Central Arizona College

COLLEGE CATALOG
2012-2013

COLLEGE MISSION

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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

For information about Central Arizona College's accreditation, you can contact the Higher Learning Commission of the North Central Association of Colleges and Schools, 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.

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;
- Completion of Test of English as a Foreign Language (TOEFL) with a score of at least 450 paper test or 133 on the computer test. The score must be submitted directly from the testing agency to the Records Office. Questions about the TOEFL should be directed to the Educational Testing Services at the following address: TOEFL Services, PO Box 6155, Princeton, NJ, 08541-6155;
- 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 Central;
- 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.

- 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 Learning Services, (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 Association.
- "Continuous attendance" means a is student 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;
- Submission of evidence of the following to 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 15 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, 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 offers a developmental process which students are offered the opportunity to understand the nature and purpose of higher education and participate in the planning and mapping of an educational process that supports 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 the student has 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 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 reading class is necessary, an academic advisor can help students select additional appropriate courses.

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, complete address of where the transcript is to be sent, along with the appropriate official transcript fee for each copy. Transcripts will not be released if students have any outstanding financial or institutional obligations.

Students can also request official transcripts online at www.centralaz.edu

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/RjKK1DvVRg7cezRIezGqr0/0.0.11.1.1 .

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.

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.

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, and submitting the form to the Records and Registration Office for processing. Students may add classes to their schedule after the Drop/Add week only with the approval of the faculty member involved.

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 or the student will be responsible for tuition and fees.

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:

Length of Class	Must Withdrawal by Friday of:
5 Week Course	3rd Week
8 Week Course	5th Week
10 Week Course	6th Week
16 Week Course	10th Week
Classes less than 5 weeks	Prior to the first day of class

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 financial obligations and needs.

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 only are offered 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 Stafford Student Loan
- Federal PLUS Loan

State Programs
- Leveraging Educational Assistance Partnership

Student Eligibility for Federal Financial Aid Programs

To be eligible for federal financial aid, the student must:
- 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;
- 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 a refund to a federal grant program.

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). 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. List Central Arizona College in the school section 5 of the application. (Central's Title IV School Code is 007283). 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
- Cumulative Grade Point Average (GPA). Students must maintain at least a 2.0 cumulative 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.

Financial Aid for Seeking Additional Degrees
Students seeking additional degrees are limited as follows: Associate degree - 30 credit hours beyond first Associate degree. Certificate limited to two (2) certificates. Students seeking a third associate degree or a third certificate are not eligible for federal financial aid.

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 has 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.

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.

Course Withdrawal

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

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. Grade of W may affect your Satisfactory Academic Progress.

Appealing a Decision

If a determination is made that a student is not making satisfactory 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 through the Financial Aid Office.

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 need. 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 SCHOLARSHIP

Target: Students who score an average of 580 or higher on the GED examination taken through the Central Arizona College GED testing program.

Enrollment Requirements: Must enroll in a minimum of 12 credit hours in the fall semester immediately following notification from Central of scholarship eligibility. 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.

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 6 credit hours in the semester immediately following notification from Central 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 18 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 three-quarter-time at 75 percent of full-time and 50 percent of full-time for half-time.

FACULTY SCHOLARSHIP

Target: New and continuing students. All approved full-time faculty are eligible to award this scholarship.

Eligibility Requirements: Must enroll in a minimum of 1 credit hour per semester. Have a 2.5 cumulative grade point average.

Application Process: A completed faculty scholarship application is required. Faculty may obtain an application in the Financial Aid Office.

Requirements: Must complete a minimum of one credit hour each semester. Must earn and maintain a 2.5 cumulative grade point average. Limited to four semesters. Contingent upon faculty recommendation.

Value: The amount varies depending on faculty recommendation. Maximum amount is not to exceed the cost of in-state tuition and up to 18 credit hours.

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: $750 per semester

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.

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 30% of their high school graduating class at participating high schools. Recipients are determined by the high school.

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;
- 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: $500.

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).

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.

Scholarship Amount: $600

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).

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: $500

Renewal Requirements: None

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 high school representative verifying participation in high school activities.

Scholarship Amount: $400 - $1,000.

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).

CENTRAL ARIZONA COLLEGE FOUNDATION SCHOLARSHIP ARAVAIPA CAMPUS

Selection Process: Awarded to outstanding "Freshman of the Year" at the Aravaipa Campus.

Scholarship Amount: $500

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: $500.

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.

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 applicants to the Financial Aid Scholarship work group (which includes a representative appointed by the former members of the Coolidge Mounted Sheriff's Posse). The work group will select recipients

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: $500 - $1,000

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: $500

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.

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

Scholarship Amount: $500

Selection Process: The Central Arizona College Financial Aid Office will select and present application(s) to the Financial Aid Scholarship work group.. The committee 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: $500

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.

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

Scholarship Amount: $1,250.

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.

Duane Irvin Scholarship

Eligibility Requirements: Program of study in technology.

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: $500

Selection Process: Central Arizona College technology faculty will choose the recipient.

N.E. "Pete" & Josephine King Scholarship

Eligibility Requirements: Must be a health careers 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: $500

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).

Donovan Kramer Scholarship

Eligibility Requirements: Must be a communications 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: $500

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: $400 - $1,600.

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: To be determined by Lin Laursen.

Selection Process: To be determined by Lin Laursen.

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: To be determined by James Lee.

Selection Process: To be determined by James Lee.

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: $2500 annually.

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).

TEPI MADDOCK SCHOLARSHIP

Eligibility Requirements:
- Must be a female:
- Program of study in physical education, nursing or pre-med;
- Minimum cumulative GPA of 2.50;
- Financial need.

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: $500

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).

ROBERTA PHILLIPS 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: Four scholarships at $950 each.

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).

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: $1000 per semester.

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.

Scholarship Amount: $500

Selection Process: Central Arizona College Creative Arts faculty will choose the recipient.

JOE REFSNES 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.

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

Scholarship Amount: $650

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. No appointment necessary.

Scholarship Amount: $500

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: $800

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: $500

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 - Central Arizona College
- www.fafsa.gov - FAFSA on the Web.
- www.ed.gov - Department of Education
- www.finaid.org - The Financial Aid Information Page
- www.students.gov - Student gateway to the U.S. Government
- www.studentaid.ed.gov - Federal Student Aid for students
- 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.

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 qualify 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 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.

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 maybe 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 diploma fee per copy. 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 following fall semester or of any single catalog in effect during subsequent terms of continuous enrollment.
- Students transferring between Arizona public higher education institutions must meet the admission requirements, residency requirements, and all curricular and academic requirements of the degree-granting institution.

University Department Time Limit for Coursework

In areas of study in which the subject matter changes rapidly, material in courses taken long before graduation may become obsolete or irrelevant. Coursework that is more than eight years old is applicable to completion of degree requirements at the discretion of the student's major department at the university to which they transfer.

Departments may accept such coursework, reject it, or request that the student revalidate its substance. The eight-year limit on coursework applies except when program accreditation agencies limit the life of coursework to less than eight years.

Departments also may require students to satisfy current major requirements rather than major requirements in earlier catalogs when completing earlier requirements is no longer possible or educationally sound.

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

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 transfer 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 the 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 meeting the credit hours required of a full-time student and 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" must be completed in the Records and Registration Office if the course is being taken to improve a previous grade.

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:
A = 4 points, B = 3 points, C = 2 points, D = 1 point and F = 0 points
Note: W does not compute into GPA.

The Formula:

1: Number of Hours for Each Class		Number of Points for Each Class		Total by Class
_____	x	_____	=	_____
_____	x	_____	=	_____
_____	x	_____	=	_____
_____	x	_____	=	_____
_____	x	_____	=	_____

_____   _____   2.
Total Number   3. Total Points
of Hours

4:_____÷_____= _____
   (Total Points)   (Total Number   GPA
                        of Hours)

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.

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.

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 the 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 the 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 students 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 campuses at Signal Peak and Superstition Mountain 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 also will 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 *student central*, then select *students* at the bottom of the page. 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 Assistance (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.
- Must maintain Satisfactory Academic Progress. More information is available under the Financial Aid section.
- Students must be enrolled in at least six (6) credits to qualify.

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.

Child Development Centers

Child Development Centers at the Signal Peak and Superstition Mountain campuses offer child care services for children between the ages of three and five. Child care is available for children of students, staff and community members with the approval of the center's director. Children have opportunities for enrichment through a planned preschool curriculum under the direction of a certified teacher.

Food Services

The Signal Peak 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 bar, simply to go at Signal Peak and the snack bar at Aravaipa offer food service for students, staff and guests. For menus, hours and locations visit, www.centralazdining.com or call (520) 494-5256.

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.

Commuters, Faculty and Staff
SoGo Cash Card

SoGo Cash Cards may be pre-load with any amount depending on frequency of use. The SoGo Cash Card can be used at any food service location at both 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.

Catering

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

General Educational Development (GED) Classes

Central Arizona College offers GED (high school equivalency) courses. The classes include instruction in the five areas tested on the GED: language arts – reading, language arts – writing, mathematics, science and social studies.

GED classes are individualized as much as possible. The time it takes a student to prepare to take the test varies with the individual student and depends on such factors as regular student attendance and the skill level in the areas of reading, math and writing upon entry.

GED classes are held at various locations throughout the county.

GED Test
GED (the high school equivalency examination) tests are given at the college by an independent examiner appointed by the State Department of Education.

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

Requirements to take GED Test
If under the age of 18 but at least 16 years old, an examinee must:
- Have officially withdrawn from high school (a letter from the last attended school is required as verification of this status.);
- Have their parent's/guardian's notarized written permission to take the test if the examinee is not married;
- Present two forms of I.D., including one picture I.D.

If 18-years-old or older, an examinee must:
- Not be a high school or GED graduate;

- Not be currently enrolled in high school;
- Present two forms of I.D., including one picture I.D.

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 Basketball 1989, 1998, 2005, 2009
- Men's Cross Country 1988, 2002, 2003, 2005
- Women's Cross Country 2005, 2009
- Women's Rodeo 1978, 1979
- Softball 1984, 1985, 1988, 1989, 1990, 1991, 1992, 1995, 1997, 1999, 2003, 2005
- Men's Track & Field 1996, 2005, 2006, 2007
- Women's Track & Field 1998, 1999, 2006, 2007, 2008
- 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 Learning Support Department. The tutors work with students individually and or in small groups to address the various learning needs of students. In addition, the 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. Support Department via the Learning Centers also

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 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, wifi, 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 students.

Summer Bridge

The Summer Bridge program is an exciting and valuable week-long program designed to give you an edge in succeeding at CAC. The program takes place on the Signal Peak Campus and is for students who have just graduated from high school or earned a GED. 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 on qualifications or applying to either TRiO or Summer Bridge please call 520-494-5060, e-mail: TRiO@centralaz.edu or search CAC TRiO on Facebook and Twitter.

Residence Life

The Signal Peak Campus offers on-campus living and a learning environment with space for roughly 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 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 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
- Phi Beta Lambda
- 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) requires students to follow a code of conduct that emphasizes important values for both the classroom and the workplace. Learn more about the Student Code of Conduct in the Student Handbook portion of the College Catalog.

Student Concern or Complaint with a Specific Office

CAC promotes an open educational environment. The college encourages all students to first direct their complaints and concerns to the faculty, staff, or administrator specifically involved. If the situation can not be remedied at this level the student should contact the faculty, staff or administrator's immediate supervisor.

Student Grade or Course Instructor Concern

Students who have a question or concern regarding their grade(s) and or 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.

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 Learning Services, (520) 494-5406, at james.moore7@centralaz.edu.

Concern or Complaint regarding any Disability Accommodation (non-employee related)

If you have a complaint about Disability Resource Services or the accommodations you have received, please contact the Assistant Student Affairs Dean Office 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 Learning Services, (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 conduct includes, but is not limited to, stalking, and all forms of verbal, physical and/or racial harassment.

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, interfering with or 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: Permanent removal from College housing. 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.

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 re-admission 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.

- 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 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 re-schedule 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;
- Copies of all documents or notarized statements to be presented at the hearing; and,
- 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 may 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 – academic standing discipline process.

Note: Students removed from housing for violations of the Student Code of Conduct (including alcohol & drug violations) are not eligible for any refund of room and board payments and can be held financially responsible for the Terms of Occupancy and License Agreement. Behaviors or activities that threaten or endanger the individual or other residents, such as possession of weapons, use of drugs, verbal and/or physical assaults, will result in immediate dismissal from the residence halls.

Campus Police Department

Law Enforcement Authority
The Central Arizona College Police Department is a full service public law enforcement agency, established by the Pinal County Community College District Board of Governors, in and by the authority vested in them by the legislature of the State of Arizona, for the purpose of providing law enforcement, security and safety services on property owned or controlled by the College. All Campus Police Officers are fully certified as police officers by the Arizona Peace Officer Standards and Training Board.

The Department is located in the Everingham Student Center, Building I, on the Signal Peak Campus, and is staffed with a combination of police officers and other personnel. Together, they provide law enforcement, safety and security services that are individually tailored to meet the needs of each campus. Our law enforcement staff, who are referred to as Campus Police Officers, are armed and vested with full law enforcement powers, including the authority to make arrests. A Campus Police Officer is on duty at the Signal Peak Campus 24-hours a day, 7 days a week, 365 days a year.

Campus Security is used to provide safety and security protection at the Superstition Mountain Campus. These individuals are not empowered to make arrests; however, a close working relationship is maintained with the local law enforcement agencies in each area. The Aravaipa Campus, Casa Grande, Florence, San Tan, Maricopa, SaddleBrooke and Coolidge centers are patrolled by the local police agencies having jurisdictional control at each location.

Department Mission
The Central Arizona College Police Department is a duly established law enforcement agency responsible for providing law enforcement and security services to the campuses and centers of Central Arizona College. The mission is to safeguard the lives and property of the people we served within the campus communities, to reduce the incidence and fear of crime and to enhance public safety while working with the community to provide an atmosphere that is conducive to the pursuit of the College's primary function – education. In

carrying out the department's responsibilities, officers will do so with honor and integrity, while at all times conducting themselves with the highest ethical standards to maintain public confidence.

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/ANNUALSECUR ITYANDFIREREPORTOct2011.pdf or copies are available at the Central Arizona College police department.

DEGREES AND CERTIFICATES

Degree and Certificate Information

Central Arizona College (CAC) offers students a variety of one- and two-year programs to meet their diverse interests and goals, including degrees and certificates in over 100 fields of study. CAC offers four associate degrees which transfer 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.

CAC associate degrees require 60-64 semester credits and share four basic "blocks" in addition to CAC degree requirements, specifically: Arizona General Education Curriculum (AGEC), Common Courses, Special Requirements, and Electives. Students completing these degrees with a minimum cumulative grade point average 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 plus 45 credit baccalaureate degree program, up to 75 credits may be completed at CAC and directly transfer to the university program. Other special program agreements with partnering higher education institutions build up to 64 CAC credits into the baccalaureate degree program.

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 2.0 in all AGEC courses and a cumulative grade point average (CGPA) of 2.5; 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 undecided about their academic program should meet with an academic advisor for assistance in exploring career and life goals, selecting a program that fits their talents and interests, and planning a timeline to achieve their academic goals based on course offerings.

Grand Canyon Diploma

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 standards prescribed by an interstate compact on board examination systems and demonstrate passing grades on a set of required core courses as determined by the State Board of Education (SBE), including the arts, history and science, and economics.

Arizona District and Charter high schools choosing to offer the GCD in school years 2010-2013 may award the GCD 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, enroll in advanced preparation board examination programs at the high school, or return to a traditional high school academic program. The GCD is legislated by House Bill 2731. See HB 2731 at: http://www.azleg.gov/DocumentsForBill.asp?Bill_Number=HB2731.

Arizona's Getting AHEAD Project: Access to Higher Education and Degrees

Getting AHEAD aims to be a comprehensive and collaborative initiative by Arizona's universities, community colleges, K-12 sector, business community and legislative and executive branches of government to reshape Arizona's post-secondary education system and enable more residents to successfully obtain a college degree. See: http://gettingaheadaz.org/ .

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)**, the **Transfer Guides, Major Guides** and **Examination Equivalency Guide (EEG)** provide specific course transfer information, see: http://www.aztransfer.com.

To determine **Credit by Exam** equivalencies for Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate Diploma Programme (IB) and Dante's (DSST) exams, see the **Exam Equivalency Guide** (EEG) at https://aztransmac2.asu. edu/cgi-bin/WebObjects/ATASS.woa/wa/ExamEquivGuide. CAC Credit by Exam equivalencies for prior years are available on the Curriculum and Student Learning Assessment website under Curriculum Development: CurriculumTools: Test Scores. Contact an Academic Advisor for assistance.

Students can map their academic career using **U.Select** at: https://az.transfer.org/uselect/.

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, review the CAC Articulation Agreements in place to select and sign up for the best program based upon your future plans. Students are strongly encouraged to discuss Transfer Agreement Options with their academic advisor during their first year and to sign the agreement which typically includes the program's Course Sequencing Map. Contact a CAC academic advisor for assistance and to review other special transfer agreement options.

Arizona Shared Unique Numbering (SUN) System ◎ SUN#

Arizona students planning a community college to university transfer now have an easier way to locate and enroll in courses with direct equivalency.

The new Shared Unique Number (SUN) course numbering system clearly identifies courses that transfer, "apples to apples," among Arizona's public community colleges and three state universities. The SUN System launched January 2011 and includes 82 of the most commonly transferred courses statewide for its introductory year.

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 and immediate for students to find transferable courses.

SUN courses are a subset of the multitude of college courses that transfer among Arizona's colleges and universities. These courses and their equivalencies can be found in the searchable Course Equivalency Guide on AZTransfer.com. Because each student has a unique academic plan, students are encouraged to seek academic advising prior to enrollment.

For more information about SUN, including a list of SUN courses, visit azsunsystem.com.

Arizona General Education Curriculum (AGEC)

Each of the transfer associate degrees (A.A., A.Bus., A.S., and A.A.E.E.) include 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 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 2.0 in all AGEC courses and a minimum CGPA of 2.5; For assured admission to the universities, Associate degree completers with an embedded AGEC are required to earn a minimum CGPA of 2.0.

The AGEC provides clear and secure transfer pathways for community college students parallel to the pathways followed by students who begin 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.

AGEC completion fulfills lower division general education requirements at all Arizona public and tribal universities and colleges. In general, most bachelor's degrees can accommodate an AGEC; however, some majors are structured in such a way that students should complete the general education requirement at the university. Please see Major Guides under https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/wa/MajorGuideAZ to determine if the major you desire recommends an AGEC. Students completing the AGEC also must fulfill lower division program requirements and prerequisites within the college and major they intend to pursue upon transfer. Majors in specific professional fields have significant prerequisites that students must complete before admission to upper division coursework, such as architecture, business, engineering, fine/creative arts, or health professions and sciences.

Students undecided about their choice of Arizona public or tribal university or program of study should consult an academic advisor to explore educational options while they complete the AGEC.

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 . U.Select provides students with the opportunity to build and track their own customized academic program from the community college through university graduation. Contact an academic advisor for assistance. Log in to: https://www.transfer.org/uselect/. First time U.Select users must "create an account" following the instructions on the website.

Transfer Agreement Options

The **aztransfer.com** website offers transfer tips, course equivalency guides, major guides, examination equivalency guides and online tools. Advisors and faculty, also use the **apascaz.org** website for additional resources. Students, please consult a CAC academic advisor at: www.centralaz.edu//x1341.xml.

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 credit hour 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 can transfer their AAS degree as a 60 credit hour block toward fulfilling the requirements for the BAS degree. Students then complete 60 credit hours of specified courses at the university granting the BAS degree.

The 75-45 Credit Hour Model **
In this model, students may take an additional 15 credit hours of specified General Studies courses beyond the credit hours required for the AAS degree, for a total of 75 transferable hours. Students then complete an additional 45 credit hours of specified courses at the university granting the BAS 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. The five courses are selected from six (6) areas of study depending upon the nature of the AAS 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 (CAC 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 AAS degree aligns with program offerings at the university to which they plan to transfer.

* NAU's model is based on 64 credits for the AAS.
**There are AAS to BAS models with more than 75 credits which can be transferred. Consult a CAC academic advisor.

See Transfer Agreement options for AAS to BAS degree.

AAS to BAS (75 + 45 Credit Hour Model)

AAS Category	Math Computer Science	Natural Sciences	Humanities / Fine Arts	S / B Sciences	Literacy	Awareness	Total
HUM / FA	3	3	0	3	3	3	15
SB Sciences	3	3	3	0	3	3	15
Science / Health	3	0	3	3	3	3	15
Technology	3	3	3	3	3	0	15

Approved by APASC, April 29, 2011

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 course work 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 ASU degree programs.
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/committment .

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.

To Enroll in RN-BSN Pathway Program:
Contact CAC Nursing Advisor. Students should seek academic advisement each semester to ensure that they are staying on track and completing the appropriate course work.

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.

Frontier Nursing University

Following completion of a CAC Registered Nursing associates 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 masters 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 18months 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.

Scholarship Details: http://www.frontier.edu/financial-aid

Kaplan University

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 admissions 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 .

Northern Arizona University (NAU) CAC2NAU, AAS to BAS, 75+45 Programs, 90+30 Programs

CAC and NAU work together to help students earn a bachelor's degree. Students can be admitted to NAU while attending CAC and receive personalized services that will help them plan for an affordable and convenient route to a four year degree at NAU. See comparison at: extended.nau.edu/TuitionComparison.aspx .

CAC2NAU Benefits:
1. Focus on student success at CAC and at NAU
2. Information about how a CAC associate's degree leads to an NAU degree locally, online, or in Flagstaff
3. NAU application fee waived
4. Affordable four year degree
5. NAU e-mail address and ID card
6. Access to NAU online library services
7. Access to NAU student discounts and athletic events

CAC2NAU Eligibility Requirements:
1. Completed less than 30 transferable college credits
2. Has not previously earned a degree at NAU

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 transfer to NAU.

CAC2NAU Scholarships and Financial Aid:
With CAC2NAU, you can earn your associate's degree at Central Arizona College then seamlessly complete your bachelor's degree at NAU. NAU is prepared to support 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
NAU offers bachelor's degrees in 62 academic disciplines. 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 .

NAU Programs Available (check URL for most current list):

Northern Arizona University-Pinal County Degrees	Online	In Person	Blended*
*Blended degrees include a combination of in person and online classes.			
Administration (BAS)	✓		✓
Business Administration (BBA)	✓		✓
Career and Technical Education - Occupational Education (90-30) (BSEd)	✓		
Comparative Cultural Studies (BA)	✓		
Criminal Justice (BAS)	✓		
Criminology and Criminal Justice (BS)	✓		
Dental Hygiene - Degree Completion Program (BS)	✓		
Early Childhood Education (BAS)	✓		✓
Elementary Education (BSEd)		✓	
Health Sciences - Allied Health (BS)	✓		
Health Sciences - Diagnostic Medical Imaging and Therapy (BS)	✓		
Health Sciences - Medical Assisting (BS)	✓		
Health Sciences - Paramedic Care (BS)	✓		
Health Sciences - Physical Therapist Assisting (BS)	✓		
Health Sciences - Public Health (BS)	✓		
Health Sciences - Respiratory Care (BS)	✓		
Health Sciences - Surgical Technology (BS)	✓		
Hotel & Restaurant Management (BS)	✓		
Interdisciplinary Studies - Administration (BA)	✓		✓
Interdisciplinary Studies - Administration (BS)	✓		✓
Interdisciplinary Studies - Administration of Justice (90-30) (BA)	✓		✓
Interdisciplinary Studies - Administration of Justice (90-30) (BS)	✓		✓

Northern Arizona University-Pinal County Degrees	Online	In Person	Blended*
Interdisciplinary Studies - Arts & Letters (BA)	✓		
Interdisciplinary Studies - Arts & Letters (BS)	✓		
Interdisciplinary Studies - Criminal Justice (BA)	✓		
Interdisciplinary Studies - Criminal Justice (BS)	✓		
Interdisciplinary Studies - Emergency Services Administration (90-30) (BA)	✓		✓
Interdisciplinary Studies - Emergency Services Administration (90-30) (BS)	✓		✓
Interdisciplinary Studies - Humanities (90/30) (BA)	✓		
Interdisciplinary Studies - Humanities (90/30) (BS)	✓		
Interdisciplinary Studies - Public Agency Management (BA)	✓		✓
Interdisciplinary Studies - Public Agency Management (BS)	✓		✓
Interdisciplinary Studies - Public Management (90/30) (BA)	✓		✓
Interdisciplinary Studies - Public Management (90/30) (BS)	✓		✓
Interdisciplinary Studies - Speech-Language Sciences and Technology (BA)	✓		
Interdisciplinary Studies - Speech-Language Sciences and Technology (BS)	✓		
Interdisciplinary Studies - Technology Management (90-30) (BA)	✓		
Interdisciplinary Studies - Technology Management (90-30) (BS)	✓		
Interdisciplinary Studies - Technology Management (BA)	✓		
Interdisciplinary Studies - Technology Management (BS)	✓		
Logistics and Supply Chain Management (BAS)	✓		✓
Nursing (RN to BSN)	✓		
Parks and Recreation Management (BS)	✓		
Public Agency Management (BAS)	✓		✓
Special and Elementary Education (BSEd)		✓	
Technology Management (BAS)	✓		

Palmer College of Chiropractic

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 at CAC, 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

Prescott College's ranking in the 2012 edition of *Best Colleges in Regional Universities* (West), 69. Annual tuition and fees for the on-campus undergraduate program are $26,819 (2011-12) and $12,329 (2011-12) 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 cumulative GPA.

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

Prescott College Eligibility Requirements:
1. Earned CAC 2.0 cumulative GPA.
2. Complete Prescott College transfer process 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 be enrolled 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-residency-undergraduate/index.html . Contact the Prescott College Tucson Center Admissions Office 888.797.4680 or admissions@prescott.edu for individual guidance.

University of Arizona (UA)
Transfer Admission Programs (TAPs), AAS to BAS

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 of your 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, utilized

real-world situations and allows students to use practical knowledge and 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

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 and, through a combination of classroom and distance-learning formats, 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/ugonlineprograms.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. Contact your CAC academic advisor for information about this opportunity.

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.

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.

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

New Doctoral Student Option:
Full-time faculty or staff at CAC may qualify for a discounted tuition rate, 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 .

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)

The Associate of Arts (A.A.) Degree is appropriate for students who plan to transfer to the university to earn a baccalaureate degree in areas such as Administration of Justice, Advertising, Agri-Business, Agriculture, American Studies, Anthropology,

Art, Art History, Broadcasting, Communication, Creative Writing, Dramatic Theory, Early Childhood Education, Economics, English, Exercise Science, Fine Arts, Geography, History, Hotel/Restaurant Management, Interdisciplinary Arts/Performance, Interdisciplinary Studies, Journalism, Languages, Liberal Arts, Mathematics, Media Arts, Music, Philosophy, Physical Education, Political Science, Psychology, Public Programs, Public Relations, Recreation and Tourism, Religious Studies, Secondary Education, Social and Behavioral Sciences, Social Work, Sociology, and Theatre.

