise, strength development and flexibility, emphasizing methods for stress reduction, value of nutrition awareness and development of individual exercise programs. Prerequisite: Acceptance to CARLOTA.
PAC105 Physical Fitness: Core Emphasis
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Open Entry/Closed Exit
Activity course focused on a balanced development of physical fitness. This course utilizes fitballs, tubing and/or other non-weight equipment to strengthen the core, upper and lower body. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

PAC106 Aerobics and Weight Training
2 Credits (6 Labs)
Typically Offered: Fall and Spring
Fundamental skills and principles of weight training and aerobics. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

PAC107 Zumba® Toning
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
Zumba® Toning is a high-energy, aerobic, calorie-crunching workout for those who love Zumba® Fitness and want to tone and sculpt the body to the next level. With an invigorating blend of Latin and International music, this fitness-dance class targets strengthening the core while improving cardiovascular endurance. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Recommended: Any pre-existing health condition needs to be acknowledged and signed off by a physician, thus clearing the student to perform an high-intensity exercise routine.

PAC108 Zumba®
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
Zumba® is a calorie-crunching workout. With a high-energy blend of Latin and International music, this fitness-dance class strengthens the core while improving cardiovascular endurance. Satisfactory/Unsatisfactory grading option available. May be taken more than four times for credit.

PAC109 Central Boot Camp
1 Credit (3 Labs)
Typically Offered: Fall
Total body workout through fitness inspired boot camp regimen, including upper and lower body workouts infused with abdominal conditioning and stretching techniques. Course utilizes outdoor areas of campus. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

PAC110 Aqua Zumba®
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
Aqua Zumba® is a high-intensity, calorie-crunching workout performed in the water to a blend of Latin and International music. This fitness-dance class is designed to strengthen the body core while improving cardiovascular endurance. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Recommended: Any pre-existing health condition needs to be acknowledged and signed off by a physician, thus clearing the student to perform and high-intensity exercise routine.

PAC111 Water Aerobics
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
Aquatic exercise emphasizing stretching techniques, endurance, flexibility, and toning for swimmers and non-swimmers. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

PAC112 Introduction to Scuba Diving
1 Credit (.5 Lecture, 2 Labs)
Typically Offered: Fall, Spring and Summer
Scuba knowledge and skills to safely gain experience in the diving environment and, ultimately, to dive independently. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisites: Age 15 (minors require signature of parent/guardian), Assumptions of Risk statement, meet medical fitness standards, demonstrate swimming competency.

PAC113 Total Body Conditioning
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
Total body workout through aerobic exercise. This course covers upper body conditioning and abdominal conditioning, stretching techniques, safety, diet and nutrition. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

ICON LEGEND
AGEC: ∈  Dual Enrollment: ⚡
Intensive Writing: IW  Programs of Study/Tech Prep: POS
Reading Required: RDG094: ⚡  SUN Course: ∈
PAC114 Aerobic Martial Arts

1 Credit (3 Labs)

Typically Offered: Consult CAC Class Schedule.

Aerobic workout using martial arts techniques. This course covers upper and lower body conditioning, stretching techniques, safety and nutrition. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit.

PAC115 Spinners

1 Credit (3 Labs)

Typically Offered: Fall, Spring and Summer

Aerobic workout using stationary bicycles. This course covers core, upper and lower body conditioning, stretching techniques and safety. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

PAC121 Theory and Practice of Basketball I

2 Credits (6 Labs)

Typically Offered: Fall

Fundamental techniques of team play and strategy in the sport of basketball. Includes mechanics of basketball, rules and total body conditioning. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC122 Theory and Practice of Baseball I

2 Credits (6 Labs)

Typically Offered: Fall

Fundamentals of baseball, including techniques of team play, rules, conditioning and mechanics of baseball. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC123 Theory & Practice of Track & Field I

2 Credits (6 Labs)

Typically Offered: Fall

Fundamentals and techniques of track and field events, including psychological aspects, training and styles used in track and field events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC125 Theory and Practice of Softball I

2 Credits (6 Labs)

Typically Offered: Fall

Fundamentals of softball, including techniques of team play, rules, conditioning and mechanics of softball. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC126 Theory and Practice of Cross-Country I

2 Credits (6 Labs)

Typically Offered: Fall

Fundamentals of racing strategies, mechanics of cross country, rules, conditioning and cross training are emphasized. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC127 Theory and Practice of Volleyball I

2 Credits (6 Labs)

Typically Offered: Fall

Fundamentals of volleyball including techniques of team play, rules, theory, conditioning and mechanics of volleyball. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC200 Advanced Competition/Fitness Swimming

2 Credits (1 Lecture, 3 Labs)

Typically Offered: Fall, Spring and Summer

This class is designed to improve/master rhythmic breathing along with stroke coordination, speed- and flip-turns, distance swimming and endurance training, water entries, diving starts and/or other skills as desired by students to further enhance skills for competition or fitness swimming. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Ability to swim freestyle (or other stroke).

PAC201J Advanced Weight Training

2 Credits (6 Labs)

Typically Offered: Fall, Spring and Summer

Development and implementation of individualized weight training programs based on the student’s activities and/or interests. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.
PAC201N Aerobics
1 Credit (3 Labs)
Typically Offered: Fall, Spring and Summer
A variety of exercises that stimulate lung activity such as running, swimming, cycling and jogging. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

PAC207 Lifeguard Training
1 Credit (3 Labs)
Typically Offered: Fall and Spring
Minimum skills necessary for qualification as a non-surf lifeguard as stipulated in the American Red Cross Lifeguard Training Certification program. A water proficiency test will be given at the beginning of the course. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisites: Adult CPR and Standard First Aid Certifications; swimming proficiency test.

PAC209 Water Safety Instructor
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Fall and Spring
This course trains instructor candidates to teach American Red Cross (ARC) Water Safety Courses, the ARC Infant and Preschool Aquatics Program and the ARC Learn to Swim Program. Students must successfully complete pre-course written and water proficiency tests and be at least 17 years of age by the end of the course. Current prerequisite certifications required for enrollment. Satisfactory/Unsatisfactory grading option is available. May be taken three times for credit. Prerequisites: Lifeguard Training, Adult CPR, Standard First Aid Certifications; pre-course written test; swimming proficiency test.

PAC222 Theory and Practice of Baseball II
2 Credits (6 Labs)
Typically Offered: Spring
Advanced techniques of baseball including techniques of team play, rules, conditioning, and mechanics of baseball. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: PAC122 or instructor consent.

PAC223 Theory and Practice of Track and Field II
2 Credits (6 Labs)
Typically Offered: Spring
Advanced techniques of track and field events including psychological aspects, training and styles used in track and field events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC123 or instructor consent.

PAC225 Theory and Practice of Softball II
2 Credits (6 Labs)
Typically Offered: Spring
Advanced techniques of softball, including techniques of team play, rules, conditioning and mechanics of softball. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC125 or instructor consent.

PAC226 Theory and Practice of Cross Country II
2 Credits (6 Labs)
Typically Offered: Spring
Advanced techniques of racing strategies, mechanics of cross country, rules, conditioning and cross training for cross country racing. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC126 or instructor consent.

PAC227 Theory and Practice of Volleyball II
1 Credit (3 Labs)
Typically Offered: Spring
Advanced techniques of volleyball, including techniques of team play, rules, conditioning and mechanics of volleyball. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: PAC127 or instructor consent.
PAC230 Arizona Seals Swimming Academy I
2 Credits (6 Labs)

Typically Offered: Fall and Spring

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the U.S. This course emphasizes the fundamentals of swimming focusing on comfort in the water. Structured practice sessions include stroke development, stroke proficiency, endurance training, resistance exercise and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Long-course program. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Student must meet minimum water proficiency eligibility criteria.

PAC231 Arizona Seals Swimming Academy II
2 Credits (6 Labs)

Typically Offered: Fall and Spring

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the U.S. The course emphasizes the fundamentals of swimming focusing on comfort in the water. Structured practice sessions include stroke development & proficiency, endurance training, resistance exercise and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Short-course program II. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Student must meet minimum water proficiency eligibility criteria.

PAC232 Arizona Seals Swimming Academy III
2 Credits (6 Labs)

Typically Offered: Fall and Spring

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the U.S. This course emphasizes the fundamentals of swimming focusing on comfort in the water. Structured practice sessions include stroke development & proficiency, endurance training, resistance exercise and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Long-course program. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Student must meet minimum water proficiency eligibility criteria.

