



COLLEGE CATALOG 2013-2014



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# College Mission



### **COLLEGE MISSION**

#### **OUR VISION**

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

#### **OUR MISSION**

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

#### **OUR DIRECTIONS**

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

#### **ACCREDITATION**

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

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

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

## DECLARATION OF CIVILITY FOR A LEARNING COLLEGE

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

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

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

#### Integrity, including

- Honesty
- Fairness
- Sincerity

#### Fidelity, including

- Faithfulness to the spirit of a learning college
- Allegiance to the public trust

#### Charity, including

- Kindness
- Caring
- Good will
- Tolerance
- Compassion

#### Responsibility, including

- Reliability
- Accountability
- Trustworthiness

#### Self-discipline, including

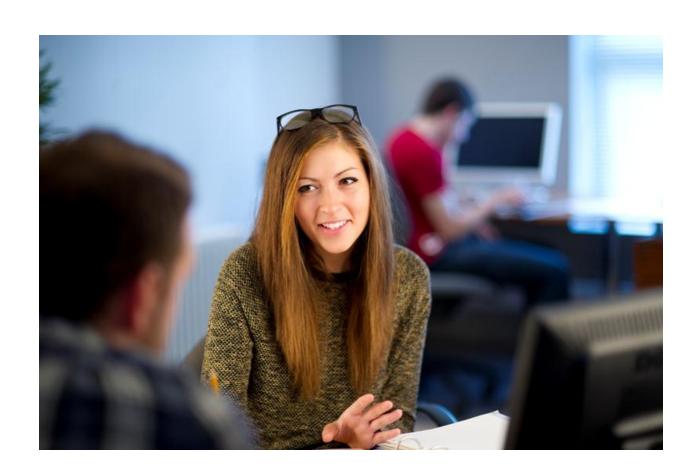
- Acting with reasonable restraint
- Not indulging in excessive behavior

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

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



# Student Services





### **Admission Information**

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

#### **Admission Requirements**

#### **Regular Admission**

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

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

#### Admission of Students Under the Age of 18

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

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

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

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

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

#### **Admission of Students in Special Status**

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

## Admission of F-1 Nonimmigrant Students – International Students

International students seeking admission based on F-1 student visa status must achieve the following:

- Completion of Admission Form/Registration Student Information form;
- Graduation from a high school equivalent to the 12th grade level in the United States. It is recommended that students have graduated in the upper 50 percent of their secondary school (high school or equivalent) in order to ensure success in academic classes at this college. Official high school transcripts must be mailed directly to the Records Office:
- 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 CAC;
- Translation of documents into English, if required.

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

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



## Students enrolling in a program sponsored by the college or in courses for dual credit

- Completion of Admission/Registration Student Information Form;
- Completion of the college placement exam (COMPASS/ASSET), if required for the courses in which the student plans to enroll.

## Students returning to CAC following an absence of more than one year

• Completion of Admission/Registration Student Information Form.

### **Residency Guidelines**

Students are classified for tuition purposes under one of the following resident classifications:

- Resident, in-state
- Non-resident (includes out-of-state, F-1 nonimmigrant students and students without legal immigration status)

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

## Resident status will be assigned under the following conditions:

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

## Non-resident status will be assigned under the following conditions:

- Students who are claimed as exemptions by parents or legal guardians for U.S. federal or state income tax purposes and the parent or guardians are not residents of Arizona;
- Persons who have lived in Arizona less than one calendar year:
- Students who have not established Arizona as their permanent domicile after moving to Arizona;

- Winter visitors who have not established Arizona as their permanent domicile, even if residing in Arizona for more than one year;
- Students who are not U.S. citizens.

#### **Official Residency Guidelines**

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

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

A.R.S. §15-1825 requires that a person who is not a "citizen of the United States, who is without lawful immigration status and who is enrolled as a student" at a public university or community college "is not entitled to tuition waivers, fee waivers, grants, scholarship assistance, financial aid, tuition assistance or any other type of financial assistance that is subsidized or paid in whole or in part with state monies."

Please contact the Records and Financial Aid Offices for further details.