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 Credits)

The AGEC-Associate of Arts Degree satisfies requirements in many liberal arts programs and other programs that articulate with the A.A. Degree. AGEC-A requires a minimum of College Mathematics plus 32 credits from specific AGEC categories. Refer to the approved AGEC course list in CAC's catalog.

General Education

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

Oral Communications (3 Credits)
Select an AGEC Course.

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

Social and Behavioral Sciences (6-9 Credits)
Select AGEC courses from at least two 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
                MAT course

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.
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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

Requirements for A.A. Degree
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information Systems
                OR
AGB124   Microcomputers in Agriculture

Grade of "C" or better in each A.A. Degree required course
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A.

Other A.A. Degree Requirements
Some A.A. Degrees 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 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.

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.
The A.A. Degree requires 60-64 semester credits.

ASSOCIATE OF BUSINESS (A.BUS.) DEGREE (60-64 Credits)

The Associate of Business (A.Bus.) Degree is appropriate for 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 AGEC-Associate of Business satisfies requirements in many business programs and other programs that articulate with the A. Bus. Degree. AGEC-B requires a minimum of Brief Calculus plus 32 credits from specific AGEC categories. Refer to the approved AGEC course list in CAC's catalog.

General Education

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

Oral Communications (3 Credits)
Select an AGEC course.

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

Social and Behavioral Sciences (6-9 Credits)
Select AGEC courses from at least two 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 MAT course

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

Core Requirements (29 Credits)
ACC201   Financial Accounting (3)
ACC202   Managerial Accounting (3)
BUS201   Legal Environment of Business (3)
BUS208   Business Statistics (3)
ECN201   Principles of Macroeconomics (3)
ECN202   Principles of Microeconomics (3)
MAT215   Math for Business Analysis (4)

Select approved business electives which transfer as "Elective or better" to all three Arizona public universities to complete the required A.Bus. Degree credit requirement.

Recommended:
BUS100   Introduction to Business (3)
                    OR
BUS207   Business Communications (3)

Prerequisites do not count toward required credit hours.

Special Requirements (0-9 Credits)
1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry; select courses from the AGEC list to fulfill this requirement.
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender); select courses from the AGEC list to fulfill this requirement.
3. At least three semester credits of coursework emphasizing Global/International Awareness or Historical Awareness; select courses from the AGEC list to fulfill this 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 requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

Requirements for A.Bus. Degree
Reading Competency: RDG094 College Reading
Computer Competency (3):
CIS120 Survey of Computer Information Systems
(Fulfilled by AGEC-B requirement)

Grade of "C" or better in each A.Bus. Degree required course
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-B.

Other A.Bus. Degree Requirements
Some A.Bus. Degree majors require up to 16 credits of a Second Language to demonstrate proficiency. 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.

ASSOCIATE OF SCIENCE DEGREE
(A.S.)
(60 - 64 Credits)

The Associate of Science (A.S.) Degree is appropriate for 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 current year or 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 (35-38 Credits)

The AGEC-Associate of Science satisfies requirements in programs with rigorous mathematics and science courses. A minimum mathematics requirement of Analytical Geometry and Calculus I plus 32 credits from specific AGEC categories fulfill the AGEC-S.

General Education

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

Arts and Humanities (6 Credits)
Select one Arts (3) and one Humanities (3) AGEC course.

Social and Behavioral Sciences (6 Credits)
Select AGEC courses from at least two different disciplines.

Physical and Biological Sciences (8 Credits)

Life Science Majors:
CHM151   General Chemistry I (4) **AND**
CHM152   General Chemistry II (4)
                        OR
BIO181   General Biology I (4) **AND**
BIO182   General Biology II (4)

Physical Science Majors:
CHM151   General Chemistry I (4) **AND**
CHM152   General Chemistry II (4)
                        OR

PHY121   University Physics I: Mechanics (4) **AND**
PHY122   University Physics II: Electricity and
                        Magnetism (4)

Mathematics (3-4 Credits)
MAT221   Analytical Geometry and Calculus I (4) or
                        higher MAT course

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, Botany, Chemistry, Environmental Science, Geology, Physical Geography, Nutrition, Physics or Zoology.

Special Requirements (0-9 Credits)

1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry; select courses from the AGEC list to fulfill this requirement.
2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender); select courses from the AGEC list to fulfill this requirement.
3. At least three semester credits of coursework emphasizing Global/International Awareness or Historical Awareness; select courses from the AGEC list to fulfill this requirement.

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 requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

Requirements for A.S. Degree

Reading Competency: RDG094 College Reading
Computer Competency (3):
CIS120   Survey of Computer Information Systems
                        OR
AGB124   Microcomputers in Agriculture

Grade of "C" or better in each A.S. Degree required course
Minimum of 20 credits completed at CAC including 13 credits in the AGEC-S.

ASSOCIATE OF ARTS IN ELEMENTARY EDUCATION DEGREE (A.A.E.E.) (60 Credits)

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): 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.

Recommended Proficiencies
Reading and math scores or courses to demonstrate college level coursework in English and math are recommended.

AGEC-A (35-36 Credits)
The AGEC-Associate of Arts satisfies requirements in many liberal arts programs and other programs that articulate with the A.A. Degree. AGEC-A requires a minimum of College Mathematics plus 32 credits from specific AGEC categories.

General Education

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

Oral Communications (3 Credits)
Select an AGEC course.

Arts (6 Credits)
Select courses from two different AGEC-approved Arts disciplines.

Humanities (3 Credits)
Select an AGEC course.

Social and Behavioral Sciences (6 Credits)
HIS101   United States History I (3)
ECE276   Child Development (3)*

Biological/Life Lab Sciences (4)
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)

Physical Lab Sciences (4)
AST101   Survey of Astronomy (4)
CHM130   Fundamental Chemistry (4)
CHM151   General Chemistry I (4)
CHM152   General Chemistry II (4)
CHM230   Fundamental Organic Chemistry (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)
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)

Mathematics (3-4 Credits)
MAT141   College Mathematics (4) or higher MAT course

AGEC Special Requirements (3-9 Credits)

Intensive Writing/Critical Inquiry (3)

Cultural Awareness (Ethnic/Race/Gender) (3)
EDU230   Cultural Values in Education (3)
(Also fulfills Core Requirement)

Global/International/Historical Awareness (3)
HIS101   United States History I (3)
(Also fulfills AGEC Soc/Behavioral Sciences Requirement)

Core Requirements (18 Credits)
EDU221   Introduction to Education (3)
EDU222   Introduction to Special Education (3)
EDU230   Cultural Values in Education (3)
EDU240   Provisional Structured English Immersion (3)
MAT201   Math for Elementary Teachers I (3)
MAT202   Math for Elementary Teachers II (3)

Specialty Requirements (6 Credits)

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)
LIT291   Children's Literature for Educators (3)

OR

Early Childhood K-3 Teaching majors select two of the following courses:
ECE176   Early Childhood Development and Theories (3)
ECE271   Creating Early Childhood Environments (3)
LIT291   Children's Literature for Educators (3)

OR

Special Education majors select two of the following courses:
EDU225   Relationships in the Classroom (3)
EDU228   Behavior Management (3)
LIT291   Children's Literature for Educators (3)
*Highly Recommended

Requirements for A.A.E.E. Degree

Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture

OR

CIS120   Survey of Computer Information Systems

Additional transferable electives to achieve a minimum of 60 credit hours for the Degree

Grade of "C" or better in each A.A.E.E. Degree required course Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A.

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.

ARIZONA GENERAL EDUCATION CURRICULUM (AGEC) Course List

Completion of the AGEC will fulfill 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 35-38 transferable credits.

Students are encouraged to meet with an advisor to select courses to meet the AGEC requirements that will also fulfill program requirements in the college and major they intend to pursue upon transfer.

AGEC (35-38 Credits)

General Education
When fulfilling the AGEC requirements, students may count only one course in each of these categories without duplication: Arts, Humanities, Written Communications, Oral Communications, Social Behavioral Sciences, Physical & Biological Sciences, and Mathematics.

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)

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   Art History II (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)
HNR204   Honors Colloquium I (3)
HNR205   Honors Colloquium II (3)
HNR255   Leadership Development (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)
ECN200   Contemporary Economic Issues (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)
POS101   American Politics (3)
POS104   Contemporary Issues in World Politics (3)
PSY101   Introduction to Psychology (3)
PSY200   Social Psychology (3)
PSY203   Developmental Psychology (3)
PSY205   Personality and Social Adjustment (3)
REC101   Recreation, Leisure, and the Quality of Life
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)

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 page 58 for the AGEC-S requirements.

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)
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)
CHM230   Fundamental Organic Chemistry (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 I: Mechanics (4)

PHY122   University Physics II: Electricity and Magnetism (4)

Mathematics (3 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 57 for AGEC-B requirements and page 58 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)

Special 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 requirements in special requirements categories. A course may not be used to satisfy more than one special requirements category.

Intensive Writing/Critical Inquiry

AGS122   Natural Resources and Conservation (3)
AJS225   Criminology (3)
ENG203   Advanced Composition (3)
HIS208   Eastern Civilization – 1850 to Modern Times
HNR204   Honors Colloquium I (3) **AND**
HNR205   Honors Colloquium II (3)
             (Note: Must complete HNR204 and HNR205)
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)
LIT256   Science Fiction Literature and Film (3)
LIT291   Children's Literature for Educators (3)
PHI105   Introduction to Ethics (3)
PSY203   Developmental Psychology (3)
PSY205   Personality and Social Adjustment (3)
SOC200   Racial and Ethnic Minorities (3)

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 and 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)
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)
SLG202   American Sign Language (4)
SOC200   Racial and Ethnic Minorities (3)
SOC212   Gender in Society (3)

HIS104   History of Western Civilization II (3)
HIS105   Arizona History (3)
HIS106   Mexican-American History (3)
HIS201   Women in U.S. History (3)
MHL100   Music Appreciation (3)
MHL207   Survey of Jazz/Popular Music (3)

Global/International and Historical Awareness (3 Credits)

Global/International Awareness

AGS122   Natural Resources and Conservation (3)
ASB102   Cultural Anthropology (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 1(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 and Historical Geography (3)
HIS101   U.S. History I (3)
HIS102   U.S. History II (3)
HIS103   History of Western Civilization I (3)

AGEC Course Designations 2012-2013-A † See Code on p. 56

Course #	Credits	Course Title	CM	MA	AH	SB	PBS	IW	CU	GI	HI
					Core Areas			Awareness Areas			
AGS101	4	World of Plants					BS				
AGS104	4	Agricultural Environmental Science					BS				
AGS106	4	Entomology					BS				
AGS122	3	Natural Resources and Conservation				SB		IW		GI	
AGS221	4	Soil Science					BS				
AGS240	4	Plant Biology					BS				
AJS101	3	Introduction to Administration of Justice				SB					
AJS123	3	Ethics and the Administration of Justice			HU	SB					
AJS225	3	Criminology				SB		IW			
AJS270	3	Community Relations				SB					
ARH200	3	Principles of Archaeology				SB					
ART100	3	Art Appreciation			AR						
ART101	3	Two-Dimensional Design			AR						
ART102	3	Three-Dimensional Design			AR						
ART103	3	Beginning Jewelry and Metalwork			AR						
ART105	3	Ceramics I			AR						
ART207	3	Art History I			AH				CU		HI
ART208	3	Art History II			AH				CU		HI
ASB101	3	Physical Anthropology				SB					
ASB102	3	Cultural Anthropology				SB			CU	GI	
ASB201	3	Indians of the Southwest				SB			CU		HI
AST101	4	Survey of Astronomy					PS				
BIO100	4	Biology Concepts					BS				
BIO156	4	Human Biology for Allied Health					BS				
BIO160	4	Introduction to Human Anatomy- Physiology					BS				
BIO181	4	General Biology I					BS				
BIO182	4	General Biology II					BS				
BIO201	4	Human Anatomy-Physiology I					BS				
BIO202	4	Human Anatomy-Physiology II					BS				
BIO205	4	Microbiology					BS				
BUS 190	3	Principles of Management and Leadership				SB					
CHM130	4	Fundamental Chemistry					PS				
CHM151	4	General Chemistry I					PS				
CHM152	4	General Chemistry II					PS				
CHM230	4	Fundamental Organic Chemistry					PS				
CHM235	4	General Organic Chemistry I					PS				
CHM236	4	General Organic Chemistry II					PS				

AGEC Course Designations 2012-2013-B

Course #	Credits	Course Title	CM	MA	AH	SB	PBS	IW	CU	GI	HI
						Core Areas			**Awareness Areas**		
COM100	3	Fundamentals of Human Communication	OR								
COM101	3	Interpersonal Communication	OR			SB					
COM202	3	Introduction to Group Communication	OR								
COM206	3	Public Speaking	OR								
COM263	3	Intercultural Communication	OR			SB			CU		
ECE276	3	Child Development				SB					
ECN200	3	Contemporary Economic Issues				SB					
ECN201	3	Principles of Macroeconomics				SB					
ECN202	3	Principles of Microeconomics				SB					
EDU221	3	Introduction to Education				SB					
EDU222	3	Introduction to Special Education				SB					
EDU230	3	Cultural Values in Education							CU		
EIT100	3	History of Rock n' Roll			AH						
ENG101	3	English Composition III	WR								
ENG102	3	English Composition IV	WR								
ENG203	3	Advanced Composition						IW			
ENG205	3	Intro to the Study of Language			HU				CU		
ENV101	4	Environmental Science					PS				
FRE201	4	Intermediate French I								GI	
FRE202	4	Intermediate French II								GI	
GEO101	3	Intro to Cultural and Historical Geography				SB			CU		HI
GLG101	4	Physical Geology					PS				
GLG102	4	Historical Geology					PS				
GLG110	4	Environmental Geology					PS				
HIS101	3	U.S. History I			HU	SB					HI
HIS102	3	U.S. History II			HU	SB					HI
HIS103	3	History of Western Civilization I			HU					GI	HI
HIS104	3	History of Western Civilization II			HU					GI	HI
HIS105	3	Arizona History				SB			CU		HI
HIS106	3	Mexican-American History				SB			CU		HI
HIS107	3	African-American History				SB			CU	GI	
HIS108	3	Eastern Civilization-Beginnings to 1850			HU				CU	GI	
HIS201	3	Women in United States History			HU				CU		HI
HIS208	3	Eastern Civilization-1850 to Modern Times (3)			HU			IW		GI	

AGEC Course Designations 2012-2013-C

Course #	Credits	Course Title	CM	MA	AH	SB	PBS	IW	CU	GI	HI
					Core Areas			**Awareness Areas**			
HNR204	3	Honors Colloquium I			HU						
HNR205	3	Honors Colloquium II			HU						
HNR204 + HNR205	3 + 3	Honors Colloquium. I & II *			HU			IW			
HNR 255	3	Leadership Development			HU						
LIT101	3	Introduction to Literature			HU				CU		
LIT201	3	American Literature I			HU			IW	CU		
LIT202	3	American Literature II			AH			IW	CU		
LIT203	3	English Literature I			HU			IW			
LIT204	3	English Literature II			HU			IW			
LIT206	3	World Literatures			HU				CU	GI	
LIT233	3	American Ethnic Literature			HU			IW	CU		
LIT254A	3	Literature and Film			HU			IW			
LIT256	3	Science Fiction Literature and Film			HU			IW			
LIT291	3	Children's Literature for Educators			HU			IW	CU		
MAT141	4	College Mathematics, Standard		MA							
MAT151	4	College Algebra Standard		MA							
MAT162	3	Applied Statistics		MA							
MAT182	4	Trigonometry with Algebra Review		MA							
MAT187	5	Pre-Calculus		MA							
MAT201	3	Math for Elementary Teachers I		MA							
MAT202	3	Math for Elementary Teachers II		MA							
MAT211	4	Brief Calculus, Standard		MA							
MAT212	3	Brief Calculus, Accelerated		MA							
MAT215	4	Math for Business Analysis		MA							
MAT221	4	Analytical Geometry and Calculus I		MA							
MAT231	4	Calculus with Analytic Geometry II		MA							
MAT241	4	Analytical Geometry and Calculus II		MA							
MAT262	3	Ordinary Differential Equations		MA							
MHL100	3	Music Appreciation			AR						HI
MHL207	3	Survey of Jazz/Popular Music			AR				CU		HI
MSC101	3	Media and Society **				SB					
NTR141	3	Nutrition and Wellness					BS				
PEH 101	3	Personal Health				SB					

AGEC Course Designations Grid 2012-2013-D

Course #	Credits	Course Title	CM	MA	AH	SB	PBS	IW	CU	GI	HI
								Core Areas		Awareness Areas	
PHI101	3	Introduction to Philosophy			HU						
PHI105	3	Introduction to Ethics			HU			IW			
PHI112	3	World Religions			HU					GI	
PHY100	4	Physical Universe					PS				
PHY111	4	College Physics I					PS				
PHY112	4	College Physics II					PS				
PHY121	4	University Physics I: Mechanics					PS				
PHY122	4	University Physics II: Electricity/Magnet Magnetism					PS				
POS101	3	American Politics				SB					
POS104	3	Contemporary Issues in World Politics				SB				GI	
PSY101	3	Introduction to Psychology				SB					
PSY200	3	Social Psychology				SB					
PSY203	3	Developmental Psychology				SB		IW			
PSY205	3	Personality and Social Adjustment				SB		IW			
REC101	3	Recreation, Leisure, and the Quality of Life				SB					
SLG202	4	American Sign Language IV							CU		
SOC100	3	Introduction to Sociology				SB					
SOC102	3	Contemporary Issues in Society				SB					
SOC200	3	Racial and Ethnic Minorities				SB		IW	CU		
SOC203	3	Marriage and the Family				SB					
SOC212	3	Gender in Society				SB			CU		
SOC250	3	Family Violence				SB					
SPA201	4	Intermediate Spanish I								GI	
SPA202	4	Intermediate Spanish II								GI	
THE100	3	Theater Appreciation			AR					GI	
THE115	3	Introduction to Cinema			AR						
THE116	3	Contemporary Cinema			AR						

†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 + HNR 205 earned grade of C
   or better fulfills the Intensive Writing
   ACEC requirement
** Note Name Change for Course

Other Degree Information for Central Arizona College

CAC offers two applied associate degrees which prepare students to directly enter the workforce. Some students may choose to continue their education and pursue a four-year baccalaureate degree. For those students who are strongly considering a four-year degree as an academic goal, an **AGEC Certificate** is available or students may select the AGEC-A, AGEC-B or AGEC-S to coincide with their desired future major or program of study. As soon as those students select their target four-year university/college, they should consult an academic advisor, go to **Transfer Guides** at: http://www.aztransfer.com/TransferGuides , and use **U.Select** to build and track their customized academic program at: https://www.transfer.org/uselect/.

ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.)
(64+ Credits)

The Associate of Applied Science (A.A.S.) Degree is appropriate for students who plan to directly enter the workforce of their chosen degree. Some state universities permit students with an A.A.S. Degree to transfer most or all of their credits to a university. Students may also choose to pursue a Bachelor of Applied Science (B.A.S.) Degree.

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 (CCM) Archives** and select the current year or the year you completed the course(s): http://www.aztransfer.com/MatrixArchives.

General Education (19 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.

Written Communications (3 Credits)
ENG101   English Composition III (3)
OR
ENG121   Applied Technical Writing (3)

Oral Communications (3 Credits)
Select an AGEC course.

For the following two categories: 1) Arts and Humanities and 2) Social and Behavioral Sciences, the required courses must represent two different departmental areas from each category. For example, a student may not take a History course from the AGEC list for their Arts and Humanities requirement if they are using another History course to complete their Social and Behavioral Sciences requirement.

Arts and Humanities (3 Credits)
CAC highly recommends students select courses numbered 100 or above in the following areas: Art, Literature, Music, Philosophy, and Theatre. Students may also choose any course from the Arts or Humanities AGEC lists, especially those areas which suit the student's major or minor areas of study.

Social and Behavioral Sciences (3 Credits)
CAC highly recommends students select courses numbered 100 or above in the following areas: Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology. Students may also choose any course from the Social and Behavioral Sciences AGEC list, especially those areas which suit the student's major or minor areas of study.

Physical and Biological Sciences (4 Credits)
Select courses numbered 100 or above from biological or physical science, or any course from the Physical and Biological Sciences AGEC list, especially those areas which suit the student's major or minor areas of study.

Mathematics (3 Credits)
Select a college-level Mathematics course numbered 101 or higher   **OR**
BUS101   Business Mathematics (3)

Major Courses (41+ Credits)
The number of credits required depends on the chosen major. See the specific A.A.S. Degree programs in CAC's catalog.

Requirements for A.A.S. Degree
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher CIS
        course
        OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ASSOCIATE OF GENERAL STUDIES DEGREE (A.G.S.)
(64+ Credits)

The Associate of General Studies (A.G.S.) Degree is appropriate for students who desire flexibility to select courses to build a degree and who do not plan to transfer. However, choosing the A.G.S. degree and fulfilling the Arizona General Education Curriculum (AGEC) requirements provides the opportunity for students to attend an Arizona public university and to transfer the 35 credit AGEC.

All students should consult an 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 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 current year or the year you completed the course(s): http://aztransfer.com/MatrixArchives.

Upon completion of the AGS degree with an AGEC, students must complete both the AGS degree completion form and the AGEC Certificate form. General Education (24-28 Credits) Note: The AGEC requires 35-37 credits.

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 an AGEC course.

Arts and Humanities (6 Credits)
Select courses numbered 100 or above from the following areas: Art, Literature, Music, Philosophy and Theatre. Students may also choose any course(s) from the Arts or Humanities AGEC lists, especially those areas which suit the student's major or minor areas of study. One Arts (3) and one Humanities (3) course is required.

Social and Behavioral Sciences (6 Credits)
Select AGEC courses, especially those areas which suit the student's major or minor areas of study. Select courses from two different disciplines.

Physical and Biological Sciences (8 Credits)
Select AGEC courses, especially those areas which suit the student's major or minor areas of study.

Mathematics (3-4 Credits)
MAT101   Essential Mathematics (4) or higher MAT course
             OR
BUS101   Business Mathematics (3)

Electives (30-31 Credits)
Select college-level courses numbered 100 or above to meet 64 credit minimum requirement. Students electing to earn the AGEC-A to prepare for transfer to a four-year institution are strongly encouraged to complete additional coursework in the following areas: English and Mathematics.

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)
             OR
CIS110   Fundamentals of Computer Literacy (3) or higher CIS course
             OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC
Complete a minimum of 64 credits to earn the AGS Degree

Students choosing to complete the AGEC must apply for the AGEC Certificate for the credential to be stamped on their transcript. See an advisor for details.

CERTIFICATES

Certificate programs prepare students for entry-level employment opportunities; some certificates offer advanced training or build foundations for future completion of an A.A.S. or A.G.S. Degree. Full-time students can complete most Certificate programs in one or two semesters.

Students selecting a Certificate program must complete a minimum of one-third of the required Certificate credits at CAC and earn a cumulative grade point average of 2.0 on a 4.0 scale.

GENERAL EDUCATION OUTCOMES
for Central Arizona College
CAC College Policy 402
adopted on November 18, 1997 and
revised June 15, 2010.

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.

The Governing Board expects any student graduating with an Associate Degree and/or AGEC completers to gain academic preparation with knowledge, skills, and attitudes for continuous learning in the 21st Century and beyond, in the following areas:

1. **Communication**
   The student has reading, writing, speaking and listening skills to function effectively, and to receive and generate information.

2. **Critical Thinking and Analytical Reasoning**
   The student has decision-making skills through application of critical thinking and analytical reasoning to effectively define and analyze issues, develop and evaluate solutions, and justify decisions.

3. **Cultural and Artistic Heritage**
   The student understands and values the ongoing influence of diverse cultural and artistic heritages in our global society.

4. **Mathematical/Scientific Inquiry and Analysis**
   The student applies the concepts, methods, and principles of mathematics and the sciences.

5. **Individual and Social Responsibility**
   The student demonstrates the ability to take responsibility for his/her physical and mental well-being, resolve interpersonal differences, work effectively with others, and to adapt to changes in the workforce. The student will:
   - Cultivate personal integrity.
   - Value the perspectives of others.
   - Contribute to a larger community.

6. **Informational/Technological Literacy**
   The student has technological knowledge and demonstrates proficiency in applying emerging technologies and understands the influence and effects of technology on society and the impact on our environment. The student uses technology to evaluate, synthesize, and produce information.

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 General Education Outcome statements are the basis for student performance criteria used to evaluate the level of student achievement.

See CAC Institutional GEO Rubric including the GEO Standards at:
http://www.centralaz.edu/Home/About_Central/Curriculum_Development/Student_Learning_Assessment_Tools_and_Forms.htm

PROGRAMS OF STUDY

Geology and Planetary Science
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Coding and Reimbursement (Certificate) 120
Health Information Technology (A.A.S.) 121
Massage Therapy (A.A.S.) 122
Massage Therapy (Certificate) 123
Medical Assistant (A.A.S.) 123
Medical Assistant (Certificate) 124
Pharmacy Technician (Certificate) 125

Manufacturing
Manufacturing Electronics (Certificate) 126
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Nanofabrication Technology (A.A.S.) 128

Nutrition and Dietetics
Community Nutrition Worker (Certificate) 129
Diabetes Care and Education (Certificate) 130
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Dietetic Technician (A.A.S.) 131
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Biofuels Technician (Certificate) 132
Renewable Energy Technology (A.A.S) 132
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Sports and Fitness
Athletic Studies (A.A.)134
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Group Fitness Instructor (Certificate) 138
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Personal Trainer (Certificate) 139
Recreation and Tourism Management (A.A.) 140
Recreation Management (Certificate) 141
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Technology
Computer Aided Design (Certificate) 143
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The following degrees and certificates also are offered at Central Arizona College; however, they have special requirements which must be fulfilled before enrollment. Please see the individual listing for specific information.

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Heavy Equipment Mechanic's Apprenticeship
	Program 147
John Deere Construction and Forestry Equipment
	Technology (A.A.S.) 147
John Deere TECH (A.A.S.) 148
Operator's Apprenticeship Program – Associated General
	Contractors (Certificate) 149

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Diagnostic Medical Sonography (Certificate) 151
Nursing (A.A.S.) 152
Practical Nursing (Certificate) 153
Radiologic Technology (A.A.S.) 153

Law Enforcement
Central Arizona Regional Law Officer's Training
	Academy - CARLOTA (Certificate)
See AJS Certificate under Administration of Justice 73

Also see Advanced Corrections Certificate and
Corrections A.A.S. Degree under Corrections 145

ACCOUNTING

ACCOUNTING A.A.S.