PEH101 Personal Health
3 Credits (3 Lectures) R

Typically Offered: Fall, Spring and Summer

The significance of physical, mental, emotional and social health to the individual and society, community health programs and national health indicators. Special emphasis on health problems of the individual. Prerequisite: RDG094.

PEH102 First Aid/CPR
2 Credits (2 Lectures) R

Typically Offered: Fall and Spring

A study of first aid dealing with fractures, dislocations, wounds, hemorrhages, poisoning, drowning and cardiopulmonary respiration. Students can receive Standard First Aid and Adult CPR Red Cross certification. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Corequisite: RDG094.

PEH110 Lifetime Fitness and Wellness
3 Credits (3 Lectures)

Typically Offered: Fall and Spring

An introduction to a complete and personalized lifetime fitness and wellness program with thorough discussion on lifestyle management, wellness and components of physical fitness and mental health.

PEH111 Nutrition for Health, Fitness and Sport
3 Credits (3 Lectures)

Typically Offered: Fall, Spring and Summer

Nutrition, exercise, health related and sports related fitness including: the essential nutrients and the recommended nutrient intake for fitness and sport, weight maintenance through proper nutrition and exercise for health and sport.
PEH200 Sports Safety Training
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
Sports Safety Training, CPR and AED for the Professional Rescuer including soft tissue and skeletal injury prevention, first aid and emergency steps for breathing and cardiac care. May be taken four times for credit. Corequisite: RDG094.

PEH203 Group Fitness Instructor Methods
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
American Council on Exercise (ACE) preparation course for the Group Fitness Instructor Certification exam. Prerequisite: RDG094

PEH204 Personal Training Methods
3 Credits (3 Lectures)  
Typically Offered: Consult CAC Class Schedule.

PHYSICAL EDUCATION VARSITY SPORTS (PEV)

PEV110 Rodeo Sports Events I
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Fall and Spring
Development of skills in one or more of the following rodeo events: steer wrestling, calf roping, team roping, bull riding, bareback riding, saddle bronco riding, barrel racing, goat tying or breakaway roping. May be taken four times for credit. Prerequisite: Intercolligate Rodeo team member.

PEV201 Varsity Basketball I
1 Credit (3 Labs)
Typically Offered: Fall
Hone basketball skills, knowledge and strategies. Explain and adhere to NJCAA regulations, basketball etiquette and team rules. May be taken two times for credit. Prerequisite: Intercolligate Basketball team member.

PEV202 Varsity Baseball I
1 Credit (3 Labs)
Typically Offered: Fall
For members of the intercollegiate varsity baseball team. May be taken three times for credit. Prerequisite: Intercolligate Baseball team member.

PEV203 Varsity Track and Field I
1 Credit (3 Labs)
Typically Offered: Fall
Hone track and field skills, knowledge and strategies. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: Intercolligate Track and Field team member.

PEV205 Varsity Softball I
1 Credit (3 Labs)
Typically Offered: Fall
For members of the intercollegiate varsity softball team. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: Intercolligate Softball team member.
COURSE DESCRIPTIONS

PEV206 Varsity Cross Country I
1 Credit (3 Labs)
Typically Offered: Fall
Varsity level Cross-Country I includes rules and athlete code of conduct, training and competition strategies, teamwork and sports etiquette. May be taken two times for credit. Prerequisite: Intercollegiate Varsity Cross-Country team member.

PEV207 Varsity Volleyball I
1 Credit (3 Labs)
Typically Offered: Fall
Hone volleyball skills, knowledge and strategies. May be taken two times for credit. Prerequisite: Intercollegiate Varsity Volleyball Team member.

PEV211 Varsity Basketball II
1 Credit (3 Labs)
Typically Offered: Spring
Intercollegiate varsity basketball with application of theory in NJCAA events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PEV201 or instructor consent.

PEV212 Varsity Baseball II
1 Credit (3 Labs)
Typically Offered: Spring
Intercollegiate Varsity Baseball with application of theory in NJCAA events. May be taken two times for credit. Prerequisite: PEV202 or instructor consent.

PEV213 Varsity Track and Field II
1 Credit (3 Labs)
Typically Offered: Spring
Intercollegiate Varsity Track and Field with application of theory in NJCAA events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PEV203 or instructor consent.

PEV215 Varsity Softball II
1 Credit (3 Labs)
Typically Offered: Spring
Intercollegiate Varsity Softball with application of theory in NJCAA events. May be taken two times for credit. Prerequisite: PEV205 or instructor consent.

PEV216 Varsity Cross Country II
1 Credit (3 Labs)
Typically Offered: Spring
Intercollegiate Varsity Cross Country with application of theory in NJCAA events. May be taken two times for credit. Prerequisite: PEV206 or instructor consent.

PEV217 Varsity Volleyball II
1 Credit (3 Labs)
Typically Offered: Spring
Intercollegiate Varsity Volleyball with application of theory in NJCAA events. Satisfactory/unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PEV207 or instructor consent.

For Physical Geography, see Geography.

PHYSICS (PHY)

PHY100 Physical Universe
4 Credits (3 Lectures, 3 Labs) R
Typically Offered: Fall and Spring
The basic principles of physics and chemistry and their application in science, technology and everyday life. Emphasis is on the fundamental behavior of matter and energy in physical systems with concepts presented and applied at the mathematical level of elementary algebra. Prerequisites: RDG094; MAT092 or higher.

PHY111 College Physics I
4 Credits (3 Lectures, 3 Labs) PHY1111 R
Typically Offered: Fall
Non-calculus treatment of the principles of physics for non-physics majors, covering the motion of particles in one and two dimensions, Newton's laws, energy, momentum, angular momentum, conservation laws, gravitation, fluids, mechanical waves, sound, temperature, heat, heat engines, the laws of thermodynamics and special relativity. Prerequisites: RDG094; MAT182 or MAT187.
PHYSICS

PHY112 College Physics II
4 Credits (3 Lectures, 3 Labs)  PHY112
Typically Offered: Spring
Non-calculus treatment of the principles of physics for non-physics majors, covering electricity, magnetism, circuits, electromagnetic waves, light, optics and modern physics. Prerequisites: PHY111; MAT182 or MAT187.

PHY121 University Physics I: Mechanics
4 Credits (3 Lectures, 3 Labs)  PHY121
Typically Offered: Fall
First course in the three-semester, calculus-based University Physics sequence covering kinematics, Newton’s laws, work, energy, momentum, angular momentum, conservation laws, Statics and dynamics of particles, solids, fluids, mechanical waves and sound. Prerequisite: MAT221.

PHY122 University Physics II: Electricity and Magnetism
4 Credits (3 Lectures, 3 Labs)  PHY122
Typically Offered: Spring
Second course in the three-semester, calculus-based University Physics sequence covering electric charge and current, electric and magnetic fields in vacuum and materials, elementary AC and DC circuit analysis with resistive, capacitive and inductive elements, displacement current, electromagnetic waves and Maxwell’s equations. Prerequisite: PHY121. Corequisite: MAT231.

PHY223 University Physics III: Vibrations and Waves
4 Credits (3 Lectures, 3 Labs)
Typically Offered: Fall
Final course in the three-semester, calculus-based University Physics sequence, covering thermodynamics, kinetic theory, physical and wave optics, matter waves, relativity, photons and atomic physics. Prerequisites: MAT231 and PHY122.

POLITICAL SCIENCE (POS)

POS101 American Politics
3 Credits (3 Lectures)  POS101
Typically Offered: Fall and Spring
The theory, organization, politics, function and problems of the federal system of government in the United States; the growth of self-government to the adoption of the federal form; the powers, functions and related activities of national government and institutions. Meets the national government requirement for teacher certification. Field trips may be required. Prerequisite: RDG094.

POS103 Arizona Constitutional Government
1 Credit (1 Lecture)
Typically Offered: Fall and Summer
Constitution and government of the state of Arizona. Meets the Arizona government requirement for teacher certification. Field trips may be required. Prerequisite: RDG094.

POS104 Contemporary Issues in World Politics
3 Credits (3 Lectures)  POS104
Typically Offered: Spring
A study of the international system, its actors and their capabilities; ends and means of foreign policy; international tension; conflict and cooperation in an age of increasing globalization. Prerequisite: RDG094.