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)

Written Communications (3)
ENG101 English Composition III (3)

Oral Communications (3)
Select an AGEC course.

Arts and Humanities (3)
Select from courses numbered 100 or above from the following areas: art, literature, music, philosophy, theater, or world religions.

Social and Behavioral Sciences (3)
ECN200   Contemporary Economic Issues (3)
ECN201   Principles of Macroeconomics (3)
ECN202   Principles of Microeconomics (3)

Physical and Biological Sciences (4)
Select an AGEC course.

Mathematics (3)
BUS101   Business Mathematics (3)

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)
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 (1)

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3): *(Fulfilled by CIS120 in Core Requirements)*

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ACCOUNTING CERTIFICATE

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

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

ADMINISTRATION OF JUSTICE

ADMINISTRATION OF JUSTICE STUDIES A.A.

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 AGEC-A (35)

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 an AGEC Art course.
AJS123   Ethics and the Administration of Justice (3)
                (Also fulfills Core Requirement)

Social and Behavioral Sciences (9)
SOC100   Introduction to Sociology (3)
PSY101   Introduction to Psychology (3)
AJS101   Introduction to Administration of Justice (3)
                (Also fulfills Core Requirement)

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

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

AGEC Special 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 emphasizing 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 these three categories. A course may not be used to satisfy more than one special requirements category.

Core Requirements (18)

AJS101	Introduction to Administration of Justice (3) *(Also fulfills Social and Behavioral Sciences requirement)*	
AJS123	Ethics and the Administration of Justice (3) *(Also fulfills Humanities requirement)*	
AJS209	Substantive Criminal Law (3)	
AJS225	Criminology (3) *(Also fulfills Intensive Writing requirement)*	
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

Computer Competency (3):
AGB124   Microcomputer in Agriculture
                        OR
CIS120   Survey of Computer Information Systems

Grade of "C" or better in each required course
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A

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.

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.

The A.A. Degree requires 60-64 semester credits.

ADMINISTRATION OF JUSTICE
A.A.S.

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)
ENG101   English Composition III (3)
ENG102   English Composition IV (3)

Oral Communications (3)
Select an AGEC course.

Arts and Humanities (3)
AJS123   Ethics and the Administration of Justice (3)
          (Also fulfills Core Requirement)

Social Behavioral Sciences (6)
SOC100   Introduction to Sociology (3)
PSY101   Introduction to Psychology (3)

Physical and Biological Sciences (4)
Select an AGEC course with a laboratory component.

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT
          course
             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
CIS110   Fundamentals of Computer Literacy or higher
          CIS course
             OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ADMINISTRATION OF JUSTICE CERTIFICATE

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)
AJS101	Introduction to Administration of Justice (3)	
AJS122	Traffic Control (3)	
AJS124	Defensive Tactics (3)	
AJS130	Firearms (3)	
AJS140	Communications in Law Enforcement (3.5)	
AJS209	Substantive Criminal Law (3)	
AJS230	The Police Function (3)	
AJS270	Community Relations (3)	
AJS275	Criminal Investigations (3)	
EMS123	First Responder (3)	
PAC104	Police Officer Physical Training (3)	

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

AGRICULTURE

AGRICULTURE A.A.

Total Credits: 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)

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 (3) and one Humanities (3) 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.

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

AGEC Special Requirements (3-9)
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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

Core Requirements (10)
AGB124   Microcomputers in Agriculture (3)
AGS240   Plant Biology (4)
ANS101   Animal Industry (3)

Electives (19)
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
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
                 (Fulfilled in Core Requirements)

Grade of "C" or better in each A.A. Degree required course
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A

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.

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.

This A.A. Degree requires 64 semester credits.

AGRICULTURE A.S.

Total Credits: 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 (35-38)

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

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) **AND**
CHM152   General Chemistry II (4)
                  OR
BIO181   General Biology I (4) **AND**
BIO182   General Biology II (4)

Physical Science Majors:
CHM151   General Chemistry I (4) **AND**
CHM152   General Chemistry II (4)
                  OR
PHY121   University Physics I: Mechanics (4) **AND**
PHY122   University Physics II: Electricity and
                  Magnetism (4)

Mathematics (3)
MAT221   Analytical Geometry and Calculus I (4) or
                  higher MAT course

Subject Options (6-8)
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, Botany, Chemistry, Environmental Science, Nutrition, or Zoology.

AGEC 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.
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 three categories. A course may not be used to satisfy more than one special requirements category.

Core Requirements (10)
AGB124   Microcomputers in Agriculture (3)
AGS240   Plant Biology (4)
ANS101   Animal Industry (3)

Agriculture Electives (16-19)
Select elective credits that transfer to the chosen university to meet 64 credit Degree requirement. Consult the Course Equivalency Guide to determine course equivalency at 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)
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
Reading Competency: RDG094 College Reading

Computer Competency:
AGB124   Microcomputers in Agriculture
                (Fulfilled in Core Requirements)

Grade of "C" or better in each required course
Minimum of 20 credits completed at CAC including 13
credits in the AGEC-S.

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)
                    OR
AGB123   Agriculture Accounting (3)

BUS101   Business Mathematics (3)
                    OR
MAT101   Essential Mathematics (4) or higher MAT
                course

Select one of the following courses (3):
ENG101   English Composition III (3)
ENG121   Applied Technical Writing (3)

Select one of the following courses (3):
COM100   Fundamentals of Human Communication (3)
COM206   Public Speaking (3)

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

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)

Written Communications (3)
ENG101   English Composition III (3)
ENG121   Applied Technical Writing (3)

For the following three categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)
Select AGEC courses with a laboratory component.

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course
OR
BUS101   Business Mathematics (3)

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 (1)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputer in Agriculture
(Fulfilled in Core Requirements)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

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. Prepares students for entry-level careers in agri-science and agri-business.

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)
                OR

Select courses from Agriculture, Technology, Business, Math or Science with Agriculture Department approval.

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

ANIMAL SCIENCE

EQUINE MANAGEMENT AND TRAINING A.A.S.

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)

For the following three categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)
AGS221   Soil Science (4)
NTR141   Nutrition and Wellness (4)

Mathematics (3)
BUS101   Business Mathematics (3)
          OR
MAT101   Essential Mathematics (4) or higher MAT
         course

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 General Education 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
CIS110   Fundamentals of Computer Literacy or higher
       CIS course
          OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

EQUINE MANAGEMENT AND TRAINING CERTIFICATE

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

Cumulative grade point average of at least a 2.0 on a 4.0 scale Minimum of one-third required Certificate credits earned at CAC

BUSINESS

BUSINESS A.A.S.

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)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)
                    OR
COM206   Public Speaking (3)

Arts and Humanities (3)
Select one AGEC course.

Social and Behavioral Sciences (3)
ECN200   Contemporary Economic Issues (3)
ECN201   Principles of Macroeconomics (3)
ECN202   Principles of Microeconomics (3)

Physical and Biological Sciences (4)
Select from the AGEC course list.

Mathematics (3)
BUS101   Business Mathematics (3)

Core Requirements (30)
ACC121   Income Tax Fundamentals (3)
ACC201   Financial Accounting (3)*
ACC202   Managerial Accounting (3)
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
  completing 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 (1)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information
                (Fulfilled in Core Requirements)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

BUSINESS CERTIFICATE

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
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

MANAGEMENT CERTIFICATE

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.

Recommended Proficiencies
RDG094   College Reading

Core Requirements (30)
BUS101   Business Mathematics (3)
BUS123   Business Relations (3)
BUS180   Introduction to Marketing (3)
BUS190   Principles of Management and Leadership (3)

ACC100   Fundamentals of Accounting (3)
          OR
ACC201   Financial Accounting (3)

BUS100   Introduction to Business (3)
          OR
BUS122   Small Business Management (3)

BUS201   Legal Environment of Business (3)
          OR
HRM208   Hospitality Law (3)

Select three of the following courses (9):
BUS207   Business Communications (3)
ECN200   Contemporary Economic Issues (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
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

HOTEL AND RESTAURANT MANAGEMENT A.A.S.

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)

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

Oral Communications (3)
COM263   Intercultural Communication (3)

Arts (3)
ART208   Art History II (3)
MHL100   Music Appreciation (3)
THE100   Theater Appreciation (3)

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)

Social and Behavioral Sciences (9)
ECN201   Principles of Macroeconomics (3)
ECN202   Principles of Microeconomics (3)

Select one from 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)

Mathematics (3)
MAT141   College Mathematics, Standard (4) or higher
          MAT course

AGEC Special 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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

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)
HRM106   Supervision in the HospitalityIndustry (3)
HRM208   Hospitality Law (3)

ACC100   Fundamentals of Accounting (3)
                    OR
ACC201   Financial Accounting (3)

CUL130   Culinary Principles & Applications I (3)
                    OR
CUL160   Baking and Pastry I (3)

HRM100   Introduction to Hospitality (3)
                    OR
REC101   Recreation, Leisure, and the Quality of Life
          (3)

Select one of the following courses:
CUL105   Food Safety Foundations (1)
NTR105   ServSafe Certification (1)
CUL205   HACCP Principles (1)

Other Requirements (1)
PAC or DAN Course (1) *(Recommended: PAC101A)*
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information Systems
            (Fulfilled in Core Requirements)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A.

HOTEL AND RESTAURANT MANAGEMENT CERTIFICATE

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 ServiceOperations (3)

CUL majors take CUL courses:
Select one of the following (1):
CUL105   Food Safety Foundations (1)
NTR105   ServSafe Certification (1)
CUL205   HACCP Principles (1)

CUL170   Dining and Beverage Operations(2)

CUL130   Culinary Principles andApplications I (3)
                        OR
CUL160   Baking and Pastry I (3)

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

CHEMISTRY

CHEMISTRY A.S.

Total Credits: 60

The A.S. Degree in Chemistry 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 (37-38)

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

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)
CHM151   General Chemistry I (4)
CHM152   General Chemistry II (4)

Mathematics (3)
MAT221   Analytical Geometry and Calculus I (4) or higher MAT course

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.
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 three categories. A course may not be used to satisfy more than one special 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)

Subject Options (3-8)
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)

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 to meet 60 credit degree requirement.

Other Requirements (3)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher
                    OR
CIS Computer Competency course

Grade of "C" or better in each required course
Minimum of 20 credits completed at CAC including 13 credits in the AGEC-S.

COMPUTER

APPLICATION DEVELOPMENT AND WEB DESIGN CERTIFICATE

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)

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
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

COMPUTER APPLICATIONS FOR BUSINESS USERS CERTIFICATE

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

Corequisite
SKL116   Employment Readiness Program Part II

Recommended Proficiencies
MAT082   Basic Arithmetic (3)
RDG094   College Reading (3)

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
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

COMPUTER PROGRAMMING A.A.S.

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 (22)

For the following three categories, select AGEC courses.

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)
ECN201   Principles of Macroeconomics (3)
ECN202   Principles of Microeconomics (3)

Physical and Biological Sciences (4)
Select AGEC courses with a laboratory component.

Mathematics (6)
Select one of the following:
BUS101   Business Mathematics (3)
                    AND
MAT121   Intermediate Algebra, Standard (4) or higher
                MAT course

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 (1)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information Systems (3)
                (Fulfilled by CIS120 in the Core Requirements)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

COMPUTER PROGRAMMING CERTIFICATE

Signal Peak Campus
Superstition Mountain Campus

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

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

MICROCOMPUTER BUSINESS APPLICATION A.A.S.

Total Credits: 66

The Microcomputer Business Application 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)

For the following five categories, select AGEC courses:
Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)
BUS101   Business Mathematics (3)

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)
CBA133A   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)

Select college-level Electives numbered 100 or higher to meet 66-credit requirement.

Other Requirements (1)
PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information Systems (3)
   (*Fulfilled by CIS120 in the Core Requirements*)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

MICROCOMPUTER BUSINESS APPLICATIONS SPECIALIST CERTIFICATE

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
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

NETWORK ADMINISTRATION CERTIFICATE

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

Core Requirements (27)
CIS120   Survey of Computer Information Systems (3)
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
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

CREATIVE ARTS

ENTERTAINMENT INDUSTRY TECHNOLOGY - ARTIST AND VENUE MANAGEMENT A.A.S.
Signal Peak Campus

Total Credits: 70

The EIT - 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)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)

Arts and Humanities (3)
EIT100   History of Rock n' Roll (3)

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology

Physical and Biological Sciences (4)
Select an AGEC course.

Mathematics (3)
BUS101   Business Mathematics (3)

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)
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)

EIT151   Digital Audio Workstation (3)
OR
MUT100   Music Technology (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 CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ENTERTAINMENT INDUSTRY TECHNOLOGY - ARTIST AND VENUE MANAGEMENT CERTIFICATE

Signal Peak Campus

Total Credits: 35

The EIT - 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
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

ENTERTAINMENT INDUSTRY TECHNOLOGY - LIVE AUDIO AND LIGHTING A.A.S.

Signal Peak Campus

Total Credits: 67

The EIT - 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)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)

Arts and Humanities (3)
EIT100   History of Rock n' Roll (3)

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology (3)

Physical and Biological Sciences (4)
Select an AGEC course..

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course

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)
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)

EIT151   Digital Audio Workstation (3)
OR
MUT100 Music Technology (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
        CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ENTERTAINMENT INDUSTRY TECHNOLOGY - LIVE AUDIO AND LIGHTING CERTIFICATE
Signal Peak Campus

Total Credits: 35

The EIT - 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

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)
EIT 232   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
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

ENTERTAINMENT INDUSTRY TECHNOLOGY - POPULAR MUSIC PERFORMANCE A.A.S.

Signal Peak Campus

Total Credits: 65.5

The EIT - 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 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)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)

Arts and Humanities (3)
EIT100   History of Rock n' Roll (3)

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology

Physical and Biological Sciences (4)
Select an AGEC course.

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course

Core Requirements (42.5)
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)
EIT140   Lighting I (3)
EIT170   Performance Skills (1)
EIT171   Songwriting I (3)
EIT203   Entertainment Capstone Project (2)
EIT221   Entertainment Marketing and Promotion (3)
EIT222   Artist Management (3)
EIT272   Songwriting II (3)

ENG200   Creative Writing (3)
MTC100   Fundamentals of Music (3)
MTC101   Aural Fundamentals (.5)

EIT151   Digital Audio Workstation (3)
OR
MUT100   Music Technology (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 CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ENTERTAINMENT INDUSTRY TECHNOLOGY - POPULAR MUSIC PERFORMANCE CERTIFICATE

Signal Peak Campus

Total Credits: 36.5

The EIT - 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

Core Requirements (36.5)
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)
EIT171   Songwriting I (3)
EIT272   Songwriting II (3)
EIT203   Entertainment Capstone Project (2)
EIT221   Entertainment Marketing and Promotion (3)
EIT222   Artist Management (3)
MTC100   Music Fundamentals (3)
MTC 101   Aural Fundamentals (.5)

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

ENTERTAINMENT INDUSTRY TECHNOLOGY - RECORDING ENGINEERING A.A.S.

Signal Peak Campus

Total Credits: 67.5

The EIT - 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)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)

Arts and Humanities (3)
 EIT100   History of Rock n' Roll (3)

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology (3)

Physical and Biological Sciences (4)
Select an AGEC course with laboratory component.

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT
                course

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)
EIT153   Recording Engineering I (3)
EIT203   Entertainment Capstone Project (2)
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)

EIT151   Digital Audio Workstation (3)
OR
MUT100   Music Technology (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
         CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

ENTERTAINMENT INDUSTRY TECHNOLOGY - RECORDING ENGINEERING CERTIFICATE
Signal Peak Campus

Total Credits: 35

The EIT - 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
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

FINE ARTS A.A.

Total Credits: 65

The Fine Arts A.A. 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)

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

Oral Communications (3)
Select an AGEC course.

Arts (3)
Fulfilled by the Core Requirements.

Humanities (3)
Select an AGEC course.

Social and Behavioral Sciences (6)
Select AGEC courses to fulfill this requirement from two different disciplines.

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

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

AGEC Special Requirements (0-3)
Select courses from the AGEC 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 emphasizing 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 these three categories.

A course may not be used to satisfy more than one special 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 also fulfills the AGEC-A Arts Requirement.

Other Requirements (3)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A.

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 or other Foreign Languages and Literatures. Contact an academic advisor for assistance.

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.
This A.A. Degree requires 65 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. Prerequisite: RDG094.

Recommended Proficiencies

RDG094   College Reading

General Education Requirements (25)

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 two of the following:
ART100   Art Appreciation (3)
ART207   Art History I (3)
ART208   Art History II (3)

For the following three categories select AGEC courses.
Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)

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
                CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

CULINARY ARTS

CULINARY ARTS A.A.S.

Signal Peak Campus

Total Credits: 65

The Culinary Arts A.A.S. Degree provides training in basic and advanced culinary skills and includes practicum experience within a commercial kitchen for application of skills and knowledge. Concentrations include Culinary Arts, Nutrition and Dietetics, and Business/Hospitality specialties. Students are prepared for positions as cooks, chefs, and entry level management or for advancement in the food service industry.

Recommended Proficiencies

Based on College Placement tests, students demonstrate preparedness in math and English. High school diploma or GED recommended.

General Education Requirements (19)

Written Communications (3)
ENG101   English Composition III (3)
ENG121   Applied Technical Writing (3)

For the following three categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)
May be fulfilled by NTR141 Nutrition and Wellness (4).

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course

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)
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)
AND
NTR104L Personal Wellness Lab (1)
OR
NTR104   Nutrition (3)
AND
Culinary Arts elective (1)
OR
NTR141   Nutrition and Wellness (4)

Select one of the following (3):
NTR223   Food Service Management (3)
OR
HRM103   Managing Food Service Operations (3)

Electives (15)
Select from one concentration or different concentrations. If the Physical and Biological Sciences requirement is fulfilled by NTR141, select 4 additional credits.

Culinary Arts Electives
CUL121   Culinary Concepts (1)
CUL161   Cake Decorating (1)
CUL167   Introduction to Food Styling (1)
CUL205   HACCP Principles (1)
CUL261   Advanced Cake Decorating (1)
NTR142   Applied Food Science (3)

Nutrition and Dietetics Electives
NTR 135   Healthy Weight for Adults (1)
NTR156   Foundations of Dietary Manager Internships (1)
NTR191   Nutrition Counseling Skill Development (3)
NTR196   Dietary Managers Internship (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)
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
        CIS course
            OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

CULINARY ARTS CERTIFICATE I

Signal Peak Campus

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

Based on College Placement tests, students demonstrate preparedness in math and English. 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)

Select one of the following (4):

NTR104   Nutrition (3)
AND
NTR104L Personal Wellness Lab (1)
           OR
NTR104   Nutrition (3)
AND
Culinary Arts elective (1)
           OR
NTR141   Nutrition and Wellness (4)

NTR223   Food Service Management (3)
           OR
HRM103 Managing Food Service Operations (3)

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

CULINARY ARTS CERTIFICATE II

Signal Peak Campus

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
Based on College Placement tests, students demonstrate preparedness in math and English. 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)

Select one of the following (4):
NTR104   Nutrition (3)
AND
NTR104L Personal Wellness Lab (1)
                OR
NTR104   Nutrition (3)
AND
Culinary Arts elective (1)
                OR
NTR141   Nutrition and Wellness (4)

NTR223   Food Service Management (3)
                OR
HRM103   Managing Food Service Operations (3)

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

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
Admitted to D&HET Cohort and 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)

For the following four categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)
Select one of the following:
BUS101   Business Mathematics (3)
                OR
MAT101   Essential Mathematics (4) or higher MAT course

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)

Select three of the following courses (9):
AGB124   Microcomputers in Agriculture
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)
AND
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
CIS110   Fundamentals of Computer Literacy or higher
          CIS course
                    OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0
scale
Minimum of 20 credits completed at CAC

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.

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 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)

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)
ENG121   Applied Technical Writing (3)
WLD   Any Welding course (3)

DIE196   Diesel Equipment Technology and HEO
         Equipment Internship I (3)
AND
DIE296   Diesel Equipment Technology and HEO
         Equipment Internship II (3)

Other Requirements
Reading Competency: RDG094 College Reading
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

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)

For the following four categories, select AGEC courses.

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)
AGS221   Soil Science (4)
GLG   Any Geology course (4)
PHY100   Physical Universe (4)

Mathematics (3)
BUS101   Business Mathematics (3)
              OR
MAT101   Essential Mathematics (4) or higher MAT
              course

Core Requirements (37)
CET125   Introduction to Earthmoving Methods and
              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)
HEO127   Heavy Equipment Reconditioning (4)
HEO128   Diesel Equipment Service and Repair (4)
HEO221   Advanced Heavy Equipment Operations III
              (5)
HEO222   Applied Heavy Equipment Construction (5)

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
CIS110   Fundamentals of Computer Literacy or higher
              CIS course
                    OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

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 AGEC course.

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course
OR
BUS101   Business Mathematics (3)

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)

Electives (11)
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)
HEO221   Advanced Heavy Equipment Operations III (5)
HEO222   Applied Heavy Equipment Construction (5)
MAT121   Intermediate Algebra, Standard (4) or higher MAT course
PHY100   Physical Universe (4)
BUS   Any Business course (3)
PEH102   First Aid/CPR (2)

TEC129   Computer Skills for Technicians (3)
OR
CIS   Any Computer Literacy course (3)
OR
AGB124   Microcomputers in Agriculture

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)

Other CAC Requirements
Reading Competency: RDG094 College Reading

Cumulative grade point average of at least 2.0 on a 4.0 scale
Minimum of one-third of required Certificate credits earned at CAC

EDUCATION

EARLY CHILDHOOD EDUCATION FAMILY CHILDCARE A.A.S.

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)

Written Communications (3)
ENG101   English Composition III (3)
ENG121   Applied Technical Writing (3)

Oral Communications (3)
Select an AGEC course.

For the following three categories, select AGEC courses.
Arts and Humanities (3)
(LIT291 Children's Literature for Educators (3) recommended.)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course
                    OR
BUS101   Business Mathematics (3)

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 CIS course
                    OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

EARLY CHILDHOOD EDUCATION FAMILY CHILDCARE CERTIFICATE

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)
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)

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

EARLY CHILDHOOD EDUCATION INFANT-TODDLER A.A.S.

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)

For the following five categories, select AGEC courses.
Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT
              course
                        OR
BUS101   Business Mathematics (3)

Core Requirements (10)
ECE120B   Providing a Healthy Environment (1)
ECE120D   Ensuring a Safe Environment for Children (1)
ECE125A   Nutrition (1)
ECE250   Professionalism (1)
ECE280   Inclusion of Children with Special Needs (3)
ECE283   Valuing Families and Diversity (3)

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
CIS110   Fundamentals of Computer Literacy or higher CIS course
OR
Computer Competency course
CIS120 *(CIS120 is recommended for students planning to transfer.)*

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

EARLY CHILDHOOD EDUCATION INFANT–TODDLER CERTIFICATE
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

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

EARLY CHILDHOOD EDUCATION MANAGEMENT A.A.S.

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)

Written Communications (3)
ENG101   English Composition III (3)
ENG121   Applied Technical Writing (3)

Oral Communications (3)
 Select an AGEC course.

Arts and Humanities (3)
(LIT291 Children's Literature for Educators (3) recommended.)

Social and Behavioral Sciences (3)
ECE276   Child Development (3)
            (Also fulfills Core Requirement)

Physical and Biological Sciences (4)
Select an AGEC course with a laboratory component.

Mathematics (3)
MAT101   Essential Mathematics (4) or higher
            MAT course
                    OR
BUS101   Business Mathematics (3)

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
CIS110   Fundamentals of Computer Literacy or higher
            CIS course
                    OR
Computer Competency course
CIS120 *(CIS120 is recommended for students planning to transfer.)*

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

EARLY CHILDHOOD EDUCATION MANAGEMENT CERTIFICATE

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

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)
CIS 120   (CIS120 recommended for transfer) (3)

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

EARLY CHILDHOOD EDUCATION PRESCHOOL A.A.S.

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)
Written Communications (3)
ENG101   English Composition III (3)
OR
ENG121   Applied Technical Writing (3)

For the following two categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)
ECE276   Child Development (3)
            (Also fulfills Core Requirement)

Physical and Biological Sciences (4)
Select an AGEC course with a laboratory component.

Mathematics (3)
MAT101   Essential Mathematics (4) or higherMAT course
OR
BUS101   Business Mathematics (3)

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)
ECE176   Early Childhood Development and Theories (3)
ECE212   Creative Expressions for Young Children (3)
ECE229   Professional Portfolio Preparation (3)
ECE248   Early Childhood Program Philosophies (1)
ECE250   Professionalism (1)
ECE271   Creating Early Childhood Environments (3)
ECE276   Child Development (3)
            (Also fulfills Social and Behavioral Requirement)
ECE278   Effective Curriculum Design for Teachers of Young Children (3)
ECE280   Inclusion of Children with Special Needs (3)
ECE283   Valuing Families and Diversity (3)

ECE124   Active Learning in Math and Science (3)
                          OR
ECE254   Emergent Language and Literacy (3)

Electives (9)
Select electives from the AGEC list 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
                 CIS course
                          OR
Computer Competency course
CIS120 *(CIS120 is recommended for students planning to transfer)*

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

EARLY CHILDHOOD EDUCATION PRESCHOOL CERTIFICATE

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)

Other Requirements (3)
Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher
                 CIS course
                          OR
Computer Competency course
CIS120 *(CIS120 is recommended for students planning to transfer)*

Cumulative grade point average of at least 2.0 on a 4.0 scale
Minimum one-third of Certificate credits earned at CAC

EARLY CHILDHOOD EDUCATION SCHOOL-AGE A.A.S.

Total Credits: 64

The Early Care and Education Program's Associate Degree provides solid foundational knowledge, field experiences, and common skills and strategies that prepare students for multiple roles within the early childhood field.

General Education Requirements (19)

For the following five categories, select AGEC courses.

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higherMAT course
OR
BUS101   Business Mathematics (3)

Core Requirements (10)
ECE120B   Providing a Healthy Environment (1)
ECE120D   Ensuring a Safe Environment for Children (1)
ECE125A   Nutrition (1)
ECE250   Professionalism (1)
ECE280   Inclusion of Children with Special Needs (3)
ECE283   Valuing Families and Diversity (3)

Specialization Requirements (12)
ECE130A   Learning Environment for School-Agers (1)
ECE176   Early Childhood Development and Theories (3)
ECE212   Creative Expressions for Young Children (3)
ECE225A   Encouraging Self-Discipline in School-Age
          Children (1)
ECE254   Emergent Language and Literacy (3)
ECE256   Math for School-Agers (1)

Electives (19)
Select college-level electives to meet 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
          CIS course
                    OR
Computer Competency course
CIS120 *(CIS120 is recommended for students planning to transfer.)*

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

EARLY CHILDHOOD EDUCATION SCHOOL-AGE CERTIFICATE

Total Credits: 25

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in School-Age specialization.