POS105 U.S. Constitution
2 Credits (2 Lectures)
Typically Offered: Fall and Summer
An examination of the U.S. Constitution, Bill of Rights and other significant amendments including the historic background, theory, organization and functions of the federal system of government in the United States. Meets the Arizona State Department of Education U.S. Constitution requirement for teacher certification. Prerequisite: RDG094.
POS220 U.S. and Arizona Constitutions
3 Credits (3 Lectures) 🏛️ 📚
Typically Offered: Fall and Spring
An examination of the U.S. Constitution, the Bill of Rights and other significant amendments, and the Constitution of the State of Arizona, including the historic background, theory, organization and functions of the U.S. federal and state systems of government. Course is required to meet the Arizona State Department of Education U.S. Constitution and Arizona government requirements for teacher certification. Course meets the state requirements for the A.A.S Degree in Corrections. Students selecting POS220 (3) should not enroll in either POS103 (1) or POS105 (2). Prerequisite: RDG094. Recommended: This course meets the Arizona State requirements for teacher certification. Students selecting POS220 (3) should not enroll in either POS103 (1) or POS105 (2). This is a required course for the Corrections AAS Degree.

PSYCHOLOGY

(PSY)

PSY101 Introduction to Psychology
3 Credits (3 Lectures) 📚 PSY1101 🏛️ 📚
Typically Offered: Fall, Spring and Summer
Introduction to principles and theories of human behavior, development, personality and cognition, and the relationship to societal issues. Historical views and research methodology applied to psychology are also presented. Field trips may be required. Prerequisite: RDG094.

PSY200 Social Psychology
3 Credits (3 Lectures) 🏛️
Typically Offered: Every other fall; consult CAC Class Schedule.
Principles of sociology and psychology with emphasis on the individual and his/her reciprocal interaction with groups, basic psychological factors, social attitudes, language and communication, society and cultures, small groups and their relation to the individual, leadership and group dynamics. Prerequisite: PSY101.

PSY202 Psychology of Abnormality
3 Credits (3 Lectures)
Typically Offered: Every other fall; consult CAC Class Schedule.
Theories of normality and abnormality, models of psychopathology, classification and treatment of mental disorder and principles of various forms of psychotherapy. Prerequisite: PSY101.

PSY203 Developmental Psychology
3 Credits (3 Lectures) 🏛️ IW
Typically Offered: Fall, Spring and Summer
Biosociopsychological approach to the study of human development, focusing on personality, social, physical and cognitive changes from conception to late adulthood. Prerequisite: PSY101. Corequisite: ENG102.

PSY205 Personality and Social Adjustment
3 Credits (3 Lectures) 🏛️ IW
Typically Offered: Every other spring; consult CAC Class Schedule.
Principles of mental health applicable to human behavior and everyday social interaction, including theory, beliefs, hypothesis testing and positive life planning. Prerequisites: ENG101; Corequisite: ENG102.
PSY230 Introduction to Statistics
3 Credits (3 Lectures)  
Typically Offered: Fall and Spring
Descriptive statistics, probability and application, probability distributions of random variables, inferential statistics and statistical decision-making. Prerequisites: MAT121; RDG094.

PSY277 Human Sexuality
3 Credits (3 Lectures)
Typically Offered: Every other spring; consult CAC Class Schedule.
An exploration of psychological, sociological, physiological aspects of human sexuality within the context of individual development, family, culture, and society. Prerequisites: SOC100 or PSY101 and ENG101. Cross Listed: SOC277.

RADIOLOGY (RAD)

RAD100 Fundamentals of Radiologic Science and Healthcare
1 Credit (1 Lecture)
Typically Offered: Spring
Introduction to the field of radiology, the healthcare system and the Radiologic Technology program. Content also includes an introduction to radiologic terminology, ethics, patient care, health care systems, accreditation and professional organizations and radiation protection. Prerequisites: HCC100, HCC111, HCC116 and Radiologic Technology cohort student.

RAD110 Radiographic Positioning I
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Spring
An introduction to radiographic positioning and a review of related anatomy, covering anatomy and physiology and the fundamentals of radiographic positioning for the upper and lower extremities, shoulder girdle, chest, pelvis, pelvic girdle, abdomen and vertebral column. Prerequisite: Radiologic Technology cohort student.

RAD120 Principles of Radiographic Exposure I
3 Credits (3 Lectures)
Typically Offered: Spring
An introduction to the fundamental factors of film-screen image production, processing, film imaging with related accessories and image analysis. Prerequisite: Radiologic Technology cohort student.

RAD130 Patient Care in Radiologic Science
2 Credits (2 Lectures)
Typically Offered: Summer
Basic concepts of patient care, physical and psychological needs of the patient/family. Infection control measures, routine/emergency patient care procedures; patient safety, assessment, radiologic technologist/patient communications and patient care devices are presented. Prerequisite: Radiologic Technology cohort student.

RAD140 Practicum I
3 Credits (3 Practica – 240+ Hours)
Typically Offered: Summer
Initial clinical radiography experience that applies radiographic theory to the performance of procedures. Through structured, sequential competency-based assignments under supervision, students acquire proficiency in clinical practice and the performance of radiographic exams. Prerequisite: Radiologic Technology cohort student.

RAD150 Radiation Physics I
3 Credits (3 Lectures)
Typically Offered: Fall
The fundamentals of radiation production/characteristics including the basics of atomic structure, the nature of radiation, interactions of photons with matter and associated terminology. Prerequisite: Radiologic Technology cohort student.

RAD160 Radiographic Positioning II
4 Credits (2 Lectures, 6 Labs)
Typically Offered: Summer
Human structure/function, sectional anatomy and the fundamentals of radiographic positioning of the bony thorax, contrast studies of urinary and digestive systems, cranium, arthrography, myelography, venography, pediatric imaging, basic mobile radiography and imaging during trauma and surgery. Prerequisites: RAD110 and Radiologic Technology cohort student.
RAD170 Principles of Radiographic Exposure II
3 Credits (3 Lectures)
Typically Offered: Fall
Digital image acquisition, image display and image analysis. Prerequisites: RAD120 and Radiologic Technology cohort student.

RAD180 Practicum II
3 Credits (Practica – 240 Hours)
Typically Offered: Fall
Structured, sequential competency-based assignments under supervision; students will acquire proficiency in clinical practice and the performance of radiographic exams. Prerequisite: Radiologic Technology cohort student.

RAD200 Practicum III
7 Credits (7 Practica – 600 Hours)
Typically Offered: Spring
Through structured, sequential competency-based assignments under supervision, students acquire proficiency in clinical practice and the performance of radiographic exams. Prerequisite: Radiologic Technology cohort student.

RAD210 Radiation Physics II
3 Credits (3 Lectures)
Typically Offered: Summer
A continuation of “Radiation Physics I” covering the basics of imaging systems and quality control. Prerequisites: RAD140 and Radiologic Technology cohort student.

RAD230 Radiobiology and Radiation Protection
3 Credits (3 Lectures)
Typically Offered: Summer
This course builds and expands on the basic and radiation protection concepts presented in the “Fundamentals of Radiologic Science and Healthcare.” Content includes the principles of the interaction of ionizing radiation, biological systems and concepts of radiation protection. Prerequisites: RAD100 and Radiologic Technology cohort student.

RAD240 Practicum IV
4 Credits (4 Practica – 360 Hours)
Typically Offered: Summer
Through structured, sequential competency-based assignments under supervision, students will acquire proficiency in clinical practice and the performance of radiographic exams. Prerequisite: Radiologic Technology cohort student.

RAD250 Pharmacology and Venipuncture
1 Credit (1 Lecture)
Typically Offered: Fall
The theory and practice of pharmacology, including basic techniques of venipuncture and administration of diagnostic contrast agents and/or intravenous medications. Prerequisite: Radiologic Technology cohort student.

RAD260 Radiographic Pathology
2 Credits (2 Lectures)
Typically Offered: Fall
The concepts of disease and the etiology of selected pathologic conditions are examined with an emphasis on the radiographic appearance of various diseases and the influence of pathologic changes on considerations of technique. Prerequisite: Radiologic Technology cohort student.

RAD270 Advanced Imaging
2 Credits (2 Lectures)
Typically Offered: Fall
An overview of the various fields of medical imaging with a focus on Computed Tomography. Prerequisite: Radiologic Technology cohort student.

RAD280 Registry Review
3 Credits (3 Lectures)
Typically Offered: Fall
A comprehensive review geared toward preparing students for the national ARRT registry examination. Prerequisite: Radiologic Technology cohort student.

ICON LEGEND
AGEC: ⊙ Dual Enrollment: ⊙
Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: R SUN Course: ☸
RAD290 Practicum V
4 Credits (4 Practica - 360 Hours)
Typically: Fall
Offered: Fall
The final course in the clinical radiography experiences series that applies radiographic theory to the performance of procedures and continued application and reinforcement of skills mastered in previous practicums. Through structured, sequential competency-based clinical assignments under supervision, students continue to refine and enhance proficiency in an effort to achieve professional entry level competency. Observations in specialized imaging areas will be optional during this practicum. Prerequisites: RAD240 and Radiologic Technology cohort student.