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 (12)
ECE130A Learning Environment for School-Agers (1)
ECE176   Early Childhood Development and Theories (3)
ECE212   Creative Expressions for Young Children (3)
ECE225A Encouraging Self Discipline in School-Age
              Children (1)
ECE254   Emergent Language and Literacy (3)
ECE256   Math for School-Agers (1)

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

ELEMENTARY EDUCATION A.A.E.E.

Total Credits: 63

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
Reading and math scores or courses to demonstrate college level coursework in English and math are recommended.

AGEC-A (35-36 Credits)
The AGEC-Associate of Arts satisfies requirements in many liberal arts programs and other programs that articulate with the A.A. Degree. AGEC-A requires a minimum of College Mathematics plus 32 credits from specific AGEC categories.

General Education Requirements

For the following eight categories, select the recommended courses or courses from the equivalent category on the AGEC course list in this catalog.

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

Oral Communications (3)
Select an AGEC course.

Arts (6)
Select courses from two different AGEC-approved Art disciplines.

Humanities (3)
LIT291   Children's Literature for Educators (3)

Social and Behavioral Sciences (6)

HIS101	United States History I (3)
ECE276	Child Development (3)*

Biological/Life Lab Sciences (4)

Select one of the following courses:

AGS101	World of Plants (4)
AGS104	Agricultural Environmental Science (4)
AGS106	Entomology (4)
AGS240	Plant Biology (4)
AGS221	Soil Science (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)

Physical Lab Sciences (4)

Select one of the following courses:

AST101	Survey of Astronomy (4)
CHM130	Fundamental Chemistry (4)
CHM151	General Chemistry I (4)
CHM152	General Chemistry II (4)
CHM230	Fundamental Organic Chemistry (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)
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)

Mathematics (3-4 Credits)

MAT141	College Mathematics (4) or higher MAT course

AGEC Special Requirements

Intensive Writing/Critical Inquiry (3)

LIT291	Children's Literature for Educators (3)
	(Also fulfills AGEC Humanities Requirement)

Cultural Awareness (Ethnic/Race/Gender) (3)

EDU230	Cultural Values in Education (3)
	(Also fulfills Core Requirements)

Global/International/Historical Awareness (3)

HIS101	United States History I (3)
	(Also fulfills AGEC Soc/Behavioral Sciences Requirement)

Core Requirements (18)

EDU221	Introduction to Education (3)
EDU222	Introduction to Special Education (3)
EDU230	Cultural Values in Education (3)
EDU240	Provisional Structured English Immersion (SEI) (3)
MAT201	Math for Elementary Teachers I (3)
MAT202	Math for Elementary Teachers II (3)

Specialty Requirements (6)

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 the following two courses:

ECE176	Early Childhood Development and Theories (3)
ECE271	Creating Early Childhood Environments (3)

OR

Special Education majors the following two courses:

EDU225	Relationships in the Classroom (3)
EDU228	Behavior Management (3) (Recommended)

Requirements for A.A.E.E. Degree

Reading Competency: RDG094 College Reading

Computer Competency (3):

AGB124	Microcomputers in Agriculture

OR

CIS120	Survey of Computer Information Systems (Recommended)

Additional transferable electives to achieve a minimum of 63-64 credit hours for the A.A.E.E. Degree.

Grade of "C" or better in each A.A.E.E. Degree required course

Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A.

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.

EMERGENCY MEDICAL SERVICES

BASIC EMT CERTIFICATE

Total Credits: 8.5

Emergency Medical Technician Certificate of Completion for students who successfully complete EMS100 (CPR for Professionals) and EMS125 (Basic EMT).

Prerequisites
9th grade reading level, immunizations, CPR certification

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

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

CRITICAL CARE FOR PARAMEDICS CERTIFICATE

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 prehospital setting. EMS275 combined with Advanced Cardiac Life Support (ACLS) and the course prerequisites prepares student to apply for a completion certificate.

Prerequisites

1. EMS272A Advanced Emergency Medical Technology/Paramedic, Module I (17.5)
2. EMS272B Advanced Emergency Medical Technology/Paramedic Module II (8.5)
3. EMS272C Advanced Emergency Medical Technology/Paramedic, Module III (8.5)
4. EMS272D Advanced Emergency Medical Technology/Paramedic Practicum I (6)
5. EMS272E Advanced Emergency Medical Technology/Paramedic Practicum II (6)
   OR
   Certified Paramedic or Registered Nurse, or Physician or equivalent
   AND
6. EMS100 CPR for Professionals (.5) or current Cardio Pulmonary Resuscitation (CPR) certification per American Heart Association standards or equivalent
   AND
7. Current Advanced Cardiac Life Support (ACLS) certification per American Heart Association standards, BTLS or PHTLS, PALS or PEPP;
   AND
8. Current ARC Certification or AHA BLS Health Care Provider, or NSC Green Cross Prof 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
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

PARAMEDICINE A.A.S.

Signal Peak 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 and C courses, students must advance through each section (A, B and C) 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)

Written Communications (3)
ENG101   English Composition III (3)
              OR
ENG121   Applied Technical Writing (3) *(Recommended)*

Oral Communications (3)
Select an AGEC course.

Arts and Humanities (3)
Select an AGEC course.

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology (3)
SOC100   Introduction to Sociology (3)

Physical and Biological Sciences (4)
BIO160   Introduction to Human Anatomy and Physiology (4) *(Recommended)*

Mathematics (3)
BUS101   Business Mathematics (3)
<div align="center">OR</div>

MAT101   Essential Mathematics (4) or higher MAT course

Core Requirements (46.5)
EMS272A Advanced Emergency MedicalTechnology/
             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
           CIS course
<div align="center">OR</div>

Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

FIRE SERVICES

BASIC FIREFIGHTER CERTIFICATE

Total Credits: 21

Entry level Basic Firefighter Certificate program designed for individuals pursuing a career as a firefighter. State of Arizona Fire Marshal awards the Firefighter I & II Certificate when courses are successfully completed.

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

Core Requirements (21)
FSC106   Introduction to Emergency Services (3)
FSC140   Firefighter I & II (11)
FSC180   Wildland Fire, Module I (5)
FSC238   Vehicular Extrication and Victim Stabilization (2)

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

FIRE SCIENCE TECHNOLOGY
A.A.S.

Total Credits: 66

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) 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
    e. IFSAC (International Fire Service Accreditation Council) certification

Prerequisites

EMS125   Emergency Medical Technician (8) or equivalent, IEMT or Paramedic*

General Education Requirements (19)

Written Communications (3)
ENG101   English Composition III (3)
OR
ENG121   Applied Technical Writing (3) *(Recommended)*

Oral Communications (3)
COM206 Public Speaking (3) *(Recommended)*
OR
Select an AGEC course.

Arts and Humanities (3)
Select an Humanities AGEC course.

Social and Behavioral Sciences (3)
SOC100   Introduction to Sociology (3) *(Recommended)*
OR
Select an AGEC course.

Physical and Biological Sciences (4)
Select an AGEC course with a laboratory component.

Mathematics (3)
BUS101   Business Mathematics (3)
OR
MAT101 Essential Mathematics (4) or higher MAT course

Core Requirements (43)
FSC106   Introduction to Emergency Services (3)
FSC108   Fundamentals of Fire Prevention (3)
FSC117   Fire Apparatus and Equipment (3)
FSC118   Fire Hydraulics (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)
FSC204   Firefighter Tactics and Strategy (3)
FSC208   Firefighter Safety/Building Construction (3)

Electives (3-4)
Choose one:
FSC202   Supervisory Training for Firefighters (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)
Physical Education Activity (1) *(Fulfilled by FSC134)*
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher CIS course
OR
Computer Competency course

Students must earn a minimum grade of "C" or better in all course work
Cumulative grade point average of at least 2.0 (C) on a 4.0 scale
Minimum of 20 credits must be completed at CAC

Note: Requirements for Basic EMT (EMS125), IEMT (EMS208) or Paramedic (EMS272) are regulated by the Arizona Department of Health Services and are not negotiable.

WILDLAND FIREFIGHTER I CERTIFICATE

Total Credits: 20

Basic education and training in Wildfire Firefighting per the requirements established by the National Wildfire Coordinating Group (NWCG) for S130/190 and Advanced Firefighter S131. Students must successfully complete FSC180 and FSC181 to qualify for the Firefighter Type I (NWCG) credential.

Recommended Proficiencies

Wildland Fightfighting advanced level of operations, including leadership, tactics, human relations, and national incidence management practices. Designed for students who have at least one year of firefighting experience and who wish to achieve Engine or Crew Boss certification.

Prerequisites: FSC129, S-110, and I-100, or Program Director consent.

Core Requirements (20)

FSC180	Wildland Fire, Module 1 (S-130/190, S-133, S-134, L-180) (5)	
FSC181	NWCG Advanced Firefighter Training (S-131) (.5)	
FSC182	NWCG Portable Pumps and Water Use (S-211) (1)	
FSC184	NWCG Supervisory Concepts and Techniques (S-280, L-280) (1)	
FSC185	NWCG Initial Attack Incident Command (I-200) (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)	
FSC201	ICS 200 NIMS Incident Command (1)	
FSC203	Fire Operations in the Wildland/Urban Interface (S-215) (2)	

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

GEOLOGY AND PLANETARY SCIENCE

GEOLOGY AND PLANETARY SCIENCE A.S. (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 (35-38)

Written Communications (6)

ENG101   English Composition III (3)
ENG102   English Composition IV (3)

Arts and Humanities (6)

Select one AGEC Arts (3) and one AGEC Humanities (3) 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 (4)

MAT221   Analytical Geometry and Calculus I (4) or higher MAT course

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.
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 three categories. A course may not be used to satisfy more than one special requirements category.

Core Requirements (24)

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)

Subject Options (4-8)
ENV101   Environmental Science (4)
GLG102   Historical Geology (4)
GLG110   Environmental Geology (4)

Transferable Electives (0-12)
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
CIS110   Fundamentals of Computer Literacy or higher
          CIS course
                    OR
Computer Competency course

Grade of "C" or better in each A.S. Degree-required course
Minimum of 20 credits completed at CAC including 13
credits in the AGEC-S.

HEALTH CAREERS

CLINICAL LABORATORY ASSISTANT CERTIFICATE

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 or completed HKS155 AND
HKS255

Recommended:
Certified Phlebotomist

Pre-Program Requirements (8)
HCC111   Healthcare Law and Ethics (2)
HCC112   Interpersonal Skills (2)
HCC113   Math and Dosage 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
Grade of "C" or higher earned in each required course to
receive the Certificate
Cumulative grade point average of at least a 2.0 on a 4.0
scale

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
Minimum of one-third of required Certificate credits completed at CAC

CODING AND REIMBURSEMENT CERTIFICATE

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:
CIS120   Survey of Computer Information Systems (3)

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)
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
Grade of "C" or higher earned in each required course or prerequisite.
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

HEALTH INFORMATION TECHNOLOGY A.A.S.

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

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)
                  OR
COM206   Public Speaking (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (8)
BIO201   Human Anatomy - Physiology I (4)
                  AND
BIO202   Human Anatomy - Physiology II (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT
                  course
                  OR
BUS101   Business Mathematics (3)

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 TechnologySeminar (2)
HIM 200   Healthcare Reimbursement (2)
HIM 205   Healthcare Statistics and Research (2)
HIM208   Advanced Coding (2)
HIM210   Supervision and Quality (2)
HIM215   Health Information Systems (3)
HIM275Q 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)

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

MASSAGE THERAPY A.A.S.

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:

After successful completion of all the General Education requirements and HCC100, HCC111 AND HCC116 courses, students must pass the required HESI tests with a score of 70 or above on each test AND after completion of the above requirements, students must apply for admission to the Degree program with the HCC Division Chair before enrolling in the Degree Specialty courses.

General Education Requirements (19)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)
COM101   Interpersonal Communication (3)
COM263   Intercultural Communication (3)

Arts and Humanities (3)
Select an AGEC course from the Arts and Humanities.

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology (3)

Physical and Biological Sciences (4)
BIO160   Introduction to Human Anatomy and Physiology (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course
                    OR
BUS101   Business Mathematics (3)

Core Requirements (8)
HCC100   Introduction to Health Care (3)
HCC111   Health Care Law and Ethics (2)
HCC116   Medical Terminology Accelerated (3)

Specialty Requirements (32)
BIO160   Introduction to Human Anatomy and Physiology (4) *(Also fulfills General Education requirement)*
HPM136   Business Skills for Massage Therapy (3)
HPM150   Chiropractic Assistant Training (2)
HPM151   Study of Acupuncture for Health Care Professionals (1)
HPM152   Study of Physiotherapy for Health Care Professionals (1)
HPM160   Applied Anatomy for Massage Therapy (3)
HPM173   Pathophysiology (3)
HPM175L Practicum – Massage Therapy, Relaxation Massage (1)
HPM175M Practicum – Massage Therapy, Therapeutic Massage (1)
HPM175N Practicum – Massage Therapy for Special Populations (1)
HPM175O Practicum – Massage Therapy, Spa Treatments and Hydrotherapy (1)
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)

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

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS 120   Survey of Computer Information Systems (3)

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Students must earn 64 credits to earn this degree.
Minimum of 20 credits completed at CAC

MASSAGE THERAPY CERTIFICATE

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

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 HCC Division Chair before enrollment 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 - Relaxation Massage (1)
HPM175M Practicum - Therapeutic Massage (1)
HPM175N Practicum - Massage for Special Populations (1)
HPM175O Practicum - Spa Treatment & Hydrotherapy (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
Grade of "C" or higher earned in each required course
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

MEDICAL ASSISTANT A.A.S.

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)

Written Communications (3)
ENG101   English Composition III (3)

Oral Communications (3)
COM100   Fundamentals of Human Communication (3)

Arts and Humanities (3)
Select an AGEC course.

Social and Behavioral Sciences (3)
PSY101   Introduction to Psychology (3)

Physical and Biological Sciences (4)
BIO160   Introduction to Human Anatomy and Physiology (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT course
                 OR
BUS101   Business Mathematics (3)

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 Practicum - Medical Assistant (4)*
CBA112A MS Word - Basic (1)
CBA112B MS Word - Intermediate (1)
OAS101 Keyboard - Alphabetic (1)
OAS103 Keyboard - Speed/Accuracy (1)

Other Requirements (4)
Prior to enrollment in HPM175C, mandatory requirements
must be met.

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124 Microcomputers in Agriculture
CIS110 Fundamentals of Computer Literacy or higher
          CIS course
                      OR
Computer Competency course

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0
scale
Minimum of 20 credits completed at CAC

MEDICAL ASSISTANT CERTIFICATE

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)
HPM175C Practicum - Medical Assistant (4)*

Other Requirements
Prior to enrollment in HPM175C, mandatory requirements
must be met
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

Grade of "C" or higher earned in each required course
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

PHARMACY TECHNICIAN CERTIFICATE

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; RDG094, MAT082

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
Grade of "C" or higher earned in each required course
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

LAW ENFORCEMENT and ADMINISTRATION OF JUSTICE STUDIES A.A. AND A.A.S.
See Administration of Justice.

MANUFACTURING

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)
ELC122   Direct Current and Alternating Current Circuit
          Analysis (3)
ELC128   Introduction 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
Grade of "C" or higher earned in each required course
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

MANUFACTURING ENGINEERING A.A.S.

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.

General Education Requirements (24)
Select AGEC approved courses if AAS to BAS Degree desired.

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)
AGEC Recommended:
ART207   Art History I (3)
MHL100   Music Appreciation (3)
MHL207   Survey of Jazz/Pop Music (3)
THE100   Theater Appreciation (3)

Social and Behavioral Sciences (3)
ECN201   Principles of Macroeconomics (3)

Physical and Biological Sciences (8)
CHM130   Fundamental Chemistry (4)
PHY100   Physical Universe (4) or higher

Mathematics (4)
MAT121   Intermediate Algebra, Standard (4) or higher MAT course

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/HighVacuum HV (3)
MET230   Semiconductor I - Seminar (3)

Specialization Requirements for all Automation Industries:
ELC128   Introduction to Programmable Logic Controllers (3)
ELC228   Advanced Programmable LogicControllers (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 CIS course
OR
Computer Competency course

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

NANOFABRICATION TECHNOLOGY A.A.S.

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, MAT092 AND RDG094

General Education Requirements (36)

Written Communications (3)
ENG100   English Composition III (3) or higher ENG course

Oral Communications (3)
Select an AGEC course.

Arts and Humanities (3)
Select one AGEC Arts or Humanities course.

Social and Behavioral Sciences (3)
Select one AGEC Social and Behavioral 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)
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 CIS course
OR
Computer Competency course

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

NUTRITION AND DIETETICS

COMMUNITY NUTRITION WORKER CERTIFICATE

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)
AND
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
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of one-third required Certificate credits completed at CAC

DIABETES CARE AND EDUCATION CERTIFICATE

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

Core Requirements (10)
NTR131   Introduction to Diabetes (3)

NTR141   Nutrition and Wellness (4)
OR
NTR104   Nutrition (3)
AND
NTR104L Personal Wellness Lab (1)

NTR191   Nutrition Counseling SkillDevelopment (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)
NTR232   A Food and Culture (1)
NTR247   Weight Management Theory (3)

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

DIETARY MANAGER TRAINING PROGRAM CERTIFICATE

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 (1)
NTR196   Dietary Manager Internship (3)
NTR223   Food Service Management (3)
NTR240   Clinical Nutrition (3)

CUL105   Food Safety Foundations (1)
OR
NTR105   ServSafe Certification (1)

Select one of the following options (4):
NTR141   Nutrition and Wellness (4)
OR
NTR104   Nutrition (3) AND
NTR104L Personal Wellness Lab (1)

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)
NTR201   Nutrition Literacy (1)
NTR130   Diabetes Overview (1)

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

DIETETIC TECHNICIAN A.A.S.

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)

Written Communications (3)
ENG101   English Composition III (3)
OR
ENG121   Applied Technical Writing (3)

For the following three categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (7)
BIO160   Introduction to Human Anatomy and Physiology (4)
AND
CHM130 Fundamentals of Chemistry (4)
OR
CHM138 Chemistry for Allied Health (3) *(equivalent or higher CHM course)*

Mathematics (3)
MAT101 Essential Mathematics (4) or higher MAT course
OR
BUS101   Business Mathematics (3)

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
            Internships (1)
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)
NTR296   Dietetic Technician Internship (6)

CUL105   Food Safety Foundations (1)
              OR
NTR105   ServSafe Certification (1)

Electives (3)

Select any NTR course (3).

Other Requirements (4)

Completion of NTR and CHM course requirements within five 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.

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):

AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher
            CIS course
              OR
Computer Competency course

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC

NUTRITION AND HEALTH PROMOTION CERTIFICATE

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

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)
              OR
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

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

RENEWABLE ENERGY TECHNOLOGY

BIOFUELS TECHNICIAN CERTIFICATE

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

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)

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

RENEWABLE ENERGY TECHNOLOGY A.A.S.

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

General Education Requirements (22)

For the following categories, select AGEC courses.
Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (8)
AGS101   World of Plants (4)
AGS104   Agricultural Environmental Science (4)
BIO100   Biology Concepts (4)
CHM130   Fundamental Chemistry (4)
ENV101   Environmental Science (4)
PHY100   Physical Universe (4)

Mathematics (2)
MAT111   Math for Electricians (2)
MAT121   Intermediate Algebra, Standard (4) or higher MAT course
MAT 162 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)

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)

Photovoltaic Technology Specialization Requirements (24)
ELC126   Residential Wiring (3)
ELC201   Solar Photo Voltaic I (3)
ELC202   Solar Photo Voltaic II (3)
BUS100   Introduction to Business (3)
                    OR
BUS101   Business Mathematics (3)
                    OR
BUS122   Small Business Management (3)
SKL115   Employment Readiness Part 1 (3)
SKL116   Employment Readiness Part 2 (3)
POS101   American Government and Politics (3)
Elective (3) Per 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
                 CIS course
                    OR
Computer Competency course

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Total credits must meet 64-65 credit degree requirement.
Minimum of 20 credits completed at CAC

SOLAR PHOTO VOLTAIC TECHNICIAN CERTIFICATE

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. Certificate completers are eligible to sit for the NABCEP certification tests.

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
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

SPORTS AND FITNESS

ATHLETIC STUDIES A.A.

Total Credits: 64

The Athletic Studies A.A. Degree prepares students to transfer to a four-year college/university by completing the AGEC and gathering a broad background in sports, intercollegiate athletics, sports management and exercise.

Recommended Proficiencies
College level reading, writing and oral communication skills recommended

General Education Requirements (35)
AGEC-A

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 course from the AGEC list.

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)
MAT141   College Mathematics, Standard (4)
MAT151   College Algebra, Standard (4)
MAT162   Applied Statistics (3)

AGEC Special 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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special 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)

Grade of "C" or better in each required course
Minimum of 20 credits completed at CAC including 12 credits in the AGEC-A.

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.

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.

This A.A. Degree requires 64 semester credits.

ATHLETIC TRAINING EDUCATION PROGRAM A.A.

Signal Peak Campus

Total Credits: 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 (35)

AGEC-A

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 course from the AGEC list.

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)

Mathematics (3)
MAT141   College Mathematics, Standard (4) or higher MAT course

AGEC Special 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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special 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

Computer Competency (3):
AGB124   Microcomputers in Agriculture (3)
                    OR
CIS120   Survey of Computer Information Systems (3)

Grade of "C" or better in each A.A. Degree required course
Minimum of 20 credits completed at CAC including 12 credits for the AGEC-A.

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.

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.

This A.A. Degree requires 64 semester credits.

GROUP FITNESS INSTRUCTOR TRANSFER PATHWAY

Signal Peak Campus

Total Credits: 64

Upon completion of the Transfer Pathway, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Group Fitness Instructor. The program core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Group Fitness Instructor. Students completing this degree will gain knowledge and skills in biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures, and health screening in addition to the AGEC, general education requirements, and may pursue degrees/career paths in athletic training, personal training, sports officiating, kinesiology, health promotion, and allied health fields.

Recommended Proficiencies

College level reading, writing and oral communication skills recommended

General Education Requirements (35)
AGEC-A

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 course from the AGEC list.

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)

Mathematics (3)
MAT141   College Mathematics, Standard (4) or higher MAT course

AGEC Special 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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

Core Requirements – Group Fitness Instructor Certificate (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)

Electives (0-10)

Total of 64 semester credit required for this Transfer Pathway.

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
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

PERSONAL TRAINER TRANSFER PATHWAY

Signal Peak Campus

Total Credits: 64

Upon completion, 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.

Students completing this degree gain knowledge and skills in biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures, and health screening in addition to AGEC, general education requirements, and may pursue degrees/career paths in athletic training, group fitness instruction, sports officiating, kinesiology, health promotion, and allied health fields.

Recommended Proficiencies
College level reading, writing and oral communication skills recommended

General Education Requirements (35) AGEC-A

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)

Mathematics (3)
MAT141   College Mathematics, Standard (4) or higher
              MAT course

AGEC Special 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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special requirements category.

Core Requirements – Personal Trainer Certificate (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)

Electives (0-10)

Select electives to earn a total of 64 semester credits required for this Transfer Pathway.

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

Minimum of seven required Certificate credits completed at CAC
Cumulative grade point average of at least a 2.0 on a 4.0 scale.

RECREATION AND TOURISM MANAGEMENT A.A.

Total Credits: 71

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 (35)
AGEC-A

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

Oral Communications (3)
COM263   Intercultural Communication (3)

Arts and Humanities (6)
Select one Arts and one Humanities AGEC course.

Social and Behavioral Sciences (6)
ECN202   Principles of Microeconomics (3)
Select 3 additional credits from a different discipline

Physical and Biological Sciences (8)
ENV101   Environmental Science (4)
NTR141   Nutrition and Wellness (4)

Mathematics (3)
MAT141   College Mathematics, Standard (4) or higher
                    MAT course

AGEC Special Requirements (3-9)
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 Oral Communications, Arts and Humanities, Social and Behavioral Sciences, or Transfer Electives, may also be used to satisfy requirements in these three categories. A course may not be used to satisfy more than one special 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 (6)

PAC or DAN Course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
CIS120   Survey of Computer Information Systems (3)

Grade of "C" or better in each required course
Minimum of 20 credits completed at CAC including 12 credits for the AGEC-A.

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.

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.

This A.A. Degree requires 71 semester credits.

RECREATION MANAGEMENT CERTIFICATE

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
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

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

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
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

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
College level reading, writing and oral communication skills recommended

Prerequisite
RDG094   College Reading

General Education Requirements (32)

Written Communications (3)
ENG101   English Composition III (3)

For the following two categories, select AGEC courses.
Oral Communications (3)

Arts (3)

Humanities (3)
PHI105   Introduction to Ethics (3) *(Recommended)*

Social and Behavioral Sciences (12)
ECN201   Principles of Macroeconomics (3)
ECN202   Principles of Microeconomics (3)
MSC101   Media and Society (3)
PSY101   Introduction to Psychology (3)

Physical and Biological Sciences (8)
NTR141   Nutrition and Wellness (4)
AND
BIO160   Introduction to Human Anatomy and
             Physiology (4) (*Recommended*)

Mathematics (3)
MAT162   Applied Statistics (3)

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 (3), excluding varsity sports:
Select 3 credits
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher
            CIS course
OR
Computer Competency course

Grade of "C" or higher earned in each required course
Cumulative grade point average of at least a 2.0 on a 4.0
scale
Minimum of 20 credits completed at CAC

*Students desiring to earn an AGEC Certificate (35
credits), see AGEC Certificate requirements.*

TECHNOLOGY

COMPUTER AIDED DESIGN CERTIFICATE
Signal Peak Campus

Total Credits: 25

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 MAT course

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
MAT121   Intermediate Algebra, Standard (4)
WLD   Welding

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

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 (21)
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
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

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)
AGB127   Farm Business Management I A (5)
AGB128   Farm Business Management I B (5)
AGB228   Farm Business Management II A (5)
AGB229   Farm Business Management II B (5)
AGB230   Farm Business Management III A (5)
AGB231   Farm Business Management III B (5)

Other Requirements
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of one-third required Certificate credits earned at CAC

CORRECTIONS

ADVANCED CORRECTIONS CERTIFICATE

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 (COTA).

Core Requirements (15)
BUS190   Principles of Management and Leadership (3)*
COM101   Interpersonal Communication (3)
                    OR
COM263   Intercultural Communication (3)
POS220   U.S. and Arizona Constitutions (3)
PSY101   Introduction to Psychology (3)
SOC100   Introduction to Sociology (3)

*Corrections Officers who have the rank of Sergeant or higher will not be required to take BUS190, but will receive BUS190 credit for work experience.

Electives (3)
AJS101   Introduction to Administration of Justice (3)
AJS275   Criminal Investigations (3)
CIS120   Survey of Computer Information Systems(3)
PHI112   World Religions (3)
PSY200   Social Psychology (3) or higher PSY course
SOC200   Racial and Ethnic Minorities(3) or higher SOC course
SPA   Any SPA course

Other Requirements
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of one-third of the required Certificate credits completed at CAC

CORRECTIONS A.A.S.

Total Credits: 64

The Corrections A.A.S. Degree is designed to upgrade the skills and knowledge of Correctional Officers currently working in the field. Completion of the Arizona COTA program is required for admission into the degree. Upon successful completion of COTA, students are eligible for up to 21 credits towards the Corrections A.A.S. Degree.

Prerequisites:

RDG094   College Reading
Successful completion of Arizona Correctional Officers Training Academy (COTA) (21 credits).

General Education Requirements (19)

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

Oral Communications (3)
COM101   Interpersonal Communication (3)
COM263   Intercultural Communication (3)

Arts and Humanities (3)
AJS123   Ethics and the Administration of Justice

Social Behavioral Sciences (6)
PSY101   Introduction to Psychology (3)
SOC100   Introduction to Sociology (3)

Physical and Biological Sciences (4)
Select an AGEC course with a laboratory component.

Mathematics (3)
MAT121   Intermediate Algebra, Standard (4) or higher
            MAT course

Core Requirements (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)
CIS120   Survey of Computer Information Systems (3)
POS220   U.S. and Arizona Constitutions (3)

Electives (3)
AJS225   Criminology (3)
AJS275   Criminal Investigations (3)

PHI112   World Religions (3)
PSY200   Social Psychology (3) or higher PSY course
SOC200   Racial and Ethnic Minorities (3) or higher
            SOC course
SPA   Any SPA course

Other Requirements
Physical Education Activity (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)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC
Total of 64 credits required to earn this degree

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.

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
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of one-third required Certificate credits earned at CAC

JOHN DEERE CONSTRUCTION AND FORESTRY EQUIPMENT TECHNOLOGY A.A.S.
Signal Peak Campus

Total Credits: 78

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)

For the five categories below, select AGEC courses.
Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)
MAT101   Essential Mathematics (4) or higher MAT
           course
                OR
BUS101   Business Mathematics (3)

Required Courses (58)
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)
DIE197   Career Advancement (3)
DIE222   Mobile Refrigeration (3)
DIE225   Preventive Maintenance (2)
WLD   Any Welding course (3)

TEC129   Computers for Technicians (3)
                OR
CIS   CIS Computer Competency Course

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 or higher Computer Competency Course
(Fulfilled in Required Courses)

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC
Total of 78 credits required to earn this degree

JOHN DEERE TECH A.A.S.

Signal Peak Campus

Total Credits: 74

The John Deere TECH, A.A.S. Degree provides solid foundational knowledge, skills, strategies and field experience to students to service and repair the engine and power train systems of John Deere agricultural, consumer, and commercial equipment. John Deere technical service literature, specialized computer systems and an array of special engine tools are used. The study of communications, humanities and the sciences complement the general trade knowledge and skills. Students must be sponsored by a John Deere Dealership.

Prerequisites

Students must be sponsored by a John Deere Dealership.

General Education Requirements (19)

Written Communications (3)

ENG101   English Composition III (3)
OR
ENG121   Applied Technical Writing (3)

For the following four categories, select AGEC courses.

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (4)

Mathematics (3)

BUS101   Business Mathematics (3)
OR
MAT101   Essential Mathematics (4) or higher MAT course

Required Courses (37)

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)
DIE116   Introduction to Diesel Technology (3)
DIE211   Advanced Electrical/Electronic Systems (3)
DIE212   Advanced Mobile Hydraulics (3)
JDT115   Computer System for John Deere Technicians (3)
JDT214   Advanced Power Train Repair and Diagnostics (5)

JDT Specialization, select three (9)
JDT205   JD TECH Hay & Forage Equipment (3)
JDT215   JD TECH Global Positioning Systems (3)
JDT220   JD TECH CC & E (Consumer & Commercial Equipment) (3)
JDT225   JD TECH Harvesting Equipment (3)

Specialization, select three (8-9)
DIE117   Workplace Success Principles, Practices, and Strategies (3)
DIE222   Mobile Refrigeration (3)
DIE225   Preventive Maintenance (2)
JDT185   JD TECH Internship (3)
WLD   Any Welding Course (3)

Other Requirements (1-4)
PAC or DAN course (1)
Reading Competency: RDG094 College Reading

Computer Competency (3):
AGB124   Microcomputers in Agriculture
CIS110   Fundamentals of Computer Literacy or higher CIS course
OR
Computer Competency course

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of 20 credits completed at CAC
Total of 74 credits required to earn this degree

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.

Prerequisites
Students must be sponsored by an Associated General Contractor.

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
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Minimum of one-third required Certificate credits earned at CAC

HEALTH CAREERS

DIAGNOSTIC MEDICAL SONOGRAPHY A.A.S.
Superstition Mountain Campus

Total Credits: 84

This 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 well being.

Prerequisites
DMS101   Introduction to Diagnostic Medical Sonography (3)
Associate Level Degree or higher in a patient care related healthcare discipline; healthcare professional or instructor consent; and
American Health Association (AHA) CPR or equivalent embedded in their healthcare specialty

Recommended Proficiencies
Placement testing in Reading, Writing and Math at college level.
PHY100 or higher PHY course recommended.

Candidates who have completed a prior A.A.S. may count their General Education course credits toward the General Education Requirements and the Other Requirements below.

General Education Requirements (23)

Written Communications (3)
ENG101   English Composition III (3)
OR
ENG121   Applied Technical Writing (3)

For the following three categories, select AGEC courses.
Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

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 MAT course

Core Requirements (60 Credits)
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 and 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

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Students must earn a grade of "C" or better in all required courses
Minimum of 20 credits completed at CAC
Total of 84 credits required to earn this degree

DIAGNOSTIC MEDICAL SONOGRAPHY CERTIFICATE

Superstition Mountain Campus

Total Credits: 60

The Diagnostic Medical Sonography Certificate program is designed for Health Care Professionals who have attained certification in direct patient care occupations and who are currently licensed or certified. The DMS Certificate coursework must be completed successfully for graduation and eligibility for ARDMS certification. In addition, DMS students are required to earn the Diagnostic Medical Sonography A.A.S. Degree which requires completion of general education requirements (24 credits) and other CAC degree requirements (4 credits).

Prerequisites
DMS Cohort student
DMS101   Introduction to Diagnostic Medical Sonography (3)

HCC100   Introduction to Healthcare (3)
HCC111   Healthcare Law and Ethics (2)
HCC112   Interpersonal Skills (2) AND
HCC116   Medical Terminology Accelerated (3)
or equivalent coursework (HCC100, 111, 112 and 116)

CPR Health Care Provider
American Health Association (AHA) CPR or equivalent embedded in the health care specialty

Corequisite
Enrollment in DMS Cohort

Recommended Proficiencies
Health Care Professionals who have attained certification in direct patient care occupations and who are currently licensed or certified.

Core Requirements (60)
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 and 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
Cumulative grade point average of at least a 2.0 on a 4.0 scale
Students must earn a grade of "C" or better in all required courses
Minimum of one-third required Certificate credits earned at CAC

NURSING A.A.S.
Signal Peak Campus

Total Credits: 71

Registered Nurses have many opportunities to specialize and to pursue higher degrees for clinical practice, teaching and administration. This Nursing Degree 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.

After completion of the second semester and an optional three-credit course, NUR150, the student receives a practical nursing certificate and is eligible to take the Practical Nurse Licensing Examination (NCLEX-PN). Completion of the four-semester program qualifies the student for the Associate of Applied Science in Nursing degree and for taking the Registered Nurse Licensing Examination (NCLEX-RN).

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.

Admission to any level of the Nursing Program is selective and based on specific criteria. Acceptance into the college does not guarantee acceptance into the Nursing Program. Further information may be obtained at: http://www.centralaz.edu/Home/Academics/Divisions_and_Programs/Nursing_Division.htm.

Proper course sequencing is essential. Please see your academic advisor.

Prerequisites
BIO201　Human Anatomy – Physiology I (4)
BIO202　Human Anatomy – Physiology II (4)*
Arizona Nursing Assistant Certification
Counted as part of the Nursing A.A.S. Degree General Education.

General Education Requirements (30)

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

Arts and Humanities (3)
Select an AGEC course.

Social and Behavioral Sciences (9)
PSY101　Introduction to Psychology (3)
PSY203　Developmental Psychology (3)
SOC100　Introduction to Sociology (3)

Physical and Biological Sciences (8)
BIO202　Human Anatomy – Physiology II (4)
　　　　(Fulfilled in the 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 and 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 maintain a grade of "C" or better average in all courses to graduate.
Minimum of 20 credits completed at CAC
Total of 71 credits required to earn this degree

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
Placement testing in college-level mathematics, English and reading.

Prerequisites
Students must successfully complete the first year of the Nursing Program.

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
Cumulative grade point average for this certificate must be at least a 2.75 on a 4.0 scale
Minimum of one-third required Certificate credits earned at CAC

RADIOLOGIC TECHNOLOGY A.A.S.
Superstition Mountain Campus

Total Credits: 71

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 23 credits of general education requirements and 60 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.

Graduates of the program are eligible to:
1. Receive a Radiologic Technology Associate of Applied Science Degree;
2. Sit for the American Registry of Radiologic Technologists examination (ARRT);
3. Apply for an Arizona license to practice radiography - CRT (Certified Radiologic Technologist).

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. It is highly recommended that a student complete the general education requirements before admission to the program, including 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
BIO201   Human Anatomy - Physiology I (4)
BIO202   Human Anatomy - Physiology II (4)

General Education Requirements (23)

For the four categories below, select AGEC courses.

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Sciences (3)

Physical and Biological Sciences (8)

BIO201   Human Anatomy - Physiology I (4)
BIO202   Human Anatomy - Physiology II (4)
            (Fulfilled by prerequisites)

Mathematics (3)

MAT121   Intermediate Algebra, Standard (4) or
            higher MAT course

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 (1)

PAC or DAN course (1)
Reading Competency: RDG094 College Reading

Cumulative grade point average of at least a 2.0 on a 4.0 scale
Students must earn a grade of "C" or better in all courses
Minimum of 20 credits completed at CAC
Total of 71 credits required to earn this degree

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 TV, open entry/open exit, accelerated and correspondence. 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 that the student must meet prior to enrollment in the proposed course. A *corequisite* is a requirement that 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 on courses noted in the course description. However, students may not choose "*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 are offered to provide a foundation for college-level course work.

197/297 Career Advancement
Up to 4 Credits
Courses in the 197 or 297series 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 maps 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 AZ transfer equivalency information. The SUN # code indicates the direct equivalency within the Arizona Transfer System that includes the three public universities and the public and tribal community colleges. See the AZTransfer website for details: http://www.aztransfer.com/home . Consult your advisor and the receiving institution's advisor for applicability to your specific academic goals.

Arizona General Education Curriculum (AGEC)
The Arizona General Education Curriculum (AGEC) icon indicates the course is approved to fulfill one or more AGEC categories.

The AGEC curriculum provides students attending any Arizona public community college with the opportunity to build a general education curriculum that is transferable upon completion without loss of credit to another Arizona public community college or university. The AGEC has three forms - the **AGEC-A** (35 credits), **AGEC-B** (35 credits) and **AGEC-S** (35-37 credits).

Arizona community and tribal colleges are obligated to accept AGEC coursework from another Arizona public community or tribal postsecondary institution. AGEC requirements will be accepted and applied as defined by the source institution.

The only exception will be regarding AGEC coursework where the "special requirements" are embedded (completed by a combination of coursework) as the requirement may not be complete in absence of a completed AGEC. Application of AGEC coursework containing imbedded "special requirements" is up to the discretion of the receiving institution.

The certified CAC **AGEC Certificate** 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. See CAC AGEC Matrix for details on page 60.

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.

Tech Prep/ Programs of Study POS

Tech Prep courses are now 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 means that both courses 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.

ACCOUNTING
(ACC)

ACC100 Fundamentals of Accounting

3 Credits (3 Lectures)
The basics of accounting for a small business with emphasis on recording transactions, posting to the general ledger, preparing financial statements, recording the payroll, accounting for inventory, and accrual accounting. *Prerequisite: RDG094.*

ACC121 Income Tax Fundamentals

3 Credits (3 Lectures)
Theory, rules, and procedures used in preparing federal income tax returns for individuals, corporations, and partnerships both manually and with the use of computer software. *Prerequisite: RDG094.*

ACC201 Financial Accounting

3 Credits (3 Lectures) SUN# *ACC 2201*
Theory and practice of accounting applicable to the accumulation, reporting, and uses of financial information. *Prerequisite: RDG094.*

ACC202 Managerial Accounting

3 Credits (3 Lectures) SUN# *ACC 2202*
Selection and analysis of accounting information for internal organization use by management. *Prerequisite: ACC201.*

ACC222 Payroll Accounting

3 Credits (3 Lectures)
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; CIS120 OR CBA133A OR CBA113A.*

ACC226 Accounting with QuickBooks Pro

3 Credits (3 Lectures)
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.*

ACC227 Accounting with Peachtree Complete

3 Credits (3 Lectures)
Practical application of accounting concepts utilizing all features of Peachtree Complete. *Prerequisite: ACC100 OR ACC201.*

ADMINISTRATION OF JUSTICE (AJS)

AJS101 Introduction to Administration of Justice

3 Credits (3 Lectures) POS
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)
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. *Prerequisites: Currently enrolled in CARLOTA.*

AJS122 Traffic Control

3 Credits (3 Lectures)
Analysis of traffic control, fundamentals of traffic accident investigation and motor vehicle law, including Arizona laws. *Prerequisites: Currently enrolled in CARLOTA.*

AJS123 Ethics and the Administration of Justice

3 Credits (3 Lectures)
Explores ethical issues in the justice system. Focuses on ethics and the law, the police, the courts, and corrections. Reviews ethical theory as it relates to the administration of justice. *Prerequisite: RDG094.*

AJS124 Defense Tactics

3 Credits (2.75 Lectures, 1 Lab)
Physical control of suspects, including handcuffing, search security, baton, come-alongs, and defense tactics. *Prerequisites: Certification of good health and currently enrolled in CARLOTA.*

AJS130 Firearms

3 Credits (2 Lectures, 3 Labs)
Firearm safety, marksmanship, combat shooting, and legal responsibilities. *Prerequisites: Currently enrolled in CARLOTA.*

AJS140 Communications in Law Enforcement

3.5 Credits (3 Lectures, 2 Labs)
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)
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 currently enrolled in CARLOTA.*

AJS210 Constitutional Law

3 Credits (3 Lectures)
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)
History and development of juvenile justice theories, procedures, and institutions. *Prerequisite: AJS101 or SOC100.*

AJS222 Criminalistics

3 Credits (3 Lectures)
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 including modern criminalistic research developments. *Prerequisite: AJS101.*

AJS224 Police Administration

3 Credits (3 Lectures)
Principles of administration, organization and management; responsibilities and interrelationships of administrative and line-and-staff services. Analysis of functional divisions of modern police and correctional operations. *Prerequisite: AJS101.*

AJS225 Criminology

3 Credits (3 Lectures)
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)
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 currently enrolled in CARLOTA.*

AJS240 The Corrections Function

3 Credits (3 Lectures) POS
History and development of correctional theories and institutions. *Prerequisite: AJS101.*

AJS260 Procedural Criminal Law

3 Credits (3 Lectures)
Introduction to procedural criminal law, focusing on court holdings, the procedural requirements, and effect on the daily operations of law enforcement. *Prerequisite: AJS101.*

AJS270 Community Relations

3 Credits (3 Lectures)
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 currently enrolled in CARLOTA.*

AJS275 Criminal Investigations

3 Credits (3 Lectures) POS
Theory of criminal investigation, crime scene procedures, case preparation, interviewing, and basic investigative techniques. *Prerequisite: AJS101 or currently enrolled in CARLOTA.*

AJS295 Internship

3 Credits (Internship)
Internship in the Criminal Justice Field that would 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)
Introductory analysis of the agriculture economy dealing with the principles of economics and marketing of agriculture products.

AGB123 Agriculture Accounting

3 Credits (3 Lectures)
Agriculture accounting principles and practices.

AGB124 Microcomputers in Agriculture

3 Credits (2 Lectures, 3 Labs)
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)
Introduction to farm analysis and decision-making, including financial and physical records.

AGB128 Farm Business Management IB

5 Credits (2 Lectures, 9 Labs)
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)
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.*

AGB213 Introduction to Agricultural Commodity and Food Marketing

3 Credits (3 Lectures)
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. *Prerequisite: RDG094.*

AGB225 Agriculture Business Analysis

3 Credits (3 Lectures)
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)
Refinement of accounting and analysis skills with use of first year records to provide material for comparative analysis, budgeting, and tax planning.

AGB229 Farm Business Management IIB

5 Credits (2 Lectures, 9 Labs)
Processes/procedures enabling cooperator to complete the second financial analysis of his/her farm, which includes income statement, net worth, cash flow, budget projections, and enterprise reports. *Prerequisite: AGB228.*

AGB230 Farm Business Management IIIA

5 Credits (2 Lectures, 9 Labs)
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)
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)
Procedures to enable participants to understand and use payroll computer software in farm business. May be taken two times for credit.

AGB234 Agricultural Leadership Development

3 Credits (3 Lectures)
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)
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) POS
The structure, function, and use of plants in the living world. Scientific experiences relating to the plant kingdom and the plant environment. *Prerequisite: RDG094.*

AGS104 Agricultural Environmental Science

4 Credits (3 Lectures, 3 Labs)
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)
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)
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.

AGS122 Natural Resources and Conservation

3 Credits (3 Lectures)
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)
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 Lectures, 2 Labs)
An introduction to the various careers and industries associated with the environmental science field. Students build industry network relationships. Field trip required. *Corequisite: RDG094.*

AGS204 Environmental Sustainability

3 Credits (3 Lectures)
Understanding the Earth's environment and the important challenges facing humanity, including climate change, pollution, loss of biodiversity, and water shortages. Attend at least one local governmental environmental science forum. *Prerequisite: RDG094.*

AGS221 Soil Science

4 Credits (3 Lectures, 3 Labs)
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)
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)
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)
Students work in agriculture internship placements tailored to the students' academic program, interests, and skills. May be taken two times for credit. Prerequisite: *RDG094, Instructor consent.*

ANIMAL SCIENCE
(ANS)

ANS101 Animal Industry

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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)
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)
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)
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)
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 available. May be taken two times for credit.

ANS195 Careers in Veterinary Science

1 Credit (1 Lecture)
An introduction to the various careers and industries associated with the veterinary science field. Students build industry network relationships. Group field trip required. RDG094 is recommended.

ANS200 Introduction to Equine Science

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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.*

ANTHROPOLOGY
(ASB)

ASB101 Physical Anthropology and Archaeology: Bones, Stones, and Human Evolution

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
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) SUN ART1115
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)
Basic jewelry design and metalwork techniques for the beginner. *Prerequisite: RDG094.*

ART104 Advanced Jewelry and Metalwork

3 Credits (3 Lectures)
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)
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)
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) SUN ART 1111
Introductory study of linear perspective, shading theory, and composition using basic drawing media.

ART108 Intermediate Drawing

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
Exploration of color, composition, techniques, and subject matter in painting media. *Prerequisite: ART201. Recommended: ART101.*

ART203 Life Drawing

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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) ![SUN# ART 1101]
A survey of the history of art from the Prehistoric Era through 1300 CE *Prerequisite: RDG094.*

ART208 Art History II

3 Credits (3 Lectures) ![SUN# ART 1102]
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)
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)
An introductory course in the technology, processes, techniques, and aesthetics of ceramic art. Satisfactory/ Unsatisfactory grading option available. May be taken up to four times for credit. *Prerequisite: ART105.*

ART215 Printmaking

3 Credits (2 Lectures, 3 Labs)
An introduction to methods of producing fine art prints. May be taken up to four times for credit. *Recommended: ART101, ART107.*

ASTRONOMY
(AST)

AST101 Survey of Astronomy

4 Credits (3 Lectures, 3 Labs)
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)
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)
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)
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 available. *Corequisite: RDG094*

BIO100 Biology Concepts

4 Credits (3 Lectures, 3 Labs)
Basic principles and concepts of biology. Exploration of methods of scientific inquiry and behavior of matter and energy in biological systems. *Prerequisite: RDG094.*

BIO156 Human Biology for Allied Health

4 Credits (3 Lectures, 3 Labs)
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)
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) SUN# BIO 1181
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) SUN# BIO 1182
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) SUN# BIO 2201
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: BIO156 or BIO181 or one year of high school biology all of which must have been completed with a grade of "C" or better; and RDG094.*

BIO202 Human Anatomy – Physiology II

4 Credits (3 Lectures, 3 Labs) SUN# BIO 2202
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, RDG094.*

BIO205 Microbiology

4 Credits (3 Lectures, 3 Labs) SUN# BIO 2205
Structure and function of microorganisms and the role they play in the environment and human disease, with emphasis on the medical importance of microbes. Laboratory includes the handling and identification of microorganisms. *Prerequisites: BIO156 or BIO181 or one year of high school biology with a grade of "C" or better; CHM130 or higher or one year of high school chemistry with a grade of "C" or better; and RDG094.*

BUSINESS
(BUS)

BUS100 Introduction to Business

3 Credits (3 Lectures) POS
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
A study of mathematical computations as applied in various business transactions including discounts, interest, payroll, bank reconciliations, and basic business statistics. *Prerequisites: MAT082 or higher; RDG094.*

BUS120 Personal Money Management

3 Credits (3 Lectures) POS

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)

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)

Interpersonal skills necessary for improving supervision and leadership in the workplace through a basic understanding of interactions among people. *Prerequisite: RDG094.*

BUS180 Introduction to Marketing

3 Credits (3 Lectures) POS

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)

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)

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)

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) SUN BUS 2201

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)

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 Credits (.75 Lecture)

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 Credits (.75 Lecture)

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)

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)

Finalizing the business planning activities required for the successful launching of a new venture.

BUS260 Applied Business Seminar

3 Credits (3 Lectures)
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)
SUN# *CHM 1130*
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. *Prerequisites: MAT092, RDG094.*

CHM138 Chemistry for Allied Health

3 Credits (3 Lectures)
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.*

CHM151 General Chemistry I

4 Credits (3 Lectures, 2 Labs, 1 Recitation)
SUN# *CHM 1151*
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. *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)
SUN# *CHM 1152*
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.*

CHM230 Fundamental Organic Chemistry

4 Credits (3 Lectures, 2 Labs, 1 Recitation)
SUN# *CHM2230*
A survey including alkanes, alkenes, alkynes, aromatics, stereoisomerism, organic halogen, compounds, alcohols, ethers, aldehydes, ketones, carboxylic acids, derivatives of carboxylic acids, amines, carbohydrates, lipids, and proteins. Includes one credit of in-person labs. *Prerequisite: CHM130 or CHM151.*

CHM235 General Organic Chemistry I

4 Credits (3 Lectures, 2 Labs, 1 Recitation) SUN# *CHM 2235*
A comprehensive study including the areas of structure and bonding, molecular properties, alkanes, cycloalkanes, stereochemistry, mechanisms for organic reactions, alkenes, alkynes, alkyl halides, conjugated dienes, alcohols, and thiols. Includes one credit of in-person labs. *Prerequisite: CHM152.*

CHM236 General Organic Chemistry II

4 Credits (3 Lectures, 2 Labs, 1 Recitation) SUN# *CHM 2236*
Topics covered are alcohols and thiols, ethers and epoxies, aldehydes and ketones, carboxylic acids and carboxylic acid derivatives, carbohydrates, lipids, amines, amino acids, polymers, the chemistry of benzene, and aromatic character. Includes one credit of in-person labs. *Prerequisite: CHM235.*

CHINESE
(CHI)

CHI101 Elementary Chinese

5 Credits (4 Lectures, 1 Recitation)
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)
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)
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)
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)
Theory and application of plane surveying, including horizontal and vertical measurements, differential leveling, topographic mapping and construction staking, and grade staking skills including percent, ratio, stake reading, hubs and lath, grade transfers, offsets, laser use, and ground safety. *Corequisite: MAT101 or higher.*

COMMUNICATIONS (COM)

COM100 Fundamentals of Human Communication

3 Credits (3 Lectures) SUN# COM 1100
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)
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)
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)
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)
Basic concepts, principles, and skills for improving communication between persons from different minority, racial, ethnic, and cultural backgrounds. *Prerequisite: RDG094.*

COMMUNITY PUBLIC HEALTH (CPH)

CPH100 Introduction to Public Health

Introducton 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.*

COMPUTER BUSINESS APPLICATIONS (CBA)

CBA102A Workshop for MS Word – Introduction

.5 Credit (.5 Lecture)
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)
Introduction to microcomputers, Microsoft Windows operating system, Microsoft programs and accessories, and Internet Explorer.