READING (RDG)

RDG090 Introduction to College Literacy
4 Credits (4 Lectures)
Typically: Fall, Spring and Summer
Offered: Fall, Spring and Summer
Reading strategies to increase comprehension, including vocabulary clarification techniques, vocabulary reference materials, graphic organizers and genre-specific attributes recognition. Prerequisites: English speaking proficiency and (COMPASS score below 47 or an ASSET score below 33).

RDG091 College Vocabulary
4 Credits (4 Lectures)
Typically: Fall, Spring and Summer
Offered: Fall, Spring and Summer
Increase reading comprehension and vocabulary skills by emphasizing the relationship between words and ideas, word parts, word history, context clues, and how they all contribute to determining the topic, main idea and details in a reading selection. To pass the course, a grade of “C” or better must be achieved. Prerequisite: RDG090.

RDG091A College Vocabulary for English Language Learners
4 Credits (4 Lectures)
Typically: Fall
Offered: Fall
Reading comprehension and vocabulary skills for ELL students emphasizing the relationship between words and ideas, word parts, word history, context clues of Standard American English and how they contribute in determining the topic, main idea and details of a reading selection. Students may take only one: RDG091 or RDG091A. Prerequisite: RDG090.

RDG094 College Reading
3 Credits (3 Lectures)
Typically: Fall, Spring and Summer
Offered: Fall, Spring and Summer
Emphasizes effective reading and critical thinking skills leading to increased reading comprehension necessary for college-level texts. Completion of this course with a grade of "C" or better fulfills the college reading proficiency requirement. Prerequisite: RDG091 or appropriate placement score.

RDG094A College Reading for English Language Learners
3 Credits (3 Lectures)
Typically: Fall
Offered: Fall
Reading comprehension and critical reading skills necessary for college-level texts with language skill development and cultural awareness for ELL students. Students may take only one: RDG094 or RDG094A. Completion of this course with a grade of "C" or better fulfills the college reading proficiency requirement. Prerequisite: RDG091 or RDG091A.
REAL ESTATE (REA)

REA122 Real Estate Principles and Practices
6 Credits (6 Lectures)
Typically Offered: Fall, Spring and Summer
Basic principles of real estate including estates, real estate code, commissioner’s rules, land description, title acquisition, contracts, escrow procedures, title insurance, encumbrances-burdens in title, financing, government restrictions, toxic waste and environmental hazards, water rights, ethics, valuations, taxation and property management. The course meets a requirement for licensure of real estate sales personnel. Satisfactory/Unsatisfactory grading option is available.

REA124 Introduction to Contract Writing
1 Credit (1 Lecture)
Typically Offered: Fall and Spring
A required course for real estate license activation on writing real estate contracts.

RECREATION (REC)

REC101 Recreation, Leisure and the Quality of Life
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
The conceptual foundations of recreation, play and leisure from cultural, historical, philosophical, physiological, psychological and sociological perspectives, and the significance of recreation, play and leisure on life quality. Prerequisite: RDG094.

REC102 Leisure and Society
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Analysis of the human relationship to leisure; a survey of the historical, environmental, philosophical, political, psychological and socioeconomic foundations for the development of systems that provide leisure programs. Corequisite: RDG094.

REC108 Recreation Practicum
3 Credits (1 Lecture, 6 Labs)
Typically Offered: Fall, Spring and Summer
The special duties and problems of aides and supervisors of recreation programs; observation and participation in assigned situations.

REC203 Leisure Delivery Systems
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Development, management and organization of public, nonprofit and private sectors of the leisure services profession and industry. Corequisite: RDG094.

REC220 Introduction to Nonprofit Youth and Human Service Agencies
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Exploration of the nonprofit youth and human service agency sector, its unique structure and its role in the delivery of services, the economy and society at large.
RENEWABLE ENERGY TECHNOLOGY (RET)

RET105 Introduction to Renewable Energy
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
An introduction to energy systems and renewable energy resources, with a scientific examination of the energy field and an emphasis on alternate energy sources, their technology and application. Explores society's present needs and future energy demands, examines conventional energy sources and systems, including fossil fuels and nuclear energy, alternate, renewable energy sources such as solar, biomass (conversions), wind power, geothermal and hydro energy conservation methods.

RET150 Pollution Controls and Industrial Waste
2 Credits (2 Lectures)
Typically Offered: Fall, Spring and Summer
Industrial pollution control of chemical, physical and biological treatment processes, including pollution prevention, waste minimization and disposal.

RET160 OSHA Safety for Renewable Energy
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Training for renewable energy workers, including renewable energy science terminology and principles, safety equipment and OSHA standards.

RET250 Ethanol Process Fundamentals
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
The history, chemistry, legal and political issues and fundamental processes of ethanol production, including the rationale for feedstock and additives used in ethanol processing and co-product production and use. Ethanol plant Process Flow Diagram (PFD) includes residence time, pressures and temperatures in production stages. Prerequisite: RDG094.

RET252 Biofuels Facilities Design and Boiler Systems
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Biofuels facilities including boiler system design, operation, maintenance, philosophy, code and standard compliance and troubleshooting. Prerequisite: RDG094.

RET255 Distillation and Evaporation Theory
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Basic distillation and evaporation theory including design of column internals, critical design aspects of trays, packings and ancillary equipment. Philosophy and practice of troubleshooting systems. Prerequisite: RDG094.

RET275 Biodiesel Production and Design
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Biodiesel production and design in transformation of biomass and other resources into biofuels and bio products. Includes biodiesel history, chemistry, legal factors and political factors. Technical applications focus on technologies for bioconversion of renewable resources. Consideration of technologies for future energy needs. Prerequisite: RDG094.
RET296 Renewable Energy Technology Internship
4 Credits (4 Internships) R
Typically Offered: Spring
Internship in renewable energy sector with placements tailored to the students' academic program, interests and skills. Since each internship is different and different skills may be learned. May be taken two times for credit. Prerequisites: RDG094 and instructor consent.

SIGN LANGUAGE (SLG)

SLG101 American Sign Language I
4 Credits (4 Lectures)
Typically Offered: Consult CAC Class Schedule.
Introduction to the Deaf culture and the vocabulary and sentence structures of American Sign Language (ASL). Mastery of receptive and expressive basic communication skills.

SLG102 American Sign Language II
4 Credits (4 Lectures)
Typically Offered: Consult CAC Class Schedule.
Expanded ASL knowledge, vocabulary and performance skills. Refinement of receptive and expressive skills. Prerequisite: SLG101 or instructor consent.

SLG201 American Sign Language III
4 Credits (4 Lectures)
Typically Offered: Consult CAC Class Schedule.
A continuation of the skills taught in SLG102. This course emphasizes improved fluency and comprehension of ASL, Deaf culture and the evolution of ASL. Course is taught primarily in American Sign Language. Prerequisite: SLG102.

SLG202 American Sign Language IV
4 Credits (3 Lectures, 1 Recitation) R
Typically Offered: Consult CAC Class Schedule.
Building upon the skills taught in SLG201, this course emphasizes advanced sign language fluency, conversational skills, comprehension skills and cultural features. Course is taught primarily in American Sign Language. Prerequisites: RDG094, SLG201.

SKILLS – WORKFORCE (SKL)

SKL110 Life Math Skills
3 Credits (3 Lectures)
Typically Offered: Consult CAC Class Schedule or the Workforce Office.
A study of basic arithmetic skills including whole numbers, fractions, decimals and percents as applied in business situations. A variety of payroll concepts, loans and credit purchases, budgeting and banking services.

SKL115 Employment Readiness Program Part I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Consult CAC Class Schedule or the Workforce Office.
The first of a two-part simulated, interactive workplace environment to prepare students with soft skills necessary for employment. Skills included are positive work habits, communication skills, workplace effectiveness and increased basic employability skill levels. Satisfactory/Unsatisfactory grading option is available.

SKL116 Employment Readiness Program Part II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Office.
The second of a two-part simulated, interactive workplace environment to prepare students with soft skills necessary for employment. Skills included are workplace effectiveness, business etiquette and job search. Satisfactory/Unsatisfactory grading option is available.
SKL117 Employment Skills
1 Credit (1 Lecture)
Typically Offered: Consult CAC Class Schedule or the Workforce Office. Employability skills necessary to identify personal interests and abilities, locate employment, and keep a job once employed. Satisfactory/Unsatisfactory grading option is available.