CBA110C MS Windows Basics

1 Credit (3 Labs)
Introduction to Microsoft Windows operating system, programs, and file management.

CBA111A Internet Explorer

1 Credit (3 Labs)
An introduction to the Internet using Internet Explorer. *Prerequisites: Basic Windows and file management knowledge.*

CBA112A MS Word – Basic

1 Credit (3 Labs) POS
Introduction to Microsoft Word covering the basics of creating business documents. *Prerequisites: Basic Windows and file management knowledge.*

CBA112B MS Word – Intermediate

1 Credit (3 Labs) POS
Create illustrated, merged, and multi-paged documents and web pages in MS Word. *Prerequisites: CBA112A and Basic Windows and file management knowledge.*

CBA112C MS Word – Advanced

1 Credit (3 Labs)
Create spectacular graphics, usable forms, and colorful charts. Explore collaboration features that make working with a group easy. Discover how macros make quick work of repetitive tasks. *Prerequisite: CBA112B.*

CBA113A MS Excel – Basic

1 Credit (3 Labs) POS
Introduction to MS Excel covering basic spreadsheets and charts. *Prerequisites: Basic Windows and file management knowledge.*

CBA113B MS Excel – Intermediate

1 Credit (3 Labs) POS
Use MS Office Excel to manage data, create and use lists, enhance charts and worksheets, and create and use macros. *Prerequisite: CBA113A.*

CBA113C MS Excel – Advanced

1 Credit (3 Labs)
Use what-if analysis, PivotTables and programming in MS Excel to solve business problems. *Prerequisite: CBA113B.*

CBA114A MS Access – Basic

1 Credit (3 Labs) POS
Introduction to MS Access and database basics. *Prerequisites: Basic Windows and file management knowledge.*

CBA114B MS Access – Intermediate

1 Credit (3 Labs)
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)
Create advanced queries, reports, macros, and modules, and manage a database and its objects in MS Access. *Prerequisite: CBA114B.*

CBA115 MS Office Integration

1 Credit (3 Labs)
Importing and exporting files, objects, and data between MS Office programs. *Prerequisites: CBA112C, CBA113C, CBA114C.*

CBA116A MS PowerPoint – Basic

1 Credit (3 Labs) POS
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
Professional delivery of presentations, advanced graphics, tables, charts, and templates. *Prerequisite: CBA116A.*

CBA117A MS Publisher – Basic

1 Credit (3 Labs) POS
Create simple publications using MS Publisher. *Prerequisites: Basic Windows and file management knowledge.*

CBA117B MS Publisher – Intermediate

1 Credit (3 Labs) POS
Create customized publications, business forms, tables, and web pages using MS Publisher. *Prerequisite: CBA117A.*

CBA118 MS Outlook

1 Credit (1 Lecture) POS

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)

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)

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)

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)

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.*

CBA134A Database Management in Access

3 Credits (2 Lectures, 3 Labs)

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)

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)

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 available. *Prerequisite: CIS120.*

CBA211 JavaScript Programming

3 Credits (2 Lectures, 3 Labs)

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 available. *Prerequisites: CIS120, CBA210.*

CBA212 Adobe Flash Animation

3 Credits (2 Lectures, 3 Labs)

Production of high impact web animation, such as animated logo, navigation controls, long-form animation, and web applications. Satisfactory/Unsatisfactory grading option available. *Prerequisites: CIS120, CBA210.*

COMPUTER INFORMATION SYSTEMS (CIS)

CIS110 Fundamentals of Computer Literacy

3 Credits (2 Lectures, 3 Labs) POS

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 RDG 091.*

CIS111 Introduction to the Internet

2 Credits (2 Lectures)
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)
Design and build web pages using HTML/XHTML and cascading style sheets.

CIS120 Survey of Computer Information Systems

3 Credits (2 Lectures, 3 Labs) *CIS1120*
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)
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)
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)
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)
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 available. *Prerequisite: CIS121.*

CIS150 Windows Server

3 Credits (2 Lectures, 3 Labs)
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 available. *Prerequisites: CIS120, CIS121.*

CIS152 Network Infrastructure

3 Credits (2 Lectures, 3 Labs)
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 available. *Prerequisite: CIS150.*

CIS153 Network Security

3 Credits (2 Lectures, 3 Labs)
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 available. *Prerequisite: CIS152.*

CIS157 Computer Forensics and Investigation

3 Credits (2 Lectures, 3 Labs)
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 available. *Prerequisites: CIS120, CIS121.*

CIS181 C#.NET

4 Credits (3 Lectures, 3 Labs)
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 available. *Prerequisite: CIS123.*

CIS213 Linux Server

3 Credits (2 Lectures, 3 Labs)
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 available. *Prerequisite: CIS150.*

CIS214 Application Development in Excel

3 Credits (2 Lectures, 3 Labs)
Application development in Microsoft Excel focusing on the programming behind developing spreadsheet applications with Microsoft Excel. Covers VBA fundamentals early on and explores spreadsheets in great detail, including an enhanced review of macros in an Excel application. Satisfactory/ Unsatisfactory grading option available. *Prerequisites: CIS120, CBA133A.*

CIS215 CISCO Routers

3 Credits (2 Lectures, 3 Labs)
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)
Thorough coverage of class construction, inheritance, Applets Exception Handling, String Buffer class, and Swing objects-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 available. *Prerequisite: CIS123.*

CIS217 Application Development in Access

3 Credits (2 Lectures, 3 Labs)
Application development in Microsoft Access focusing on the programming behind developing database applications. Covers VBA fundamentals, data access pages, and an enhanced review of tables, queries, forms, and reports. Satisfactory/ Unsatisfactory grading option available. *Prerequisites: CIS120, CBA134A.*

CIS218 C++ Programming

4 Credits (3 Lectures, 3 Labs)
Comprehensive coverage of C++ programming and data structure topics through a problem-solving approach. May lead to IBM Developer Certification. Satisfactory/Unsatisfactory grading option available. *Prerequisite: CIS123.*

CIS219 Exchange Server

3 Credits (2 Lectures, 3 Labs)
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 available. *Prerequisite: CIS152.*

CIS233 Web Application Development Using PHP

3 Credits (2 Lectures, 3 Labs)
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)
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)
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.*

COUNSELING/PERSONAL DEVELOPMENT (CPD)

CPD101 Orientation to Student Development

1 Credit (1 Lecture)
Exploration of campus, college, academic resources for student success, and development of the characteristics and strategies of lifelong learning. Satisfactory/Unsatisfactory grading option available. *Recommended for students in the first-semester of college or transferring from another institution.*

CPD110 Orientation to College

3 Credits (3Lectures)
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)
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 available. *Corequisite: RDG094.*

CPD125 Portfolio of Prior Learning

2 Credits (2 Lectures)
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)
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)
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.

CULINARY ARTS (CUL)

CUL105 Food Safety Foundations

1 Credit (1 Lecture) POS
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.*

CUL110 Asian Cuisine

1 Credit (1 Lecture)
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)
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)
 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)
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)
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
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)
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
Basic principles and techniques required for the commercial preparation of bakery products, including yeast-leavened breads, pies, tarts, quick breads, cookies, and cakes. *Prerequisites: MAT082 or higher, RDG094.*

CUL161 Cake Decorating

1 Credit (.75 Lecture, 1 Lab)
The art of cake decorating: baking cakes in a variety of forms; preparing basic butter cream frosting and fondant; learning to work with pastry bag, tips, and colors to decorate special occasion cakes. May be taken three times for credit.

CUL162 Cakes, Fillings, and Frostings

1 Credit (.75 Lecture, 1 Lab)
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)
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 via a digital photograph for critique.

CUL168 Introduction to Food Photography

1 Credit (1 Lecture)
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 via a digital photograph for critique.

CUL170 Dining and Beverage Operations

2 Credits (2 Lectures) POS
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)
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 styles of catering. *Corequisite: RDG094.*

CUL205 HACCP Principles

1 Credit (1 Lecture)
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)
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. *Prerequisite: CUL130.*

CUL260 Baking and Pastry II

3 Credits (1 Lecture, 6 Labs)
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 17 hours of supervised catering events outside of class. *Prerequisite: CUL160 OR HRM250.*

CUL261 Advanced Cake Decorating

1 Credit (1 Lecture)
Advanced cake decorating class focusing on the techniques of working with fondant, royal icing, and forming flowers with gum paste. Satisfactory/Unsatisfactory grading option available. May be taken more than four times for credit.

CUL263 Everything Chocolate

1 Credit (1 Lecture)
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.

CUL290 Commercial Cooking Practicum

2 Credits (Practicum – 90 Hours)
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)
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: Preceptor consent.*

DANCE (DAN)

DAN130 Introduction to Ballroom, Latin, and Swing Dance

1 Credit (3 Labs)
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)
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)
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)
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)
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 or instructor consent.*

DMS130 Sonography Physics and Instrumentation I

2 Credits (2 Lectures)
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 well being; bioeffects and risks. *Prerequisite: DMS cohort student or instructor consent.*

DMS131 Physics and Instrumentation Lab

1 Credit (3 Labs)
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 or instructor consent. Corequisite: DMS130.*

DMS132 Abdominal Imaging I

3 Credits (3 Lectures)
Introduction to Diagnostic Medical Sonography and Abdominal scanning including physiology, pathology, terminology, anatomy, and techniques. *Prerequisite: DMS cohort student or instructor consent.*

DMS133 Abdominal Imaging Lab

1 Credit (3 Labs)
Laboratory course designed to augment the didactic information presented in Abdominal Imaging (DMS 132). 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 or instructor consent.*

DMS135 Small Parts Imaging

1 Credit (1 Lecture)
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 or instructor consent.*

DMS140 Sonographic OB/GYN Imaging

2 Credits (2 Lectures)
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 or instructor consent.*

DMS149 Pathology for Medical Imaging

3 Credits (3 Lectures)
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 or instructor consent.*

DMS150 Clinical Sonography Practicum I

2 Credits (Practicum - 180 Hours)
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 or instructor consent; current CPR.*

DMS151 Clinical Sonography Practicum II

3 Credits (Practicum - 270 Hours)
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 or instructor consent.*

DMS152 Clinical Sonography Practicum III

4 Credits (Practicum - 360 Hours)
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 or instructor consent. Corequisite: DMS151.*

DMS154 Abdominal Imaging II

2 Credits (2 Lectures)
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 or instructor consent.*

DMS158 Sonography Case Studies I

1 Credit (1 Lecture)
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 or instructor consent.*

DMS159 Sonography Case Studies II

2 Credits (2 Lectures)
Case Studies II focuses on increasing students' sonographic critical thinking skills using more complex patient pathology. *Prerequisite: DMS cohort student or instructor consent.*

DMS234 Sonography Physics and Instrumentation II

2 Credits (2 Lectures)
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 or instructor consent.*

DMS242 High Risk OB/GYN Imaging

2 Credits (2 Lectures)
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 or instructor consent.*

DMS254 Clinical Sonography Practicum IV

4 Credits (Practicum - 360 Hours)
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 or instructor consent.*

DMS255 Clinical Sonography Practicum V

4 Credits (Practicum - 360 Hours)
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 abdomen, pelvis, obstetrics, small parts, vascular imaging, interventional, and other studies in the clinical setting. *Prerequisite: DMS cohort student or instructor consent.*

DMS256 Clinical Sonography Practicum VI

4 Credits (Practicum - 360 Hours)
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 or instructor consent.*

DMS259 Sonography Case Studies III

2 Credits (2 Lectures)
Case Studies III focuses on students presenting cases of the complexity and caliber expected of an entry level sonographer. *Prerequisite: DMS cohort student or instructor consent.*

DMS260 OB/GYN Sonography Lab

1 Credit (3 Labs)
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 or instructor consent. Corequisite: DMS242.*

DMS271 Concepts of Vascular Imaging

2 Credits (2 Lectures)
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 or instructor consent.*

DMS272 Vascular Imaging Lab

1 Credit (3 Labs)
Vascular applications of sonography in the cerebrovascular, abdominal, arterial and venous systems of the body in a lab setting. *Prerequisite: DMS cohort student or instructor consent.*

DMS273 Advanced Sonography Applications

3 Credits (3 Lectures)
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 or instructor consent.*

DMS280 Physics and Instrumentation Review

1 Credit (1 Lecture)
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 instructor consent.*

DMS281 Abdominal Imaging Review

1 Credit (1 Lecture)
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 instructor consent.*

DMS282 OB/GYN Review

1 Credit (1 Lecture)
Review of sonography in obstetrics and gynecology (OB/GYN), including normal, abnormal, pathology of the non gravid and gravid female pelvis per ARDMS examination content specifications. *Prerequisite: DMS cohort student or instructor consent.*

DMS289 Vascular Technology RVT Review

1 Credit (1 Lecture)
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 available. *Prerequisite: Instructor consent.*

DMS290 Sonography Capstone Seminar

2 Credits (2 Lectures)
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 or instructor consent.*

DIESEL/HEAVY EQUIPMENT (DIE)

DIE110 Introduction to Diesel Engines and Fuel Systems

3 Credits (3 Lectures)
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/ Electronics

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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)
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)

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)

An exploration of employer expectations, economic factors related to the success of a business, and ethical workplace behavior for employees 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)

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)
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)
Theory of operation, diagnostic procedures, service and repair techniques, with safety stressed, related to chassis and drive trains used in heavy equipment and truck applications, emphasizing 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)
Career advancement study that will allow the 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)
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)

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 Lectures, 6 Labs)
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)
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)
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)
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)
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)
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)
Career advancement study that will allow the students to obtain college credit for hands-on work experience.
Prerequisite: DIE196.

DRAFTING (DFT)

DFT127 Autocad I

3 Credits (2 Lectures, 3 Labs) POS
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
Advanced Autocad two-dimensional applications and techniques. *Prerequisite: DFT127 or instructor consent.*

DFT130 Advanced Computer Aided Drafting Applications

1 Credit (1 Lecture)
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.*

DFT131 Autocad III

3 Credits (2 Lectures, 3 Labs)
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)

ECE116 Guiding and Observing Children

3 Credits (3 Lectures)
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)
Positive guidance and discipline techniques for family childcare providers that encourage self-discipline and enhance a positive self-image of children ages 0 - 12. Course has a bilingual component as an option and supplement.

ECE119 Making Learning Visible Through Documentation

1 Credit (1 Lecture)
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)
Procedures and practices designed to protect the health of young children in early childhood programs, with emphasis on the development of lifelong health habits and attitudes..

ECE120D Ensuring a Safe Environment for Children

1 Credit (1 Lecture)
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
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. Course has a bilingual component as an option and supplement.

ECE122 Safety for Family Childcare

1 Credit (1 Lecture) POS
Practices and procedures to use when providing for the safety of children in family childcare programs. Course has a bilingual component as an option and supplement.

ECE123 Nutrition for Family Childcare

1 Credit (1 Lecture) POS
Introduction to nutrition with emphasis on methods of planning and implementing nutrition education and experiences in family childcare programs. Course has a bilingual component as an option and supplement.

ECE124 Active Learning in Math and Science

3 Credits (3 Lectures)
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)
Introduction to nutrition, emphasizing methods of planning and implementing nutrition education and experiences in the early childhood settings.

ECE128A Environments for Infants and Toddlers

1 Credit (1 Lecture)
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)
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)
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)
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)
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

Ages and stages of children ages 0 to 12, emphasizing the principles of physical, social, emotional and intellectual growth. Course has a bilingual component as an option and supplement.

ECE183 Curriculum and Learning Materials for Infants

1 Credit (1 Lecture)

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)

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)

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)

Plan, develop, implement and evaluate health, safety, and food services for early childhood programs.

ECE221 ECE Program Financial Management

3 Credits (3 Lectures)

Plan, develop, and implement an accounting and financial system for an early childhood program.

ECE222 Managing and Evaluating ECE Programs

3 Credits (3 Lectures)

Management and evaluation skills necessary to effectively operate a quality early childhood program.

ECE223 Planning and Promoting an ECE Program

3 Credits (3 Lectures)

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)

Personnel management in an early childhood program, including staffing, supervision, and evaluation.

ECE225A Encouraging Self-Discipline in School-Age Children

1 Credit (1 Lecture)

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)

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)

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 program.

ECE227B Guidance and Discipline of Infants and Toddlers

1 Credit (1 Lecture)

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)
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)
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)
Preparation and compilation of a professional portfolio to be used for assessment (CDA credential), employment, and educational opportunities. This course is intended to be last course taken toward certificate completion. *Prerequisite: Instructor consent.*

ECE248 Early Childhood Program Philosophies

1 Credit (1 Lecture)
Examination of a variety of Early Childhood Program philosophies culminating in the development of a personal program philosophy.

ECE250 Professionalism

1 Credit (1 Lecture)
Professionalism in the early childhood field, including a history of the profession, advocacy of ethical behavior, and commitment to professional growth.

ECE254 Emergent Language and Literacy

3 Credits (3 Lectures)
Understanding, assessing, and enhancing language and literacy development for the young child.

ECE255 Communications for Family Childcare

3 Credits (3 Lectures)
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. Course has a bilingual component as an option and supplement.

ECE256 Math for School-Agers

1 Credit (1 Lecture)
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)
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. Course has a bilingual component as an option and supplement.

ECE271 Creating Early Childhood Environments

3 Credits (3 Lectures)
Methods of establishing an age-appropriate learning environment, incorporating indoor, outdoor, and community aspects. Design and implementation of schedules, lesson plans, and transitions designed to meet the needs of young children in a variety of early childhood settings.

ECE272 Family Childcare Environments

3 Credits (3 Lectures)
Creating age-appropriate learning environments, incorporating indoor, outdoor, and community aspects for family childcare. Implementation of schedules, lesson plans, and transitions designed to meet the needs of all children in a family childcare setting. Course has a bilingual component as an option and supplement.

ECE276 Child Development

3 Credits (3 Lectures) [a]
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)
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)
Plan and implement a developmentally appropriate curriculum for all children in family childcare. Methods of collecting and organizing curriculum resources. Course has a bilingual component as an option and supplement.

ECE280 Inclusion of Children with Special Needs

3 Credits (3 Lectures)
The concepts of quality inclusion of children with special needs, including information on laws governing services to children with disabilities, knowledge of individualized plans, a review of 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)
Methods of developing effective communication skills to involve parents in the early childhood program. Building an awareness of diverse family values and implementing a diverse curriculum. Skills to help parents and staff work together to understand the child's needs.

ECONOMICS
(ECN)

ECN200 Contemporary Economic Issues

3 Credits (3 Lectures)
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) SUN# *ECN 2201*
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) SUN# *ECN 2202*
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.*

EDUCATION
(EDU)

EDU101 Tutor Certification I

2 Credits (1 Lecture, 3 Labs)
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)
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)
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) POS
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) ⭐
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) 🔄
An introduction to preK-12 classroom settings and the relationships between teachers and their students. Focus on class management and developing positive and appropriate individual relationships with students. *Prerequisite: RDG094.*

EDU228 Behavior Management

3 Credits (3 Lectures)
Individual student and group management in K-12 classrooms, using proactive strategies. *Prerequisite: RDG094.*

EDU230 Cultural Values in Education

3 Credits (3 Lectures) ⭐
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)
A study of education from an international perspective, including the culturally-based formation of the child's self-concept and learning styles, an 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)
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.*

EDU250 Structured English Immersion II

3 Credits (3 Lectures)
Structured English Immersion for Teachers and Administrators who are working in the K-12 school system, "the completion 45 hours." *Prerequisites: RDG094 and 15-hour Arizona Department of Education Approved Structured English Immersion Workshop or EDU240 or equivalent.*

EDU270 Education Through Drama in the Elementary Classroom

3 Credits (3 Lectures)
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)
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)
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 MAT 121 (ASSET Algebra score of 46 or higher OR COMPASS College Algebra score of 21 or higher).*

ELC128 Introduction to Programmable Logic Controllers

3 Credits (2 Lectures, 3 Labs)
Principles and applications of programmable logic controls (PLCs) including numbering systems, control strategies, and ladder logic. *Prerequisite: ELC122.*

ELC200 Radio Frequency RF/High Vacuum HV

3 Credits (2 Lectures, 3 Labs)
High vacuum and plasma systems to manufacture semiconductor devices, processing foods, surface hardening, compact disk production, and film deposition. *Prerequisite: instructor consent; Second Year Level student.*

ELC201 Solar Photo Voltaic I

3 Credits (2 Lectures, 3 Labs)
Basic principles of photovoltaic (PV) or solar energy, including PV fundamentals, components, system sizing, troubleshooting strategies, and safety hazards. Completion prepares students to take the North American Board of Energy Practitioners (NABCEP) PV Entry Level Examination.

ELC202 Solar Photo Voltaic II

3 Credits (2 Lectures, 3 Labs)
Advanced principles of Solar Photo Voltaic (PV), including site surveys, SolarPV component size, analysis, and creation of a customized system. Completion prepares students to take the second NABCEP PV Level Examination. *Prerequisite: ELC201 and MAT092 or MAT111 with a grade of "C" or higher or placement into MAT 121 (ASSET Algebra score of 46 or higher OR COMPASS College Algebra score of 21 or higher).*

ELC220 Active Circuits

3 Credits (2 Lectures, 3 Labs)
Basic semiconductor devices (transistors, diodes and Op-Amps) and circuit simulation software. *Prerequisite: ELC124.*

ELC221 Control Devices

3 Credits (2 Lectures, 3 Labs)
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)
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)
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, ELC220.*

ELC228 Advanced Programmable Logic Controllers

3 Credits (2 Lectures, 3 Labs)
Advanced principles and applications of programmable logic controls (PLCs). Advanced programming using math function blocks, bit manipulation blocks, and subroutines. Networking of PLCs and HMI devices will also be introduced. *Prerequisite: ELC128.*

ELC251 Instrumentation

3 Credits (2 Lectures, 3 Labs)
Alternative energy fields equipment usage, measurements, and calculations.

ELECTRONICS
(ELT)

ELT128 FPGA Fundamentals

3 Credits (2 Lectures, 3 Labs)
Theory and application of inverters, AND, OR, NAND and NOR gates, flip-flops, counters, timers, and registers using Field Programmable Gate Arrays (FPGAs).

ELT130 Computer Upgrades and Operating Systems I

3 Credits (2 Lectures, 3 Labs)
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)
Microcontroller theory and operation, assembly and High level programming, and interfacing. *Prerequisite: ELT128.*

ELT260 Advanced FPGA Concepts

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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
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 healthcare to patients in a wide variety of settings, including in-hospital and out-of-hospital. For certified or non-certified, licensed or non-licensed healthcare professionals. Satisfactory/Unsatisfactory grading 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)
A course to train a lay person to provide care for patients suffering sudden illness or injury. Focus is on providing immediate care until EMS personnel arrive. Intent is to fulfill OSHA, specific business or industry job requirements. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

EMS123 First Responder

3 Credits (3 Lectures) POS
A comprehensive course to train a lay person to provide first response care for patients suffering sudden illness or injury. For members of law enforcement agencies, industry, and the private sector.

EMS125 Emergency Medical Technician

8 Credits (7 Lectures, 2 Labs, .5 Practicum) POS
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. New skills have been added to 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, Immunization records for TB, MMR and Tetanus, Age 18 or older, and current CPR Healthcare Provider card.*

EMS190 Pediatric Education for Prehospital Providers

1 Credit (1 Lecture)
An interactive, scenario-based course designed for certified Emergency Medical Technicians (EMTs) who practice in the field. Enables providers to perform a rapid assessment of sick and injured children in a variety of circumstances and in accordance with recommendation of the American Academy of Pediatrics (AAOP). *Prerequisite. Advanced Life Support Provider (ALS)-IEMT, Paramedic, Nurse, or MD.*

EMS191 Neonatal Resuscitation Program

1 Credit (1 Lecture)
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. May be taken two times for credit. *Prerequisite: EMS125 or equivalent.*

EMS200 Basic EMT Refresher

2 Credits (2 Lectures)
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 the student for State recertification and NREMT reregistration. May be taken two times for credit. *Prerequisites: Current basic EMT and CPR certifications.*

EMS201 Basic EMT Renewal Challenge

.5 Credit (.5 Lecture)
Designed to support the Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (B-EMS) 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 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 total)
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. 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)
Designed to acquaint all levels of emergency care providers with basic electrocardiographic (ECG) rhythm analysis and interpretation and related care in a clinical and prehospital setting. *Prerequisite: EMS125 or division chair consent.*

EMS236 Pharmacology in an Emergency Setting

3 Credits (3 Lectures)
Designed for the Emergency Medical Technician dealing with the administration of emergency medications in the field as outlined in current paramedic legislation. Indepth 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 Credits (1 Lectures)
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 prehospital. Course may be repeated for recertification. *Prerequisites: 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)
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. 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)
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 U.S. 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 Prehospital Trauma Management/ PHTLS

1 Credits (1 Lecture)
Designed to instruct prehospital care personnel in the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances basic emergency medical technology (EMT) skills by focusing on emergency care interventions 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)
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. *Prerequisites: 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)
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. Emphasis on 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)
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. Emphasis is on 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)
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. Emphasis on 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 Practicums)
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 Practicums)
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. Emphasis is on 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)
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 PEPP, ACLS.*

ENGINEERING
(EGR)

EGR090 STEM Learning Success

1 Credit (1 Lecture)
Learning how to learn through effective time and stress management, 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)
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
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. Recommended: MAT162.*

EGR105 Beginning MATLAB Programming

2 Credits (2 Lectures)
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)
A continuation of EGR105 covering the design of problem-solving algorithms and their application to scientific and engineering solutions. *Prerequisites: EGR105, MAT187.*

EGR116 Introduction to Python Programming

2 Credits (2 Lectures)
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)
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; PHY111 OR PHY121.*

ENGLISH
(ENG)

ENG090 English Composition I

3 Credits (3 Lectures)
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)
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. *Prerequisite: Appropriate writing assessment score.*

ENG095 Writing Center

1 Credit (3 Labs)
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)
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 placement test score.*

ENG100A English Composition II for English Language Learners

3 Credits (3 Lectures)
An introduction to academic writing for English Language Learner students. Emphasis on generating ideas, expressing those ideas in essay form, and using one's writings 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) SUN# *ENG 1101*
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, RDG094.*

ENG102 English Composition IV

3 Credits (3 Lectures) SUN# *ENG 1102*
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)
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, RDG091.*

ENG200 Introduction to Creative Writing

3 Credits (3 Lectures)
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)
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)
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)
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)
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 more than four times for credit. *Prerequisite: Pretest to determine existing skill level.*

ENTERTAINMENT INDUSTRY TECHNOLOGY (EIT)

EIT100 History of Rock n' Roll

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
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)
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)
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 times for credit.

EIT171 Songwriting I

3 Credits (2 Lectures, 3 Labs)
An introduction to the basics of song writing. Topics include lyrics, rhythmic, melodic, and harmonic development, form, and emotional content. *Prerequisite: MTC100.*

EIT203 Entertainment Capstone Project

2 Credits (6 Labs)
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 track with a grade of "C" or better in each course.*

EIT221 Entertainment Marketing and Promotion

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
An in-depth study of concert lighting to include full lighting design and lighting instrument hang 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)
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)
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)
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)
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

3 Credits (2 Lectures, 3 Labs)
A continuation of songwriting I, advanced songwriting techniques includes: 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)
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 class.*

ENVIRONMENTAL SCIENCE (ENV)

ENV101 Environmental Science

4 Credits (3 Lectures, 3 Labs)
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
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.

FSC108 Fundamentals of Fire Prevention

3 Credits (3 Lectures)
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, includes techniques, procedures, regulations, and enforcement. Also includes discussion of hazards in ordinary and special occupancies. Field trips and lectures from industry experts included.

FSC111 Emergency Driver Operator

2 Credits (1 Lecture, 3 Labs)
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. Includes hands-on training in an emergency vehicle, trouble shooting apparatus, foam equipment and systems, and apparatus testing. *Prerequisites: FSC117 and FSC118.*

FSC117 Fire Apparatus and Equipment

3 Credits (3 Lectures)
Principles of care, maintenance, and operation of fire apparatus and pumps. Includes pump construction and accessories, pumping techniques, power development, and transmission. Driving, troubleshooting and producing effective fire streams.

FSC118 Fire Hydraulics

3 Credits (3 Lectures)
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)
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)
The basic uses of rope rescue equipment to the standards of the State of Arizona for Rope 1. *Prerequisite: Students must be affiliated with a fire service public safety agency. Students sponsored by agencies are required to provide their own equipment.*

FSC129 Hazardous Materials First Responder Operations

3 Credits (3 Lectures) POS
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, and basic tactical information relating to scene management. Confined space operations in accordance with the National Fire Protection Agency Association.