SKL120 Intro to Solar and Green Construction Concepts
5 Credits (4 Lectures, 3 Labs)
Typically Offered: Consult CAC Class Schedule or the Workforce Office. Overview of green collar jobs and the skills related to weatherization, alternative energy and green construction concepts. Satisfactory/Unsatisfactory grading option is available.

SKL121 Intro to Green Block Construction
1 Credit (1 Lecture)
Typically Offered: Office. Overview of construction using alternative block materials and the skill sets related to the green collar jobs in this trade. Satisfactory/Unsatisfactory grading option is available.

SKL122 Intro to Steel Framing
1 Credit (1 Lecture)
Typically Offered: Office. Overview of steel framing construction and the skill sets related to the green collar jobs in this alternative market. Satisfactory/Unsatisfactory grading option is available.

SKL123 Intro to Weatherization
1 Credit (1 Lecture)
Typically Offered: Office. Overview of insulation, appliance and low voltage systems that relate to the green collar jobs in weatherization. Satisfactory/Unsatisfactory grading option is available.

SKL124 Intro to Rammed Earth and Straw Bale Construction
1 Credit (1 Lecture)
Typically Offered: Office. Overview of rammed earth and straw bale construction and the skill sets related to the green collar jobs in these alternative programs. Satisfactory/Unsatisfactory grading option is available.

SKL125 Intro to Solar Panel Systems
1 Credit (1 Lecture)
Typically Offered: Office. Overview of solar panel systems and the skill sets related to the green collar jobs in solar panel installation. Satisfactory/Unsatisfactory grading option is available.

SKL126 Building Analyst Energy Auditor
2 Credits (2 Lectures)
Typically Offered: Office. Introduction to Building Analyst and Energy Audit Training, including residential energy consumption devices, maintenance and safety issues, conservation and projected savings. May lead to Building Performance Institute (BPI) Building Analyst Certification. Satisfactory/Unsatisfactory grading option is available.

SKL130 Intro to Weatherization, Solar and Green Construction
5 Credits (4 Lectures, 3 Labs)
Typically Offered: Office. Overview of green collar jobs and the skills related to weatherization, alternative energy and green construction concepts. Satisfactory/Unsatisfactory grading option is available.

SKL141 Overview of Office Assistant
2 Credits (2 Lectures)
Typically Offered: Office. An overview of various office environments in which office assistants are employed, including the use of basic office machines such as copiers, faxes, telephones and others as well as general duties such as filing, customer service, making change and filling out forms. Students completing the course will have a comprehensive overview of the functions and duties of an Office Assistant position. Satisfactory/Unsatisfactory grading option is available.
COURSE DESCRIPTIONS

SKL142 Green Office Solutions
1 Credit (1 Lecture)
Typically Consult CAC Class Schedule or the Workforce
Offered: Office.
An overview of current methods of green conservation
techniques related to office environments in use today,
including cost savings resulting from "green" techniques.
Satisfactory/Unsatisfactory grading option is available.

SKL143 Basic Accounting Concepts
1 Credit (1 Lecture)
Typically Consult CAC Class Schedule or the Workforce
Offered: Office.
The concepts of accounting for front office clerk. Satisfactory/Unsatisfactory grading option is available.

SKL144 Proofreading for Accuracy
1 Credit (1 Lecture)
Typically Consult CAC Class Schedule or the Workforce
Offered: Office.
Introduction to proofreading skills to identify and modify basic grammar, spelling and formatting within common computer
generated materials.

SKL145 Communication Skills
3 Credits (3 Lectures)
Typically Consult CAC Class Schedule or the Workforce
Offered: Office.
Written and oral communication in organizations with
emphasis on writing business letters, memos and reports;
speaking and listening skills; critical analysis of appropriate
writing; and managing various communication situations.

SKL146 Employment Coaching Workshop
1 Credit (1 Lecture)
Typically Consult CAC Class Schedule or the Workforce
Offered: Office.
An interactive workshop designed to coach individuals to
implement successful employment strategies with emphasis on
specific tools for researching the job market and acquiring
employment.

SKL149 Practicum for Computer Applications for Business Users
3 Credits (1 Lecture, 2 Practica)
Typically Consult CAC Class Schedule or the Workforce
Offered: Office.
Hands-on learning to further develop skills through employer
based experiences. Students will work in an office environment
utilizing the information, skills and software taught throughout
the program. This is an unpaid practicum.

SOCIAL WORK UNDERGRADUATE (SWU)

SWU171 Introduction to Social Work
3 Credits (3 Lectures) R
Typically Fall and Spring
Offered: Every other fall; consult CAC Class Schedule.
A descriptive and analytical historical perspective of the
profession of social work, social problems and the social
welfare system. Prerequisite: RDG094.

SWU242 Introduction to Child Welfare Service in a Diverse World
3 Credits (3 Lectures)
Typically Every other fall; consult CAC Class Schedule.
Offered: Examines contemporary child welfare policies and practices in the United States, including the rights of children, the rights and responsibilities of parents and society and their point of conflict. The nature and impact of child maltreatment, the ways in which society prevents or responds to the social problem of child maltreatment, and the system of response to child maltreatment are addressed. Prerequisite: ENG101 R.

SWU291 Social Service Delivery
3 Credits (3 Lectures)
Typically Spring
Offered: Purpose, structures and delivery systems of human service agencies, including 40 hours of volunteer experience in local human service agencies. Prerequisite: SWU171 and division chair consent.

ICON LEGEND
AGEC: Dual Enrollment: 
Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: R SUN Course: 

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SWU295 Foundations of Social Work Practice: Effective Helping in a Diverse World
3 Credits (3 Lectures)
Typically Offered: Every other spring; consult CAC Class Schedule.
Theoretical foundations and skills base for effective culturally competent communication and interviewing with individuals, families, small groups and larger systems. Prerequisite: ENG101

SOCIOLOGY (SOC)

SOC100 Introduction to Sociology
3 Credits (3 Lectures) SOC 1101
Typically Offered: Fall, Spring and Summer
The systematic study of society: the role and impact of society on individual and group social interaction. Prerequisite: RDG094.

SOC102 Contemporary Issues in Society
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
A systematic study of contemporary American and global social problems from a sociological viewpoint. Prerequisite: RDG094.

SOC200 Racial and Ethnic Minorities
3 Credits (3 Lectures) SOC 2215
Typically Offered: Every other spring; consult CAC Class Schedule.
Race and ethnicity in American society including such topics as discrimination, segregation, conflict, power and assimilation with an emphasis on contemporary issues. Prerequisites: SOC100 and ENG101. Corequisite: ENG102

SOC203 Marriage and the Family
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
A comprehensive examination of marriage and the family as a cultural unit and a social institution. Prerequisite: RDG094.

SOC212 Gender in Society
3 Credits (3 Lectures)
Typically Offered: Every other fall; consult CAC Class Schedule.
Social structures and processes related to the construction of gender in society, including theoretical perspectives, impact of politics past and present, sex versus gender, and gender in the workplace, religion and medicine. Prerequisite: ENG101.

SOC250 Family Violence
3 Credits (3 Lectures)
Typically Offered: Every other fall; consult CAC Class Schedule.
The introduction to concepts related to family/intimate violence with an emphasis on legal, social and psychological aspects of abuse. Prerequisite: RDG094.

SOC277 Human Sexuality
3 Credits (3 Lectures)
Typically Offered: Every other spring; consult CAC Class Schedule.
An exploration of psychological, sociological and physiological aspects of human sexuality within the context of individual development, family, culture and society. Prerequisites: SOC100 or PSY101 and ENG101. Cross Listed: PSY277.

SPANISH (SPA)

SPA101 Elementary Spanish I
4 Credits (4 Lectures, 1 Lab) SPA 1101
Typically Offered: Fall, Spring and Summer
The basic skills of understanding, speaking, reading and writing Spanish with a survey of cultural materials from Spanish-speaking countries.

ICON LEGEND
AGEC:             Dual Enrollment:  
Intensive Writing: IW  Programs of Study/Tech Prep: POS
Reading Required: RDG094: R  SUN Course: 

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SPA102 Elementary Spanish II
4 Credits (4 Lectures, 1 Lab) SPA 1102
Typically Offered: Fall, Spring and Summer
Refinement of basic communication skills in Spanish, emphasizing reading, writing, speaking and listening exercises. Survey of cultural norms, beliefs and traditions from areas where Spanish is spoken. Prerequisite: SPA101 or one full year of high school Spanish completed with a grade of “B” or better or instructor consent.