FSC130 Fitness for Firefighters/CPAT

1.5 Credits (1.5 Lectures) POS
Skills and abilities required for entry level position in the fire service including physical ability and stamina. Opportunity to take the International Association of Fire Fighters (IAFF) Candidate Physical Ability Test (CPAT) at the end of the course. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

FSC134 Fitness and Conditioning for Firefighters

3 Credits (3 Lectures)
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) POS

Introductory fire science course primarily designed for the fire department recruit. Includes firefighting skills, equipment, and administrative policies, fire department operations, personnel policies, and International Fire Service Accreditation Congress Practical Skills Testing. *Prerequisites: 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

This Basic-level course is for individuals with little or no experience in the wildland environment. Preparation for performing as a beginning-level wildland firefighter with an organized fire department engine or hand crew. Training will allow students to identify human and environmental factors and indicators of hazardous fire conditions, and how to use these factors and indicators when implementing the Risk Management Process. This course encompasses the National Wildfire Coordinating Group content: S130, S190, S133, S134 and L180. *Prerequisite: FSC129 or Program Director's consent.*

FSC181 NWCG Advanced Firefighter Training, S-131

.5 Credit (.5 Lecture)

Advanced firefighter training. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: FSC130.*

FSC182 NWCG Portable Pumps and Water Use, S-211

1 Credit (1 Lecture)

Combined self-paced/field exercise format providing training for a portable water pump operator. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available.

FSC183 NWCG Wildland Power Saws, S-212

1.5 Credits (1.5 Lectures)

Skill course designed to instruct prospective chain saw operators in the requirements of the wildfire power saw operator position. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available.

FSC184 NWCG Supervisory Concepts and Techniques, S-281 (L-281)

1 Credit (1 Lecture)

Instruction in basic supervision applicable to the single resource boss in the Incident Command System (ICS) and nonoperations first-level supervisors. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available.

FSC185 NWCG Basic Incident Command System, I-200

1 Credit (1 Lecture)

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. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: FSC180.*

FSC186 NWCG Crew Boss (Single Resource), S-230

1.5 Credits (1.5 Lectures)

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. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: NWCG S-131 OR FSC181.*

FSC187 NWCG Engine Boss (Single Resource), S-231

.5 Credit (.5 Lecture)

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. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: NWCG S-131 OR FSC181.*

FSC188 NWCG Ignition Operations, S-234

2 Credits (2 Lectures)

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. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: NWCG S-290 OR FSC191.*

FSC189 NWCG Interagency Incident Business Management, S-260

1 Credit (1 Lecture)
Instruction to meet the general training needs of all positions for which an understanding of interagency incident business management is required. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available.

FSC190 NWCG Basic Air Operations, S-270

1 Credit (1 Lecture)
Instruction that covers 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 one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: NWCG S-131 OR FSC181.*

FSC191 NWCG Intermediate Wildland Fire Behavior, S-290

2 Credits (2 Lectures)
Instruction to develop and prepare prospective supervisors to undertake safe and effective fire management operations. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/Unsatisfactory grading option available. *Prerequisite: NWCG 130/190 OR FSC180.*

FSC192 Initial Attack Incident Commander

1 Credits (1 Lecture)
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 Credits (1 Lecture)
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)
Administrative and personnel methods applied to fire safety, department organization, and personnel management. Includes fire service planning and relationships with other city departments.

FSC203 Fire Operations in the Wildland/Urban Interface

2 Credits (2 Lectures)
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)
Methods of coordinating personnel, equipment, and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fire. Includes simulation exercises. *Prerequisite: FSC140.*

FSC204A Regional Incident Command/Mutual Aid Training

4 Credits (4 Lectures)
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. This course is designed for rural Pinal County fire agencies. *Prerequisite: FSC140 or equivalent, or three years of firefighter experience.*

FSC205 Command Strategies for Major Emergencies

4 Credits (4 Lectures)
Methods of managing major emergency incidents including multiple alarm structural fires, high-rise fires, major brush fires, complex hazardous materials incidents, and multi-casualty medical incidents. Management of incidents requiring the commitment of resources based on transitional situations and managing the interaction between numerous agencies to achieve control is employed utilizing simulated exercises. *Prerequisite: FSC204 (or equivalent) or instructor consent.*

FSC208 Firefighter Safety and Building Construction

3 Credits (3 Lectures)
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 and Determination

3 Credits (3 Lectures)
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)
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 mirrors the National Fire Academy Leadership I, II, and III courses taught by the AZ State Fire Marshal. This course is required for IFSAC certification as a Fire Officer I. *Prerequisite: FSC202.*

FSC238 Vehicular Extrication and Victim Stabilization

2 Credits (2 Lectures)
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, hazardous materials incidents, integration of local emergency medical services (EMS) for patient assessment and management, and standard operating procedures to selected victim scenarios. *Prerequisites: Basic EMT certification or equivalent, nurse with emergency department, and EMS Department consent.*

FSC250 Ladder Company Officer

1 Credit (1 Lecture)
Overview of all aspects of ladder company operations including activities, expectations, and responsibilities required of the ladder captain. Designed for the company officer who aspires to the role of ladder company officer.

FSC252 Engine Company Officer

1 Credit (1 Lecture)
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. Designed for the aspiring company officer or anyone having the opportunity for the role of a company officer. *Prerequisite: Firefighter, either volunteer or paid.*

FSC255 Fire Instructor I

3 Credits (3 Lectures)
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. This course meets the requirements set forth in the National Fire Protection Association (NFPA) 1041 standard. *Prerequisite: FSC140 or Program Director consent.*

FSC256 Fire and Emergency Services Instructor Level II

1.5 Credits (1.5 Lectures)
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; and organize and plan the supervisory/administrative components of instruction. Satisfactory/Unsatisfactory grading option available. *Prerequisite: FSC255.*

FRENCH
(FRE)

FRE101 Elementary French I

4 Credits (4 Lectures, 1 Lab) SUN *FRE 1101*
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) SUN *FRE1102*
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) SUN *FRE2201*
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) SUN *FRE2202*
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)
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. May be taken more than four times for credit. *Prerequisite: Pretest to determine existing skill level*

GEOGRAPHY
(GEO)

GEO101 Introduction to Cultural and Historical Geography

3 Credits (3 Lectures)
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.*

GEOLOGY
(GLG)

GLG101 Physical Geology

4 Credits (3 Lectures, 3 Labs) SUN *GLG 1101*
Basic principles of geology. Earth materials, external processes, internal processes, mineral and energy resources, and planetary geology. *Prerequisites: MAT092, RDG094.*

GLG102 Historical Geology

4 Credits (3 Lectures, 3 Labs)
Rocks, fossils, organic evolution, geologic time, plate tectonics, earth's origin, and the major time periods of earth history. *Prerequisites: MAT092, RDG094.*

GLG110 Environmental Geology

4 Credits (3 Lectures, 3 Labs)
Geological studies as they apply to interactions between humans and the Earth, including geologic processes and hazards, resources, and global change. *Prerequisites: MAT092, RDG094.*

HEALTH CAREERS CENTER (HCC)

HCC100 Introduction to Healthcare

3 Credits (3 Lectures) POS
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)
Study of medical terminology and its application to assigned body systems. *Prerequisite: RDG094.*

HCC110B Medical Terminology B

3 Credits (3 Lectures)
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
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
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)
Mathematical concepts and dosage calculations required in a variety of health occupations. *Prerequisites: MAT082, RDG094.*

HCC116 Medical Terminology Accelerated

3 Credits (3 Lectures) POS
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)
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)
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)
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)
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)
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: HCC116.*

HIM139 ICD Coding - Procedures and ICD-10

2 Credits (1 Lecture, 3 Labs)
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, HCC116.*

HIM158 CPT Coding

3 Credits (3 Lectures)
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)
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)
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 – Professional Coder

4 Credits (12 Labs)
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)
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)
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, MAT101 or higher.*

HIM208 Advanced Coding

2 Credits (2 Lectures)
Continued study in intermediate coding concepts advances student skill training using all coding methodologies. Students perform coding functions using real life medical records and both the manual system and an encoder/grouper. *Prerequisite: HIM200. Corequisite: HIM205.*

HIM210 Supervision and Quality

2 Credits (2 Lectures)
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)
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, HIM160. Corequisite: CBA114A.*

HIM275Q Health Information Technology Practicum

4 Credits (12 Labs – 180 Hours)

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 an Registered Health Information Technician (RHIT) or Registered Health Information Administrator (RHIA). Enrollment in this course is by Instructor Permission only based on availability of approved clinical sites. *Prerequisite: HIM215.*

HEALTH KNOWLEDGE AND SKILLS (HKS)

HKS155 Introduction to Phlebotomy

3 Credits (2 Lectures, 3 Labs)

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.*

HKS255 Phlebotomy Practicum

3 Credits (9 Labs)

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)

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) POS

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, Registration Packet must be completed.*

HPM136 Business Skills for Massage Therapy

3 Credits (3 Lectures)

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)

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; instructor consent.*

HPM141 Medical Assisting Skills II

4 Credits (3 Lectures, 3 Labs)

Cardiopulmonary procedures, colon procedures, radiology and diagnostic imaging, introduction to the clinical laboratory, urinalysis, phlebotomy, hematology, blood chemistry and serology, and microbiology. *Prerequisites: RDG094; instructor consent.*

HPM150 Chiropractic Assistant Training

2 Credits (2 Lectures)

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)

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)
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.

HPM160 Applied Anatomy for Massage Therapy

3 Credits (3 Lectures)
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)
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)
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)
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. *Prerequisite: Phlebotomy Certificate and instructor consent.*

HPM170 Clinical Laboratory Assistant Basics II

4 Credits (3 Lectures, 3 Labs)
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)
Medical business practices, basic practice finances, managed care/insurance, and procedural and diagnostic coding.

HPM173 Pathophysiology

3 Credits (3 Lectures)
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 Practicum – Medical Assistant

4 Credits (12 Labs)
Supervised, unpaid practical experience of 180 hours in an ambulatory health care setting performing both administrative and clinical 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 HPM175C must be met before enrollment; all program courses must be successfully completed before enrollment; Instructor consent.*

HPM175H Practicum – Pharmacy Technician

4 Credits (12 Labs)
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; Instructor consent.*

HPM175L Practicum – Massage Therapy (Relaxation Massage)

1 Credit (3 Labs)
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. *Prerequisite: HPM180; Mandatory requirements specific to HPM175L must be met before enrollment; Instructor consent.*

HPM175M Practicum – Massage Therapy (Therapeutic Massage)

1 Credit (3 Labs) POS
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 (3 Labs)
Practicum consisting of 45 hours of hands-on experience with emphasis on massage for special populations under supervision of an instructor. Students must earn 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 HPM 175N must be met before enrollment; Instructor consent.*

HPM175O Practicum – Massage Therapy (Spa Treatments and Hydrotherapy)

1 Credit (3 Labs)
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 HPM 175O must be met before enrollment; Instructor consent.*

HPM175P Clinical Laboratory Assistant Practicum

3 Credits (9 Labs -135 Hours)
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; Instructor consent.*

HPM180 Therapeutic Massage I

3 Credits (3 Lectures) POS
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
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)
A comprehensive approach to reviewing both administrative and clinical competencies for the medical assistant A.A.S. degree graduate preparing to take the RMA (registered medical assistant) 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)
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)
Special populations massages including pregnant women, lymphatic massage, geriatric massage, and foot reflexology along with the use of proper body mechanics, hygiene, safety, draping, and professional decorum.

HPM282 Therapeutic Massage V

3 Credits (3 Lectures) POS
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)
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)
 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)
Expanded operation of heavy equipment to include interpreting blueprints, staking, and estimating costs, using technology to conduct research, and constructing more complex projects. *Prerequisites: HEO121 and a valid driver license.*

HEO127 Heavy Equipment Reconditioning

4 Credits (2 Lectures, 6 Labs)
Fundamentals of heavy equipment reconditioning procedures. *Prerequisite: Valid driver license.*

HEO128 Diesel Equipment Service and Repair

4 Credits (2 Lectures, 6 Labs)
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)
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)
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)
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)
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)
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)
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)
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)
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)

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)

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)

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)

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)

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.*

HONORS
(HNR)

HNR201 Honors Seminar I

1 Credit (1 Recitation)

Required for Honors students in the 18-hour academic transfer program. A one-hour Honors Seminar must be taken concurrently with each content course taken for Honors credit. Honors students and faculty work closely together on in-depth projects outside the regular curriculum. During the seminar, the project is developed and research shared with other Honors students through in-depth discussion and analysis. *Prerequisite: HNR204 or HNR205.*

HNR202 Honors Seminar II

1 Credit (1 Recitation)

Required for Honors students in the 18-hour academic transfer program. A one-hour Honors Seminar must be taken concurrently with each content course taken for Honors credit. Honors students and faculty work closely together on in-depth projects outside the regular curriculum. During the seminar, the project is developed and research shared with other Honors students through in-depth discussion and analysis. *Prerequisite: HNR204 OR HNR205.*

HNR203 Honors Seminar III

1 Credit (1 Recitation)

Required for Honors students in the 18-hour academic transfer program. A one-hour Honors Seminar must be taken concurrently with each content course taken for Honors credit. Honors students and faculty work closely together on in-depth projects outside the regular curriculum. During the seminar, the project is developed and research shared with other Honors students through in-depth discussion and analysis. *Prerequisite: HNR204 OR HNR205.*

HNR204 Honors Colloquium I

3 Credits (3 Lectures, 3 Recitations)
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)
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; RDG094. Corequisite: ENG102.*

HNR255 Leadership Development

3 Credits (3 Lectures)
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)
An introduction to and career exploration of the hotel, restaurant, recreation, tourism, and related industries. *Recommended: RDG094.*

HRM101 Facilities Management

3 Credits (3 Lectures)
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)
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)
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)
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)
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)

HMS200 Comparative Cultures and Society

3 Credits (3 Lectures)
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. *Prerequisites: RDG094 and ENG100.*

INTERDISCIPLINARY STUDIES
(IDS)

IDS100 Service Learning I

3 Credits (2 Lectures, 1 Internship)
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.*

LITERATURE
(LIT)

LIT101 Introduction to Literature

3 Credits (3 Lectures)
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)
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)
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)
Major English literary works from Old English to 1800. *Prerequisite: ENG101. Corequisite: ENG102.*

LIT204 English Literature II

3 Credits (3 Lectures)
The chief English literary works from the Romantic period to the Modern period. *Prerequisite: ENG101. Corequisite: ENG102.*

LIT206 World Literatures

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
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 LIT 254A. *Prerequisites: LIT254A; instructor or division chair consent.*

LIT255 The Horror Novel

3 Credits (3 Lectures)
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)
A survey of 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)
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; ENG100 with grade of "C" or better or test into ENG101.*

LIT291 Children's Literature for Educators

3 Credits (3 Lectures)
A survey and analysis of classic and contemporary children's literature and an examination of criteria for selecting children's books in educational contexts. *Prerequisite: ENG101. Corequisite: ENG102.*

MANUFACTURING ENGINEERING TECHNOLOGY (MET)

MET110 Introduction to Quality Assurance

3 Credits (2 Lectures, 3 Labs)
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)
Principles and applications of common metal removal processes and sheet metal fabrication. Processes include drilling, turning, milling, shearing, and bending.

MET127 Manufacturing Process and Materials

3 Credits (3 Lectures)
Production processes, materials, techniques, systems, and applications used in industry. Concepts, design, materials, processes, 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)
Fluid theory, production, consumption, control, and application of the transmission of energy through hydraulic and pneumatic components, including valves, actuators, pumps, and circuits.

MET150 VB.NET for Engineering

3 Credits (2 Lectures, 3 Labs)
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.

MET221 Electro-Mechanical Technology

3 Credits (2 Lectures, 3 Labs)
Mechanical concepts and basic electro-mechanical systems, including electronic circuits incorporating electro-mechanical and electro-optical transducers, and auxiliary devices. *Prerequisite: ELC122.*

MET226 Electro-Mechanical Systems

3 Credits (2 Lectures, 3 Labs)
Diagnostics, troubleshooting, design, maintenance, schematic reading, and preventive maintenance of electric, hydraulic, pneumatic, and vacuum systems of industrial machines. *Prerequisites: ELC220, MET221.*

MET230 Semiconductor I – Seminar

3 Credits (2 Lectures, 3 Labs)
Semi-conductor Manufacturing Technician Fabrication Cleanroom employment seminar.

MET232 Solids Modeling – Solidworks

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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)
Learn LabVIEW field-programmable gate array (FPGA) applications to extend LabVIEW to other user interfaces, emphasis on design and compiling processes. *Prerequisite: MET263.*

MET265 LabVIEW Overview

4 Credits (2 Lectures,6 Labs)
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)
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)
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)
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)
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)
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)
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) 🔲
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*
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)
Script theory and application in preparing a final, full-length script, emphasizing techniques for visual and oral media production. *Prerequisites: ENG102, MSC101.*

MSC109 TV/Video Production

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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)
An introduction to the use of Adobe Illustrator design tool and to the place of illustration in a web or print design. *Prerequisite: RDG094.*

MSC130 Digital Photography and Photoshop

3 Credits (3 Lectures) POS
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.

MSC150 History of Still Photography

3 Credits (3 Lectures)
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, RDG094.*

MSC180 Basic Photojournalism

3 Credits (3 Lectures)
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)
Advanced reporting of feature stories, interviews, reviews, columns, and editorials. *Prerequisite: MSC102.*

MSC205 Portfolio Preparation

3 Credits (2 Lectures, 3 Labs)
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)
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
Advanced Digital Photography expands experience with computer software, presents more complex photographic instruction, and offers complex assignments. Students will pursue individualized projects. *Prerequisite: MSC130.*

MSC240 Mass Media and the Public Mind

3 Credits (3 Lectures)
Examine the influence of mass media images on the public mind, including analysis and interpretation of content from technical, ethical, historical, psychological, and cultural perspectives. Analyze news, advertising, and entertainment media content for messages on values, choices, and perceptions presented through photography, cinema, TV, and the Internet. *Prerequisites: ENG101, MSC101.*

MATHEMATICS
(MAT)

MAT082 Basic Arithmetic

3 Credits (3 Lectures)
Development of arithmetic skills as a foundation for other mathematics courses, stressing number awareness and arithmetic processes.

MAT086 Pre-Algebra

3 Credits (3 Lectures)
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

2 Credits (2 Lectures)
Instructional assistance to strengthen students' math concepts and study skills for their 082, 086 or 092 math course(s). May be taken three times for credit with instructor consent.

MAT092 Introductory Algebra

3 Credits (3 Lectures)
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)
Customized practice of math concepts and study skills; complements MAT121, 141, and/or 151. May be taken three times for credit with instructor consent. For elective credit only. *Prerequisite: MAT092.*

MAT101 Essential Mathematics

4 Credits (4 Lectures)
A review of the basic skills of mathematics with emphasis on developing sound mathematical skills in arithmetic, algebra, geometry, and problem-solving. *Prerequisites: MAT092, RDG091.*

MAT111 Math for Electricians

2 Credits (1.5 Lectures, 2 Labs)
Introduction to math principles for electricians including basic arithmetic, algebra and fundamental trigonometry 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)
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)
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) ⓐ
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) SUN# *MAT 1151*
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, RDG094.*

MAT162 Applied Statistics

3 Credits (3 Lectures)
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)
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: MAT151, RDG094.*

MAT187 Pre-Calculus

5 Credits (5 Lectures) SUN# *MAT1187*
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.*

MAT201 Math for Elementary Teachers I

3 Credits (3 Lectures)
Numbers and operations, including algebraic reasoning and problem solving. *Prerequisite: MAT141 or MAT151.*

MAT202 Math for Elementary Teachers II

3 Credits (3 Lectures)
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)
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)
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)
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) SUN# *MAT 2220*
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 Calculus with Analytic Geometry II

4 Credits (4 Lectures) SUN# *MAT 2230*
Techniques of integration, improper integrals, applications of calculus, elements of analytic geometry sequences and series. *Prerequisites: MAT221, RDG094.*

MAT241 Analytical Geometry and Calculus III

4 Credits (4 Lectures) SUN# *MAT 2241*
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 SUN# *MAT 2262*
An introduction to first and higher order ordinary differential equations with applications. *Prerequisite: MAT231.*

MUSIC HISTORY AND LITERATURE (MHL)

MHL100 Music Appreciation

3 Credits (3 Lectures) ⭐
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) ⭐
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)
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)
Concert Choir, a major performance ensemble, is dedicated to the performance of varied choral literature from all historical periods, styles, and ethnic origins which performs 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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
An introduction to the fundamentals of tonal aural problems and rhythms taught through sightsinging and ear training. *Corequisite: MTC100.*

MTC102 Theory of Music I

3 Credits (3 Lectures)
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)
A study of tonal aural problems and rhythms taught through sightsinging and ear training. This is a continuation of Aural Fundamentals. *Prerequisite: MTC101. Corequisite: MTC102.*

MTC204 Theory of Music II

3 Credits (3 Lectures)
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)
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.*

NURSING
(NUR)

NUR121 Introduction to Nursing Transitions

8 Credits (4 Lectures, 12 Labs)
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. 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)
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)
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)
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)
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: Admission into the Nursing Program; NUR121, NUR122, NUR126, NUR145.*

NUR221 Nursing in Developmental Transitions

8 Credits (4 Lectures, 12 Labs)
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, PSY 203.*

NUR222 Nursing in Organizational Transitions

8 Credits (4 Lectures, 12 Labs)
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. *Prerequisite: BIO205, MAT141, NTR200, NUR221, SOC100.*

NUTRITION/DIETETICS
(NTR)

NTR100 Contemporary Issues

1 Credit (1 Lecture)
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)
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)
A scientific investigation into one's own personal health and wellness status.

NTR105 ServSafe Certification

1 Credit (1 Lecture)
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)
Examines the role of nutrition during every stage of life, common problems and concerns, 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)
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)
Fundamentals common to all healthcare occupations with an emphasis on nutrition. *Prerequisite: RDG094.*

NTR130 Diabetes Overview

1 Credit (1 Lecture)
An introduction to diabetes, risk factors for developing diabetes, detection methods, and management techniques.

NTR131 Introduction to Diabetes

3 Credits (3 Lectures)
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)
An overview of 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.

NTR135 Healthy Weight for Adults

1 Credit (1 Lecture)
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)
An overview of gestational diabetes, management techniques, potential complications, nutritional management, and strategies for monitoring.

NTR137 Carbohydrate Counting

1 Credit (1 Lecture)
A-Z guide to carbohydrate counting for people with diabetes addressing 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)
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)
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)
Overview of the career opportunities in the fields of nutrition, dietetics, foodservice management, wellness, and nutrition communication.

NTR156 Foundations of Dietary Manager Internships

1 Credit (1 Lecture)
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. *Corequisites: NTR141; CUL105 or NTR105.*

NTR157 Foundations of Dietetic Technician Internships

1 Credit (1 Lecture)
Identify rotation facilities and Registered Dietitian preceptor required to successfully complete a dietetic technician internship. The course emphasizes the legal and ethical aspects specific to dietetic technicians. *Prerequisites: Complete all Dietetic Technician A.A.S. degree general education requirements and instructor consent.*

NTR191 Nutrition Counseling Skill Development

3 Credits (3 Lectures)
Comprehensive skill development of step-by-step nutrition counseling. *Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.*

NTR196 Dietary Manager Internship

3 Credits (Internship – 150 Hours)
Supervised application of food production, food service management, and nutritional care principles in clinical and community environments. *Prerequisites: NTR156, NTR223, NTR240.*

NTR200 Human Nutrition

3 Credits (3 Lectures)
Scientific principles of human nutrition. Emphasizes nutrient metabolism, the relationships between diet and disease, and the importance of nutrition in health promotion and disease prevention. Required course for the Dietetic Technician AAS. *Prerequisites: RDG094; CHM130 or CHM138 or one year High School Chemistry with grade of C or better.*

NTR201 Nutrition Literacy

1 Credit (1 Lecture)
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)
The anthropometric, biochemical, clinical, dietary, and behavioral evaluation and assessment of nutritional status throughout the life cycle. *Prerequisites: NTR123, NTR129.*

NTR223 Food Service Management

3 Credits (3 Lectures)
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)
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)
Indepth study of the role of nutrition in the prevention and treatment of diseases. *Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.*

NTR247 Weight Management Theory

3 Credits (3 Lectures)
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)
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)
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.

NTR296 Dietetic Technician Internship

6 Credits (Internship – 450 Hours)
The application of life cycle nutrition, assessment, disease prevention, and medical nutrition therapy in clinical, community, and food service management settings. *Prerequisites: Dietetic Technician A.A.S. degree requirements completed.*

OFFICE AUTOMATION SYSTEMS
(OAS)

OAS101 Keyboard – Alphabetic

1 Credit (3 Labs)
Mastery of essential microcomputer keyboard skills. Emphasis on alphabetic material using the touch technique.

OAS103 Keyboard – Speed/Accuracy

1 Credit (3 Labs)
Improve keyboard speed and accuracy. Emphasis on alphabetic, numeric, and symbol material using the touch technique.

OAS104 Ten-Key Pad

1 Credit (3 Labs)
Key numeric data using touch technique on the computer numeric ten-key pad.

OAS125 Proofreading and Editing

3 Credits (3 Lectures)
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) SUN# PHI 1101
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) SUN# PHI 1103
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) SUN# PHI 1105
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)
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)
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)
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 The Management of Sport

3 Credits (3 Lectures)
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)
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) POS
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)
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
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 (6 Labs – 90 Hours)
An introduction to practical work experience in the athletic training setting. *Prerequisite: PED108.*

PED109B Athletic Training Practicum II

2 Credits (6 Labs – 90 Hours)
Clinical application of practical work experience in the athletic training setting. *Prerequisite: PED109A.*

PED109C Athletic Training Practicum III

2 Credits (6 Labs – 90 Hours)
Clinical application of practical work experience in the athletic training setting. *Prerequisite: PED109B.*

PED109D Athletic Training Practicum IV

2 Credits (6 Labs – 90 Hours)
Clinical application of practical work experience in the athletic training setting. May be taken four times for credit. *Prerequisite: PED109C.*

PED112 Introduction to Strength Training

3 Credits (3 Lectures)
A comprehensive guide to the design and implementation of strength and conditioning programs.

PED114 Introduction to Coaching

3 Credits (3 Lectures)
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)
An overview of coaching methods, emphasizing both competitive and recreational settings and practical applications of concepts. Satisfactory/Unsatisfactory grading option available. *Prerequisite: PED114.*

PED202A Team Sports Officiating – Baseball

1 Credit (1 Lecture)
Fundamentals of baseball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PED202B Team Sports Officiating – Basketball

1 Credit (1 Lecture)
Fundamentals of basketball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PED202C Team Sports Officiating – Football

1 Credit (1 Lecture)
Fundamentals of football officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PED202D Team Sports Officiating – Soccer

1 Credit (1 Lecture)
Fundamentals of soccer officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PED202E Team Sports Officiating – Softball

1 Credit (1 Lecture)
Fundamentals of softball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PED202F Team Sports Officiating – Volleyball

1 Credit (1 Lecture)
Fundamentals of volleyball sport officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PED209 Introduction to Rehabilitation Techniques

3 Credits (3 Lectures) POS
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)
In-depth examination of coaching emphasizing methods and concepts in both competitive and recreational settings. Satisfactory/Unsatisfactory grading option available. *Prerequisite: PED115.*

PHYSICAL EDUCATION ACTIVITY (PAC)

PAC100 Strength and Conditioning for Varsity Sports

1 Credit (3 Labs)
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 available. May be taken two times for credit. *Prerequisite: Varsity athlete.*

PAC100B Introduction to Yoga Techniques

1 Credit (1 Lecture)
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 available. May be taken more than four times for credit.