SPA115 Conversational Spanish I
3 Credits (1 Lecture, 2 Recitations)
Typically Offered: Fall, Spring and Summer
Introduction to conversational Spanish. Fundamentals of authentic speaking and listening skills in Spanish, with minimal grammar instruction. Introduction to cultures of the Spanish-speaking world.

SPA116 Conversational Spanish II
3 Credits (3 Recitations)
Typically Offered: Fall, Spring and Summer
Development of Spanish speaking and listening skills at the novice level, with grammatical explanations kept to a minimum, so that students learn primarily through pattern practice, repetition and practical application. SPA116 is a continuation of SPA115. Prerequisite: SPA115 or assessed competency.

SPA117 Costa Rican Culture and Spanish Conversation I
3 Credits (3 Lectures)
Typically Offered: Summer
Students will immerse themselves within the culture by living with Costa Rican families in Costa Rica conversing daily in conversational classes and participating in daily cultural activities and excursions.

SPA118 Costa Rican Culture and Spanish Conversation II
3 Credits (3 Lectures)
Typically Offered: Summer
Students will immerse themselves within the culture by living with Costa Rican families in Costa Rica conversing daily in conversational classes and participating in daily cultural activities and excursions. Prerequisite: SPA117.

SPA201 Intermediate Spanish I
4 Credits (4 Lectures, 1 Lab) SPA 2201
Typically Offered: Fall and Spring
Development of reading, writing, speaking and listening skills proficiency in Spanish, at the novice intermediate level. Continuation of understanding, appreciation and sensitivity to aspects of Hispanic cultures. Prerequisites: RDG094; SPA102 or four semesters of high school Spanish with a grade of “B” or better.

SPA202 Intermediate Spanish II
4 Credits (4 Lectures, 1 Lab) SPA 2202
Typically Offered: Fall, Spring and Summer
Continued development of speaking, writing, listening and reading proficiency in Spanish at the intermediate level. A continued study and appreciation of cultures of the Spanish-speaking world. Prerequisite: SPA201 or instructor consent.

TECHNOLOGY (TEC)

TEC129 Computer Skills for Technicians
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Practical use of computer software in industrial and technological applications. An introduction to word processing, spreadsheets, databases, presentations and the Internet.
THEATER

THE100 Theater Appreciation
3 Credits (3 Lectures)  R
Typically Offered: Fall and Spring
Survey of theater, including the origins of drama, influence of significant plays, contributions of the actors, directors, designers, stage managers and playwrights. Evaluation of stage and filmed versions of plays and how society influenced the development and creation of plays. Prerequisite: RDG094.

THE101 Beginning Acting I
3 Credits (2 Lectures, 3 Labs)  R
Typically Offered: Fall and Spring
Intro to the fundamentals of acting through physical expression, improvisation and performance of short scenes. Designed for students with little or no experience. Prerequisite: RDG094.

THE102 Beginning Acting II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Continuing study of the fundamentals of acting with emphasis on script analysis, character analysis and the rehearsal process through the performing of two or three short scenes. Prerequisite: THE101.

THE103 Introduction to Technical Theater
3 Credits (2 Lectures, 3 Labs)  R
Typically Offered: Fall and Spring
Theater safety, production organization and management, and introduction to basic technical design concepts, including scenic, stage lighting and sound design. Students perform the technical aspects for selected events in the Pence Center for the Performing and Visual Arts during the semester. Prerequisite: RDG094.

THE104 Stagecraft
3 Credits (2 Lectures, 3 Labs)  R
Typically Offered: Fall and Spring
Basic backstage techniques in building, painting and rigging of scenery. Operation of stage lighting, sound and curtain equipment. May be taken two times for credit. Prerequisite: RDG094.

THE105 Lighting I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Introduction to the technical aspects of concert and theatrical lighting, including basic design, color theory, instrument types, power distribution, control, safety and the proper hanging, connection, focus and control of instruments. Prerequisite: EIT101.

THE110 Stage Combat
3 Credits (2 Lectures, 3 Labs)  R
Typically Offered: Fall and Spring
Stunt fighting including hand-to-hand combat and the possible use of rapier, rapier-and-dagger or quarterstaff. May be taken two times for credit. Prerequisite: RDG094.

THE112 Introduction to the Performing Arts
2 Credits (1 Lecture, 3 Labs)  R
Typically Offered: Fall, Spring and Summer
Students meet once per week to explore the theater as an art form. Students work 28 hours over the course of the semester behind the scenes of a theatrical production to gain first-hand experience and attend one live theater production. May be taken four times for credit. Prerequisite: RDG094.

THE113 Theater Workshop: Stagecraft
2 Credits (6 Labs)  R
Typically Offered: Fall and Spring
Production experience in technical theater as a member of one or more technical activities. Positions are stage lighting, sound reinforcement and recording, properties, costumes, scenic artist, multimedia graphics design and set construction. May be taken four times for credit. Prerequisite: RDG094.
THE115 Introduction to Cinema
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisite: RDG094.

THE116 Contemporary Cinema
3 Credits (3 Lectures) R
Typically Offered: Fall, Spring and Summer
Survey of various genres of motion picture films since 1960, including criticism of aesthetic and technical elements. Prerequisite: RDG094.

THE117 Theater Workshop: Drama
2 Credits (6 Labs) R
Typically Offered: Fall, Spring and Summer
Participation as an actor, understudy or assistant to the director in the semester's production. Actors are selected by audition. Participation as an assistant to the director is based on availability of a position. May be taken four times for credit. Prerequisite: RDG094.

THE163 Scenic Design
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Design, plan and execute scenery with emphasis on craftsmanship, a safe work environment, creating and maintaining an organized work place and estimating time and energy to build various units of scenery.

THE164 Costume Design
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Costume design and execution using traditional and creative methods and generating all production work. Course includes design, fitting, sewing and repairs; budgeting and calculations to maximize efficiency and minimize cost; and creative and critical problem solving techniques. Prerequisite: THE104.

THE165 Makeup Design
2 Credits (1 Lecture, 3 Labs)
Typically Offered: Fall and Spring
Makeup design and execution using traditional and newly developed methods, including corrective makeup, old age makeup, facial prosthetics, facial hair/wig appliances, as well as a wide range of fantasy makeup applications. Prerequisite: THE104.

THE203 Intermediate Acting I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Continuing study of the fundamentals of acting with emphasis on movement and voice. In addition to performing in scenes and/or one-act plays, students learn two monologues to further prepare them for auditioning. Prerequisite: THE102 or instructor consent.

THE204 Intermediate Acting II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Continuing study of the fundamentals of acting with emphasis on career opportunities, further training opportunities and the introduction of acting style. In addition to performing in scenes and/or one-act plays, students learn two monologues to further prepare them for auditioning. Prerequisite: THE203 or instructor consent.

THE205 Stagecraft II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Advanced stagecraft techniques and concepts, including the visual aspects of theater created through design, planning and executing scenery creation. Emphasis is on quality craftsmanship, a safe work environment, creating and maintaining an efficient and organized work place, estimating time and energy required to build various units of scenery and executing designs to meet deadlines. Prerequisite: THE104.

THE261 Acting for the Camera
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall and Spring
Develop an actor's approach to the special demands of acting in front of a camera. Emphasis is placed on the development of specific performance skills used for television and film acting. A capstone portfolio includes a variety of audition shorts. Prerequisite: THE101 or instructor consent. Cross Listed: EIT261.
THE270 Education through Drama in the Elementary Classroom
3 Credits (3 Lectures)
Typically Offered: Fall and Spring
Hands-on opportunity to learn and teach drama based classroom activities that support learning in the elementary classroom. Develop an understanding of the research supporting the use of drama in the classroom. Cross Listed: EDU270.

VETERINARY TECHNICIAN (VET)

VET113 Math and Dosage Calculations for Veterinary Technicians
1 Credit (1 Lecture)
Typically Offered: Fall, Spring and Summer
Mathematical concepts and dosage calculations required for a veterinary technician. Prerequisites: RDG094 and MAT082.

VET116 Veterinary Medicine Terminology
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Mathematical concepts and dosage calculations required for a veterinary technician. Prerequisite: RDG094.

WELDING (WLD)

WLD110 Survey of Welding Processes
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Fundamental welding processes and procedures including basic shield arc, oxy-acetylene, tungsten inert gas and metal inert gas welding using manual setting machines and digital machines.

WLD120 Oxy-Acetylene Welding
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
The fundamentals of oxy-acetylene welding including equipment use and safety procedures in brazing, cast iron, silver soldering, running all-directional beads and machine cutting.

WLD121 Shielded Metal Arc Welding I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit
The fundamentals of arc welding using manual setting machines and digital machines with emphasis on running beads in all positions, identification of electrodes, hand flame cutting with the torch and identification of metal.

WLD122 Shielded Metal Arc Welding II
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Advanced arc welding using manual and digital setting machines with emphasis on out-of-position welding, basic destructive and non-destructive testing, oxy-acetylene cutting, arc air cutting, plasma arc cutting. Prerequisite: WLD120 or WLD121.

WLD125 Pipe Welding I
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer
Basic pipe welding of underground and industrial pipelines. Students will cut, bevel, fit and weld pipe. Prerequisite: WLD122.

WLD128 Blueprint Reading for Welders
3 Credits (3 Lectures)
Typically Offered: Fall, Spring and Summer
The fundamentals of reading and interpreting welding symbols and blueprints as they pertain to the area of welding technology.
WLD221 Gas Tungsten Arc Welding
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit

Techniques of both arc and oxy-acetylene welding; the theory, operation, safety, care and maintenance of the Gas Tungsten Arc Welding equipment both manual and digital. Additionally students will use oxy-acetylene torch and tungsten inner gas welding processes on ferrous and non-ferrous metals with various joint designs. Prerequisite: WLD120.

WLD222 Gas Metal Arc Welding
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit

Short-circuiting, spraying and globular transferring of ferrous and non-ferrous metals, flux-cored welding in the flat and horizontal positions, with emphasis on proper use and care of equipment and safety procedures. Describe the use of a spool-gun using aluminum. Discuss the operation of digital settings on MIG machines. Prerequisite: WLD121.

WLD223 Automatic and Semi-Automatic Welding
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer

Development of the necessary skills to enter the welding industry, including TIG and MIG techniques. Prerequisite: WLD221.

WLD225 Shielded Metal Arc Welding III
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring and Summer

Use of E7018 and E6011 electrodes in the flat, horizontal and overhead welding positions, with emphasis on basic joints placed in out-of-position per AWS D1-1 Guided Bend Test, and Destructive Methods. Prerequisite: WLD122.

WLD227 Welding Design and Fabrication
3 Credits (2 Lectures, 3 Labs)
Typically Offered: Fall, Spring, Summer and Open Entry/Open Exit

Welding design, layout, fabrication processes, with the class being job/shop oriented and emphasis placed on specific individual and group projects with instructor’s approval. May be taken two times for credit.

WOMEN AND GENDER STUDIES (WGS)

WGS100 Introduction to Gender and Women’s Studies
3 Credits (3 Lectures) R

Typically Offered: Every other spring; consult CAC Class Schedule.

Interdisciplinary survey of gender and feminist issues in contemporary society. Includes theoretical approaches to gender and gender socialization; body, health and intimacy issues; gender and religion; contemporary issues in politics/law, education, work and family. Prerequisite: RDG094.
General Information
**COLLEGE LEADERSHIP**

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Professor of Sociology, SPC

Avina, Lucy, 1989-2001
Office Assistant II, SPC

Babb, Wayne, 0981 - 2009
Campus Facilities Supervisor

Banta, Russell, 1980-2010
Vice President, Finance & Administrative Services, District

Belden, Thomas, 1989-2002
Professor of Art, SPC

Blank, Nancy, 1990-2004
Administrative Assistant, SPC

Blasco, Nancy, 1999-2013
Library Assistant I

Blow, James, 1979 – 2008
Facilities Assistant III, AVC

Bloxham, Anne, 1972-1983
Systems Analyst, SPC

Bolgren, Carol, 1978-2003
Office Assistant II, SPC

Facilities Assistant, SPC

Buttery, William, 1974-1987
Executive Dean, AVC

Buttram, Gary, 1984 - 2009
Professor of Masonry, ASP

Buys, Ekdal, Jr., 1971-1994
Professor of Philosophy

Cardell, Sharon “Shay”, 1990 – 2008
Professor of Mathematics, AVC

Cardenas, Jesus, 1971-1983
Maintenance/Watchman Supervisor, SPC

Cardona, Ralph, 1981-1993
Custodian, SPC

Carpenter, Mary, 1997-2009
Office Assistant I, SPC

Castillo, Josephine, 1983-2004
Facilities Assistant III, AVC

Celaya, Pete, 1973-1992
Counselor, SPC

Chapman, Robert, 1987-1999
Program Manager-Academic Services, ASP

Chew, Al, 1969-2001
Professor of Mathematics, SPC

Administration of Justice, SPC

Cockrill, Julia, 1996-2010
Website/Designer/Developer, District

Colman, Laura “Jill”, 1997-2011
Librarian

Collard, Gerald, 1972-2000
Professor of Business, SPC

Cubbage, John F., 1974-1993
Professor of Business/Electricity, AVC

Denton, Helen, 1988-2001
Dean of Student Services, District

Dorsett, Terry, 1983-2000
Professor of CIS, SPC

Elliott, Allen, 1976-2002
Professor of Engineering/Technology, SPC

Elson, Ellen, 1989-2000
Professor of Office Administration, SMC

Faucette, Dixon, 1972-1998
Professor of Math/Science, SPC

Professor of Math/Science, SPC

Feliz, M. Fred, 1969-1996
Facilities Technician II/Plumber, SPC

Dean of Instruction, ASP

Foster, Cass, 1990-2008
Professor of Theater, SPC

Foster, Cheryl 1975-1988 & 1990-2004
Vice President of College Development Services, District

Freyermuth, Kim, 1979-2007
Professor of Vocal Music, SPC

Gaunt, Eileen, 1983-1993
Switchboard Operator, SPC

Gessner, Michael, 1985-2001
Professor of English, SPC

Gibson, Dr. Dale, 1967-1983
Vice President of Planning & Research, SPC

Gray, Michael, 1996-2010
Professor of Sports & Fitness, Head Cross Country Coach, SPC
Haefner, Charles, 1987-2001  
Professor of Business, AVC

Halford, Delores, 1989-1999  
Office Assistant II, SMC

Harrington, Patrick, 1997 – 2012  
Professor of Farm Business Management, SPC

Heal, Joe, 1968-1998  
Dean of Instruction, AVC

Heaps, Melvin, 1995 – 2008  
Professor of Physics, SPC

Heintz, Gary, 1990-2007  
Professor of Sports & Fitness, SPC

Hight, Willie, 1978-1987  
Secretary-PEP, SPC

Hillery, Kenneth, 1969-1999  
Welding Technology, SPC

Honeycutt, Martha, 1972-1996  
Director of Continuing Education, SPC

Huether, Delores, 1971-1995  
Professor of Nursing, SPC

Irvine, John, 1990-2010  
Vice President, Academic Programs & Services, District

Isbell, Thomas, 1988-2005  
Professor of Speech, SPC

Jenkins, Dennis, 1972 – 2012  
President, District

Jenkins, Marsaille, 1996-2007  
Distance Learning Operator I, AVC

Johnson, Glen, 1976-1995  
Professor of Building Construction, AVC

Johnson, James, 1969-1983  
Professor of Music, SPC

Johnson, Katie, 1982-2003  
Professor of Sociology, SPC

Johnson, Robert, 1978-1995  
Campus Safety Office, SPC

Kessel, Joyce, 1994-2005  
Program Coordinator, Learning Resource Center/SMC

Kinnison, William, 1970-2000  
Professor of Science, SPC

Klein, John J., Jr., 1988-2003  
President, District

Kochenderfer, Terrill, 1987 – 2008  
Professor of Computer Information Systems, SMC