PAC101A Basic and Beginning Techniques of Golf

1 Credit (3 Labs)
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 available. May be taken two times for credit.

PAC101J Basic and Beginning Techniques of Weight Training

1 Credit (3 Labs)
The basic lifts and explanation of muscle groups affected. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC101K Basic and Beginning Techniques of Yoga

1 Credit (3 Labs)
A slow and relaxed form of stretching where breathing (pranayama) and positions (asanas) are performed. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC101L Basic and Beginning Techniques of Karate

1 Credit (3 Labs)
The art of Chinese karate emphasizing defense techniques against basic kicks, punches, and grab attacks. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC101M Basic and Beginning Techniques of Basketball

1 Credit (3 Labs)
The basic skills of the game of basketball, the rules and techniques for basketball as well as general basketball play. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC101R Aerobic Weight Training I

1 Credit (3 Labs)
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 available. May be taken four times for credit.

PAC101V Basic and Beginning Techniques of Volleyball

1 Credit (3 Labs)
Basic volleyball skills, including the rules and techniques for volleyball players in various positions as well as general volleyball play. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC102A Intermediate Golf

1 Credit (3 Labs)
A concentrated approach to golf skills with emphasis on individual skill level. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: PAC101A or appropriate experience.*

PAC102J Intermediate Weight Training

1 Credit (3 Labs)
Weight training techniques for use throughout the life cycle. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC102K Intermediate Yoga and Fitness

1 Credit (3 Labs)
Learn intermediate yoga poses, breathing techniques, and meditation exercises. Satisfactory/Unsatisfactory grading option available. May be taken more than four times for credit.

PAC102L Intermediate Karate

1 Credit (3 Labs)
Intermediate martial art forms and techniques; the study of anatomy, physiology, and physics as related to karate. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit. *Prerequisite: PAC101L.*

PAC103 Special Activity (Adaptive)

1 Credit (3 Labs)
A special physical education activity class for the student who is unable to participate in the regular physical education program. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC104 Police Officer Physical Training

3 Credits (2 Lectures, 3 Labs)
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)
Activity course focused on a balanced development of physical fitness. This course uses fitballs, tubing, and/or other non-weight equipment to strengthen the core, upper and lower body. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit.

PAC106 Aerobics and Weight Training

2 Credits (6 Labs)
Fundamental skills and principles of weight training and aerobics. Satisfactory/Unsatisfactory grading option available. May be taken more than four times for credit.

PAC108 Zumba®

1 Credit (3 Labs)
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)
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 available. May be taken more than four times for credit.

PAC111 Water Aerobics

1 Credit (3 Labs)
Aquatic exercise emphasizing stretching techniques, endurance, flexibility, and toning for swimmers and non-swimmers. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit.

PAC112 Introduction to Scuba Diving

1 Credit (.5 Lecture, 2 Labs)
Scuba knowledge and skills to safely gain experience in the diving environment and, ultimately, to dive independently. Satisfactory/Unsatisfactory grading option 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)
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 available. May be taken four times for credit.

PAC114 Aerobic Martial Arts

1 Credit (3 Labs)
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)
Aerobic workout using stationary bicycles. This course covers core, upper, and lower body conditioning, stretching techniques, and safety. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit.

PAC121 Theory and Practice of Basketball I

2 Credits (6 Labs)
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 available. May be taken two times for credit.

PAC122 Theory and Practice of Baseball I

2 Credits (6 Labs)
Fundamentals of baseball, including techniques of team play, rules, conditioning, and mechanics of baseball. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC123 Theory and Practice of Track and Field I

2 Credits (6 Labs)
Fundamentals and techniques of track and field events, including psychological aspects, training, and styles used in track and field events. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC125 Theory and Practice of Softball I

2 Credits (6 Labs)
Fundamentals of softball, including techniques of team play, rules, conditioning, and mechanics of softball. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC126 Theory and Practice of Cross-Country I

2 Credits (6 Labs)
Fundamentals of racing strategies, mechanics of cross country, rules, conditioning, and cross training are emphasized. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC127 Theory and Practice of Volleyball I

2 Credits (6 Labs)
Fundamentals of volleyball including techniques of team play, rules, theory, conditioning, and mechanics of volleyball. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC200 Advanced Competition/Fitness Swimming

2 Credits (1 Lecture, 3 Labs)
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 available. May be taken four times for credit. *Prerequisite: Ability to swim freestyle (or other stroke).*

PAC201J Advanced Weight Training

2 Credits (6 Labs)
Development and implementation of individualized weight training programs based on the student's activities and/or interests. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC201N Aerobics

1 Credit (3 Labs)
A variety of exercises that stimulate lung activity such as running, swimming, cycling, and jogging. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit.

PAC207 Lifeguard Training

1 Credit (3 Labs)
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 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)
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 available. May be taken three times for credit. *Prerequisites: Lifeguard Training, Adult CPR, Standard First Aid Certifications; pre-course written test; swimming proficiency test.*

PAC221 Theory and Practice of Basketball II

2 Credits (6 Labs)
Advanced techniques of team play and strategy in the sport of basketball. Includes advanced mechanics of basketball and total body conditioning. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit. *Prerequisite: PAC121 or instructor consent.*

PAC222 Theory and Practice of Baseball II

2 Credits (6 Labs)
Advanced techniques of baseball including techniques of team play, rules, conditioning, and mechanics of baseball. Satisfactory/Unsatisfactory grading option 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)
Advanced techniques of track and field events including psychological aspects, training, and styles used in track and field events. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: PAC123 or instructor consent.*

PAC225 Theory and Practice of Softball II

2 Credits (6 Labs)
Advanced techniques of softball, including techniques of team play, rules, conditioning, and mechanics of softball. Satisfactory/Unsatisfactory grading option 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)
Advanced techniques of racing strategies, mechanics of cross country, rules, conditioning, and cross training for cross country racing. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: PAC126 or instructor consent.*

PAC227 Theory and Practice of Volleyball II

1 Credit (3 Labs)
Advanced techniques of volleyball, including techniques of team play, rules, conditioning and mechanics of volleyball. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit. *Prerequisite: PAC127 or instructor consent.*

PAC230 Arizona Seals Swimming Academy I

2 Credits (6 Labs)
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 with a focus 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. Short-course program I. Satisfactory/Unsatisfactory grading option 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)
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 with a focus on comfort in the water. Structured practice sessions will 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. Short-course program II. Satisfactory/Unsatisfactory grading option 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)
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 with a focus on comfort in the water. Structured practice sessions will 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 available. May be taken four times for credit. *Prerequisite: Student must meet minimum water proficiency eligibility criteria.*

PHYSICAL EDUCATION HEALTH (PEH)

PEH101 Personal Health

3 Credits (3 Lectures)
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)
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 available. May be taken more than four times for credit. *Corequisite: RDG094.*

PEH110 Lifetime Fitness and Wellness

3 Credits (3 Lectures)
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)
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)
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)
American Council on Exercise (ACE) preparation course for the Group Fitness Instructor Certification exam. *Prerequisites: RDG094, PED103, PED104, PEH111, PEH200.*

PEH204 Personal Training Methods

3 Credits (3 Lectures)
American Council on Exercise (ACE) preparation course for the Personal Trainer Certification Exam. *Prerequisites: RDG094, PED103, PED104, PEH111, PEH200.*

PHYSICAL EDUCATION VARSITY SPORTS (PEV)

PEV110 Rodeo Sports Events I

2 Credits (1 Lecture, 3 Labs)
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: Intercollegiate Rodeo team member.*

PEV201 Varsity Basketball I

1 Credit (3 Labs)
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: Intercollegiate Basketball team member.*

PEV202 Varsity Baseball I

1 Credit (3 Labs)
For members of the intercollegiate varsity baseball team. May be taken three times for credit. *Prerequisite: Intercollegiate Baseball team member.*

PEV203 Varsity Track and Field I

1 Credit (3 Labs)
Hone track and field skills, knowledge, and strategies. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: Intercollegiate Track and Field team member.*

PEV205 Varsity Softball I

1 Credit (3 Labs)
For members of the intercollegiate varsity softball team. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: Intercollegiate Softball team member.*

PEV206 Varsity Cross Country I

1 Credit (3 Labs)
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)
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)
Intercollegiate varsity basketball with application of theory in NJCAA events. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: PEV201 or instructor consent.*

PEV212 Varsity Baseball II

1 Credit (3 Labs)
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)
Intercollegiate Varsity Track and Field with application of theory in NJCAA events. Satisfactory/Unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: PEV203 or instructor consent.*

PEV215 Varsity Softball II

1 Credit (3 Labs)
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)
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)
Intercollegiate Varsity Volleyball with application of theory in NJCAA events. Satisfactory/unsatisfactory grading option available. May be taken two times for credit. *Prerequisite: PEV207 or instructor consent.*

PHYSICS
(PHY)

PHY100 Physical Universe

4 Credits (3 Lectures, 3 Labs)
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) SUN# *PHY1111*
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.*

PHY112 College Physics II

4 Credits (3 Lectures, 3 Labs) SUN# *PHY1112*
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) SUN# *PHY1121*
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) SUN# *PHY1131*
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)
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, PHY122.*

POLITICAL SCIENCE
(POS)

POS101 American Politics

3 Credits (3 Lectures) SUN# *POS 1110*
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)
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)) SUN POS 1120
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)
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)
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 federal and state systems of government in the United States. Meets the Arizona State Department of Education U.S. Constitution and Arizona government requirements for teacher certification. Meets the requirement for the A.A.S Degree in Corrections. *Prerequisite: RDG094.*

PSYCHOLOGY
(PSY)

PSY101 Introduction to Psychology

3 Credits (3 Lectures)) SUN PSY1101
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)
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)
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)
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)
Principles of mental health applicable to human behavior and everyday social interaction, including theory, beliefs, hypothesis testing, and positive life planning. *Prerequisite: ENG101. Corequisite: ENG102.*

PSY230 Introduction to Statistics

3 Credits (3 Lectures)
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)
An exploration of psychological, sociological, physiological aspects of human sexuality within the context of individual development, family, culture, and society. *Prerequisites: SOC100 or PSY101; ENG101. Cross Listed: SOC277.*

RADIOLOGY
(RAD)

RAD100 Fundamentals of Radiologic Science and Healthcare

1 Credit (1 Lecture)
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, healthcare systems, accreditation and professional organizations, and radiation protection. *Prerequisite: Radiologic Technology Cohort student.*

RAD110 Radiographic Positioning I

4 Credits (2 Lectures, 6 Labs)
An introduction to radiographic positioning and a review of related anatomy covering anatomy, 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)
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)
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 (9 Labs – 240 Hours)
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)
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)
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. *Prerequisite: Radiologic Technology Cohort student.*

RAD170 Principles of Radiographic Exposure II

3 Credits (3 Lectures)
Digital image acquisition, image display, and image analysis. *Prerequisite: Radiologic Technology Cohort student.*

RAD180 Practicum II

3 Credits (9 Labs – 240 Hours)
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.*

RAD200 Practicum III

7 Credits (21 Labs – 600 Hours)
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)
A continuation of "Radiation Physics I" covering the basics of imaging systems and quality control. *Prerequisite: Radiologic Technology Cohort student.*

RAD230 Radiobiology and Radiation Protection

3 Credits (3 Lectures)
This course builds and expands on the basic and radiation protection concepts presented in "Fundamentals of Radiologic Science and Healthcare." Content includes the principles of the interaction of ionizing radiation, biological systems, and concepts of radiation protection. *Prerequisite: Radiologic Technology Cohort student.*

RAD240 Practicum IV

4 Credits (12 Labs – 360 Hours)
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 Basic Pharmacology and Drug Administration

1 Credit (1 Lecture)
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)
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)
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)
A comprehensive review geared toward preparing the students for the national ARRT registry examination. *Prerequisite: Radiologic Technology Cohort student.*

RAD290 Practicum V

4 Credits (12 Labs - 360 Hours)
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. *Prerequisite: Radiologic Technology Cohort student.*

READING
(RDG)

RDG090 Introduction to College Literacy

4 Credits (4 Lectures)
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)
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)
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. *Prerequisite: RDG090.*

RDG094 College Reading

3 Credits (3 Lectures)
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)
Reading comprehension and critical reading skills necessary for college-level texts with language skill development and cultural awareness for ELL students. 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)
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 available.

REA124 Introduction to Contract Writing

1 Credit (1 Lecture)
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)
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)
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)
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)
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)
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. *Prerequisite: REC101.*

REC230 Program Planning

3 Credits (3 Lectures)
Effective leisure and recreation program planning in the public, nonprofit, and private sectors. *Prerequisite: REC101.*

REC250 Leadership in Recreation

3 Credits (3 Lectures)
Theories and strategies for leadership in recreation and tourism settings, including communication skills, group dynamics, motivational processes, and supervisory skills. *Prerequisite: REC101.*

RENEWABLE ENERGY TECHNOLOGY (RET)

RET105 Introduction to Renewable Energy

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
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)
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)
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, Instructor consent.*

SIGN LANGUAGE (SLG)

SLG101 American Sign Language I

4 Credits (4 Lectures)
Introduction to 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)
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)
A continuation of the skills taught in SLG102. Emphasis on improved fluency and comprehension of ASL, Deaf culture and the evolution of ASL. Class taught in American Sign Language. *Prerequisite: SLG102.*

SLG202 American Sign Language IV

4 Credits (3 Lectures, 1 Recitation) ⬛
Building upon the skills taught in SLG201, emphasis on 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)
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)
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 available.

SKL116 Employment Readiness Program Part II

3 Credits (2 Lectures, 3 Labs)
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 available.

SKL117 Employment Skills

1 Credit (1 Lecture)
Employability skills necessary to identify personal interests and abilities, locate employment, and keep a job once employed. Satisfactory/Unsatisfactory grading option available.

SKL120 Intro to Solar and Green Construction Concepts

5 Credits (4 Lectures, 3 Labs)
Overview of green collar jobs and the skills related to weatherization, alternative energy, and green construction concepts. Satisfactory/Unsatisfactory grading option available.

SKL121 Intro to Green Block Construction

1 Credit (1 Lecture)
Overview of construction using alternative block materials and the skill sets related to the green collar jobs in this trade. Satisfactory/Unsatisfactory grading option available.

SKL122 Intro to Steel Framing

1 Credit (1 Lecture)
Overview of steel framing construction and the skill sets related to the green collar jobs in this alternative market. Satisfactory/Unsatisfactory grading option available.

SKL123 Intro to Weatherization

1 Credit (1 Lecture)
Overview of insulation, appliance, and low voltage systems that relate to the green collar jobs in weatherization. Satisfactory/Unsatisfactory grading option available.

SKL124 Intro to Rammed Earth and Straw Bale Construction

1 Credit (1 Lecture)
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 available.

SKL125 Intro to Solar Panel Systems

1 Credit (1 Lecture)
Overview of solar panel systems and the skill sets related to the green collar jobs in solar panel installation. Satisfactory/Unsatisfactory grading option available.

SKL126 Building Analyst Energy Auditor

2 Credits (2 Lectures)
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 available.

SKL130 Intro to Weatherization, Solar and Green Construction

5 Credits (4 Lectures, 3 Labs)
Overview of green collar jobs and the skills related to weatherization, alternative energy, and green construction concepts. Satisfactory/Unsatisfactory grading option available.

SKL141 Overview of Office Assistant

2 Credits (2 Lectures)
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 available.

SKL142 Green Office Solutions

1 Credit (1 Lecture)
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 available.

SKL143 Basic Accounting Concepts

1 Credit (1 Lecture)
The concepts of accounting for front office clerk. Satisfactory/Unsatisfactory grading option available.

SKL144 Proofreading for Accuracy

1 Credit (1 Lecture)
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)
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)
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 Practicums)
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) SUN #: SWU 2220
A descriptive and analytical historical perspective of the profession of social work, of social problems, and of the social welfare system. *Prerequisite: RDG094.*

SWU242 Introduction to Child Welfare Service in a Diverse World

3 Credits (3 Lectures)
Examine 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.*

SWU291 Social Service Delivery

3 Credits (3 Lectures) SUN #: SWU 2291
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.*

SWU295 Foundations of Social Work Practice: Effective Helping in a Diverse World

3 Credits (3 Lectures)
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
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)
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
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)
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)
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, media, religion, medicine, and in global perspective. *Prerequisite: ENG101.*

SOC250 Family Violence

3 Credits (3 Lectures)
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)
An exploration of psychological, sociological, physiological aspects of human sexuality within the context of individual development, family, culture, and society. *Prerequisites: SOC100 or PSY101; ENG101. Cross Listed: PSY277.*

SPANISH
(SPA)

SPA101 Elementary Spanish I

4 Credits (4 Lectures, 1 Lab)) SPA 1101
The basic skills of understanding, speaking, reading, and writing Spanish with a survey of cultural materials from Spanish-speaking countries.

SPA102 Elementary Spanish II

4 Credits (4 Lectures, 1 Lab)) SPA 1102
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 grade of "B" or better or instructor consent.*

SPA115 Conversational Spanish I

3 Credits (1 Lecture, 2 Recitations)
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)
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 Mexican Culture and Spanish Conversation I

3 Credits (3 Lectures)
Students will immerse themselves within the culture by living with Mexican families in Cuernavaca, Mexico, conversing daily in conversational classes, and participating in daily cultural activities and excursions.

SPA118 Mexican Culture and Spanish Conversation II

3 Credits (3 Lectures)
Students will immerse themselves within the culture by living with Mexican families in Cuernavaca, Mexico, 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) SUN# *SPA 2201*
Development of reading, writing, speaking, and listening skills and 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) SUN# *SPA 2202*
Continued development of speaking, writing, listening, and reading proficiency in Spanish at the intermediate level. 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)
Practical use of computer software in industrial and technological applications. An introduction to word processing, spreadsheets, databases, presentations, and the Internet.

THEATER
(THE)

THE100 Theater Appreciation

3 Credits (3 Lectures)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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 (3 Lectures)
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.

THE203 Intermediate Acting I

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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)
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.*

WELDING
(WLD)

WLD110 Survey of Welding Processes

3 Credits (2 Lectures, 3 Labs)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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

BOARD OF GOVERNORS

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| District 1 | District 2 | District 3 | District 4 | District 5 |

COLLEGE ADMINISTRATION

Doris Helmich Ed.D.
Interim President
Chief Executive Officer

Chris Wodka, M.B.A., CPA
Vice President for Financial & Administrative Services
Chief Financial Officer

Jim Kimsey, M.A.
Vice President for Human Resources
Chief Human Resources Officer

James Moore, Ed.D.
Acting Vice President for Learning Services

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Associate Vice President for Institutional Effectiveness

Richard King, M.S.
Associate Vice President for Technology Services
Chief Technology Officer

Steven Gonzales, Ed.D.
Acting Associate Vice President for Academic Affairs
Chief Academic Officer

Phillip Tompkins, Ed.D.
Acting Associate Vice President for Student Affairs
Chief Student Services Officer

TJ Ferrer, M.B.A.
Acting Associate Vice President for Human Resources

Terri Ackland, M.A.
Dean for Arts & Social Sciences

Janice Pratt, Ed. D.
Acting Assistant Dean for Career & Technical Education

Julian Easter, M.S.
Dean for Health Careers & Sciences

Valerie Jensen, M.A.
Acting Assistant Dean for Communications, Mathematics
& Learning Support

Jennifer Gonzales, M.Ed.
Acting Assistant Dean for Student Affairs

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Executive Director of Institutional Research

Luisa Ott, CPA, CFE
Executive Director of Accounting Services/Comptroller

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  B.T., University of Northern Iowa
Williams-Tuenge, Linda, Program Specialist -
  Early Childhood Education, District/SPC
  B.S., University of Wisconsin-Stout
  M.Ed., University of Arizona
  Ed.S., University of St. Thomas
Wilson, Maren, Professor of Social
  Sciences/Anthropology, AVC
  B.A., New Mexico State University
  M.A., New Mexico State University
Wodka, Chris, Vice President Financial &
  Administrative Services, District
  B.A., Saint Xavier University
  M.B.A., Saint Xavier University
  Certified Public Accountant
Wood, Matthew, Professor of Computer Information
  Systems, ASP
  B.S., Utah Valley State College

Woodbury, Christy, Student Services Generalist,
      District/SPC
      B.A., Arizona State University
      M.Ed., Northern Arizona University
Wooten, Loida, Program Assistant I, ASP
      B.S., Philippine College of Commerce
Young-Chiverton, Victoria, Professor of Early
      Childhood Education, SPC
      B.A., Clark University
      M.Ed., University of New Hampshire
Youtsey, Mykel, Accounting Clerk II, District/SPC

EMERITUS FACULTY AND STAFF

Abril, Rogelio "Larry", 1986-2008
  Facilities Technician I, SPC
Adamavich, Carol, 2001 – 2012
  Preceptor II , SPC
Alexander, S. Leslie, 1985 – 2008
  Professor of Psychology, SMC
Almendarez, Anne, 1990 – 2009
  Executive Secretary, CCC
Al Zibaree, Sabah, 1984-2010
  Professor of Computer Information Systems, District
Amado, Dolores, 1974-1995
  LRC Technician, AVC
Anderson, Flint, 1985 – 2004
  Program Manager/Student Services, AVC
Atencio, Alfonso, 1970-2001
  Professor of Business, SPC
Austin III, Robert Calvin, 1970-1992
  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
Blow, James, 1979 – 2008
  Facilities Assistant III, AVC
Bloxham, Anne, 1972-1983
  Systems Analyst, SPC
Bolgren, Carol, 1978-2003
  Office Assistant II, SPC
Bond, Julie, 1970-1999
  Professor of Business, SPC
Bowles, Loren, 1978-2003
  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, SMC
Castillo, Josephine, 1983-2004
  Facilities Assistant III, AVC
Celaya, Pete, 1973-1992
  Counselor, SPC
Chafey, Barbara, 1980-1995
  LRC Technician, SPC
Chapman, Robert, 1987-1999
  Program Manager-Academic Services, ASP
Chew, Al, 1969-2001
  Professor of Mathematics, SPC
Cibbarelli, Edward, 1989-1996 & 1999-2006
  Administration of Justice, SPC
Clemans, Bettie, 1967-1989
  Professor of Business, SPC
Cockrill, Julia, 1996-2010
  Website/Designer/Developer, District
Coleman, 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, SMC
Faucette, Walter, 1970-1998
  Professor of Math/Science, SPC
Feliz, M. Fred, 1969-1996
  Facilities Technician II/Plumber, SPC
Flores, William, 1968-1991
  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

Koliba, Homer, 1967-1979
> Vice President of Financial Services, SPC

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, SPC

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

McGlynn, Cherie, 1970-1993
> District Director of Student Records & Registrar, SPC

McIntyre, Harold "Mac", 1994 – 2008
> 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

Miller, Alton, 1969-1993
> Assistant Director of Physical Plant, SPC

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

O'Brien, Richard, 1969-1991
 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
Padilla, Ed, 1969-1991
 Superintendent of Building & Grounds, SPC
Page, Frank, 1997-2005
 Professor of Plumbing, ASP
Palmer, John, 1969-2003
 Professor or 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
Phillips, William, 1988-2000
 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
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
Valencia, Henry, 1970-1994
 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 2012

Faculty on Campus	August 14 - 17	
Faculty Development Day	August 14	T
Semester Begins after 4:30	**August 17**	**F**
Last Day of Fall Registration	August 18	Sat
Class Changes/Add-Drop	August 20 - 25	M-Sat
Labor Day - *College Closed*	September 3	M
All College Day (*No classes prior to 4:30 pm No services all day*)	September 4	T
45 Day Census	October 3	W
Spring Registration Begins	October 5	F
Mid-Term Week	October 8 – 13	M-Sat
Last Day to Apply for December Graduation	October 15	M
Veteran's Day Observed - *College Closed*	November 12	M
Thanksgiving Break *(No evening classes or college services after 4:30 pm on Nov.21)*	November 22 - 24	Th-Sat
Final Exams *(Exams begin Friday at 4:30 pm)*	December 7 - 14	F-F
Semester Ends	December 15	S
Grades due in Registrar's Office by 4:00 pm	December 17	M
Winter Break - *College Closed*	Dec 22 – Jan 1	Sat-T

SPRING 2013

Faculty on Campus	January 15 – 18	T-F
Semester Begins after 4:30	**January 18**	**F**
Last Day of Spring Registration	January 19	Sat
Martin Luther King, Jr. Day - *College Closed*	January 21	M
Class Changes/Add-Drop	January 22 – 28	T-M
President's Day – *College Closed*	February 18	M
Faculty Development Day *(No classes prior to 4:30 pm)*	February 22	F
45 Day Census	March 7	Th
Last Day to Apply for May Graduation	March 11	M
Mid-Term Week	March 11 – 16	M-Sat
Spring Break - *College Closed*	March 18-23	M-Sat
Summer/Fall Registration Begins	April 1	M
Final Exams *(Exams begin Friday at 4:30 pm)*	May 10 – 17	F-F
Semester Ends	May 18	S
Grades due in Registrar's Office by 4:00 pm	May 20	M

Commencements

Superstition Mtn. Campus 7:00 pm	May 17	F
Aravaipa Campus 11:00 am	May 18	Sat
Signal Peak Campus 7:00 pm	May 18	Sat

SUMMER 2013

Last Day of Summer Registration	May 25	Sat
Memorial Day - College Closed	May 27	M
First Summer Session Begins	**May 28**	**T**
Class Changes/Add-Drop	May 28-29	T-W
Last Day to Apply for August Graduation	May 31	F
First Five Week Session Ends	June 29	Sat
Second Summer Session Begins	**July 1**	**M**
Class Changes/Add-Drop	July 1-2	M-T
Independence Day - College Closed	July 4	Th
Second Five Week Session Ends	August 3	Sat
Grades Due in Registrar's Office by 4:00 pm	August 5	M

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