Kolb, Sandra, 1990-2011  
Professor of Reading

Laursen, Linda, 1971-2007  
Professor of Sports & Fitness, SPC

Lee, James, 1982-2001  
Professor of Music, SPC

Lee, Judy, 1979-2010  
Student Services Assistant III, SPC

Linnaus, Vernon, 1969-1987  
Professor of Business, AVC

Marin, Alejandro, 1972-1983  
Maintenance Worker/Watchman, AVC

Marinoff, Krist, 1990-2006  
Inventory Management

Martinez, Guillermo “Willie”, 1979-2010  
Campus Facilities Supervisor, SMC

Mason, Sheila, 1986-2004  
Secretary III, SMC

McClellan, Patrick, 1984 – 2008  
Professor of History, SPC

McEuen, Jody, 1992-2005  
Director of the Learning Resource Center, SPC

McFee, Rebecca, 1975-2001  
Professor of Office Administration, AVC

District Director of Student Records & Registrar, SPC

Facilities Assistant III, SMC

McLaughlin, L. Harold, 1992-2002  
Dean of Instruction, SPC

Mauldin, Sheryl, 1975-2002  
Continuing Education Medical Manager, SMC

Medley, John, 1982-2006  
Facilities Technician II, AVC

Menke, Larry 1996-2009  
Facilities Technician III, SPC

Mills, Gerald, 1984-2005  
Professor of English, SPC

Mitchell, Marian, 1990-2006  
Professor of English/Reading, SPC

Munoz, Maria Elda, 1979 – 2009  
Student Services Assistant III

Myers, Clint, 1986-2005  
Professor of Sports and Fitness, SPC

Myers, Varr, 1978 – 2008  
Professor of Heavy Equipment & Diesel Technology, SPC

Nava, Steve, 1980 – 2004  
Facilities Technician II, SPC

Nieto, Steve, 1976-2002  
Facilities Assistant I, SP

Professor of Chemistry/Math, SPC

Ochoa-Marek, Sandy, 1976-2007  
Program Manager, SPC

Ortiz, Sr., Ruben, 1975-1995  
Facilities Assistant I/Gardener, SPC

Pace, Wendell, 1988 – 2007  
Professor of Heavy Equipment, SPC
Paddison, John, 1992-2007
    Professor of English, SMC
    Superintendent of Building & Grounds, SPC
Page, Frank, 1997-2005
    Professor of Plumbing, ASP
Palmer, John, 1969-2003
    Professor of Electricity, SPC
Patton, Norman, 1981-1994
    Professor of HPER/Men's Head Basketball Coach, SPC
Peel, Jack, 1982-1998
    Facilities Assistant II, SPC
Perez, Juan, 1985-2003
    Facilities Assistant, SPC I
Peters, Edgar, 1982-2007
    Professor of Manufacturing/Engineering, SPC
Peters, Fran, 1981-1998
    Accounting Clerk III, SPC
    Dean of Instruction, ASP
Policastro, Joseph, 1989-2004
    Professor of Business, SMC
Powell, Louise, 1986-2001
    Professor of Early Childhood Education, SPC
Randall, Ted, 1996-2007
    Professor of Cement Finishing, ASP
Ratz, Arlene, 1974-1996
    Professor of Music/English, SPC
Rhodes, Edwyna, 1974-1995
    Secretary II, AVC
Richardson, Kenneth, 1973-1999
    Professor of Health, Physical Education, Recreation, SPC
Romero, Marie, 1974 – 2008
    Office Assistant II, AVC
Ross, Edna, 1975-1988
    Director of Nursing, SPC
Ross, Jeffrey, 1979 – 2008
    Professor of English, SMC
Ruelas, Augustine, 1969-1995
    Facilities Technician I/Assistant Craftsman, SPC
Ruiz, Henry, 1979-1997
    Professor of Upholstery, ASP
Runner, Robert, 1969-1983
    Professor of History & Government, SPC
Rupp, Leslie, 1987-2008
    Bookstore Manager, SPC
Schiller, Marjorie, 2000 – 2011
    Professor of Education, SPC
Shaw, Susan, 1999-2011
    Vice President, Institutional Effectiveness & Advancement, District
Shirley, Al, 1999 - 2013
    Student Services Generalist, SPC
Soliz, Arle, 1982 - 2012
    Purchasing Assistant, District/SPC
Soliz, Josie, 1980 - 2010
    Academic Division Assistant, SPC
Soliz, Manuel, 1979 – 2009
    Facilities Foreman, SPC
Sowers, John, 1976-2002
    Professor of Journalism, SPC
Spillman, Craig, 1989-2003
    Program Manager, Continuing Education, AVC
Stinard, Sharon, 1990-2011
    Community Outreach Coordinator, SMC
Strang, Eleanor, 1989-2001
    Director of Nursing, SPC
Taylor, Beverly, 1986-1996
    Professor of Psychology, SPC
Thielsen, Clarence, 1986-1996
    Professor of Cement, ASP
    Custodian, SPC
Van Hazel, Kurt, 1981-2003
    Professor of Mathematics, SPC
Welsh, Dianne, 1995-2006
    Secretary II, SMC
Weir, Janet, 1984-2002
    Associate Director of Public Services, SMC
Westerman, Frank, 1975-2005
    Professor of Drafting, SPC
Wilcox, Alice, 1973-2002
    Program Specialist, ECE, SPC
Wise, Fred, 1986-2006
    Facilities Assistant, SPC
Wolf, Louise, 1970-1983
    Professor of Technical Communications, SPC
Wright, Phyllis, 1980-1993
    Programmer/Analyst, SPC
Young, George, 1971-1996
    Professor of HPER/Athletic, SPC
Zawlocki, Eleanor, 1973-1983
    Professor of Nursing, SPC
Zeluff, Barbara, 1990-2000
    Secretary II, ASP
Zesiger, Jack, 1976-1989
    Police Officer I, SPC
FALL 2013

Faculty on Campus
Faculty Development Day
Weekend College Begins
Last Day of Fall Registration
Regular Classes Begin
Class Changes/Drop-Add
Labor Day - College Closed
All College Day
(No classes prior to 4:30 pm)
(No services all day)
45 Day Census
Spring Registration Begins
(Continues through January 18)
Mid-Term Week
Last Day to Apply for December Graduation
Last Day to Withdraw from Semester Length Classes
Veteran’s Day - College Closed
Thanksgiving Break
(No evening classes or college services after 6 pm on Nov. 27th)
Final Exams
Semester Ends
Grades due in Registrar’s Office
Winter Break - College Closed

August 13-16 T-F
August 13 T
August 16 F after 4:30
August 17 Sat 9-1pm
August 19 M
September 2 M
September 3 T
October 3 Th
October 7 M
October 7–11 M-F
October 14 M
October 26 Sat.
November 11 M
November 28-30 Th-Sat
December 6-13 F-F
December 14 Sat
December 16 M
Dec 23 – Jan 2 M-Th

SPRING 2014

Faculty on Campus
Weekend College Begins
Last Day of Spring Registration
Martin Luther King, Jr. Day
Regular Classes Begin
Class Changes/Drop-Add
President’s Day
Development Day
(No classes prior to 4:30 pm)
Last Day to Apply for May Graduation
45 Day Census
Mid-Term Week
Spring Break - College Closed
Summer/Fall Registration Begins
(Serves through August 16)
Last Day to Withdraw from Semester Length Classes
Final Exams
Semester Ends
Grades due in Registrar’s Office
Commencement

January 13–16 M-Th
January 17 F after 4:30
January 18 Sat 9-1pm
January 20 M
January 21 T
January 21-27 T-M
February 17 M
February 18 T
March 3 M
March 6 Th
March 7-13 F-Th
March 17-22 M-Sat
March 31 M
April 5 Sat
May 9–15 F-Th
May 15 Th
May 19 M
May 16 F

SUMMER 2014

Memorial Day - College Closed
Last Day of Summer Registration
First Summer Session Begins
Class Changes/Add-Drop
Last Day to Apply for Summer Graduation
First Five Week Session Ends
Second Summer Session Begins
Class Changes/Add-Drop
Second Five Week Session Ends
Grades Due in Registrar’s Office

May 26 M
May 29 Th
June 2 M
June 2-3 M-T
June 5 Th
July 5 Th
July 7 M
July 7-8 M-T
August 9 Sat
August 11 M

Academic Calendar 2013-14
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General Information
Campuses:

Aravaipa Campus
80440 E. Aravaipa Rd.
Winkelman, AZ 85192
520-357-2800 or 866-869-6507

Maricopa Campus
17945 N. Regent Drive
Maricopa, AZ 85138
520-494-6400

San Tan Campus
3736 E. Bella Vista Rd.
San Tan Valley, AZ 85143
480-677-7825 or 520-494-6725

Signal Peak Campus
8470 N. Overfield Road,
Coolidge, AZ 85128
520-494-5444 or 800-237-9814

Superstition Mountain Campus
273 E. Old West Hwy,
Apache Junction, AZ 85119
480-677-7700

Centers:

Casa Grande Center
1015 E. Florence Blvd.
Casa Grande, AZ 85122
520-494-6050

Corporate Center
540 N. Camino Mercado
Casa Grande, AZ 85122
520-494-6600

Florence Center
P.O. Box 707
800 E. Butte Avenue
Florence, AZ 85132
520-494-6801

SaddleBrooke Center
63675 E. SaddleBrooke Blvd., Suite T
SaddleBrooke, AZ 85739
520-825-4493

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