#### **Implementation of Guidelines**

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

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

#### **Definitions**

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

#### **Proof of Residency**

When a student's residency is questioned, or when a student wishes to have his/her residency status reviewed, the following proof will be required:

- A complete domicile affidavit signed by the student must be filed with the Records and Registration Office;
- Submitting evidence of at least three of the following items will be used in determining a student's domicile in Arizona:
  - a. Arizona income tax return
  - b. Arizona voter registration
  - c. Arizona automobile registration
  - d. Arizona driver's license
  - e. Place of high school graduation
  - f. Source of financial support
  - g. Dependency as indicated on federal income tax return
  - h. Notarized statement from landlord or employer

- Bank accounts
- i. Other relevant information
- k. Birth certificate
- Student who is honorably discharged from the armed forces and demonstrated evidence of intent to be a resident of Arizona.

#### **Concurrent Enrollment: Non-resident Tuition**

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

#### Western Undergraduate Exchange Program

Students from 16 Western states are eligible to participate in the Western Undergraduate Exchange Program (W.U.E.). The program allows full-time students who are seeking degrees or certificates to pay 150 percent resident tuition, rather than out-of-state tuition. Central Arizona College participates in the program along with other colleges and universities in Arizona, Alaska, California, Colorado, Common Wealth of the Northern Marianas Islands, Hawaiʻi, 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 instate tuition. There are a limited number of waivers available. Contact the Records and Registration Office for an application form or additional information.

#### **Out-of-County Residence Affidavit**

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

#### **Classification of Students**

- **First year**: A student with less than 30 semester hours of college credit.
- **Sophomore:** A student who has completed 30 or more hours of college credit.



- Part-Time Student: A student enrolled for less than 12 semester hours.
- Full-Time Student: A student enrolled for 12 or more semester hours.

#### **Transfer Students**

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

## Readmission of Academically Dismissed Students

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

#### **Catalog Year of Admission**

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

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

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

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

Tech Prep students' catalog year is based upon the year they enter the Tech Prep program. These students must continue enrollment with no more than a one-year break after high school to maintain their catalog of initial enrollment. All students have the option to choose the *current year catalog* for degree or certificate graduation requirements or follow their initial enrollment catalog. Students who complete a degree

program and elect to pursue another degree are subject to the degree requirements of the catalog at the time they select the new degree. This catalog is for information only, and shall not be construed to create any contractual rights. Central Arizona College reserves the right, with or without notice, to change any or all fees, tuition or other charges; or to add, delete or modify any course or program offering, services, requirements for graduation, regulations, or any other information contained herein.

#### **Program Requirements**

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

### **Academic Advising**

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

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

#### **Placement Testing**

Prior to meeting with an academic advisor and registering for classes, most students will complete placement testing.

Students in the following categories must test:

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

Students may contact the Testing Center to make an appointment for placement testing.

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

#### **Basic Skills**

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

#### **Course Sequence and Prerequisite Courses**

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

#### **Academic Advising for New Students**

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

#### **Academic Advising for Returning Students**

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

#### **Reading Requirement**

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

Reading is a prerequisite or co-requisite for many courses and programs. When test scores indicate a 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, a 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 <a href="https://www.centralaz.edu">www.centralaz.edu</a>. Online requests will be processed with priority.

#### **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: <a href="https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/4/wo/RjKK1DvVRg7cezRIezGqr0/0.0.11.1.1">https://aztransmac2.asu.edu/cgi-bin/WebObjects/ATASS.woa/4/wo/RjKK1DvVRg7cezRIezGqr0/0.0.11.1.1</a>

### **Registration Information**

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

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

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

Proposition 300 and the Arizona Revised Statutes require that all students must show proof of their citizenship, including

employees taking courses. Students only need to provide citizenship proof once, not every time they register. The primary documents that are being requested are a copy of one of the following: a driver's license, a birth certificate, or a passport.

#### **On Time Registration (OTR)**

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

#### **Online Registration**

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

#### **Dropping or Adding a Class**

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

#### **Adding Classes**

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

#### **Dropping Classes**

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

#### Withdrawing from Classes/College

#### **Regular/Short Term Courses:**

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



#### **Open Entry/Open Exit Courses:**

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

#### Withdrawal Timeline:

Length of Class	Must Withdraw by Friday of:
5 Week Course	3 <sup>rd</sup> Week
8 Week Course	5 <sup>th</sup> Week
10 Week Course	6 <sup>th</sup> Week
16 Week Course	10 <sup>th</sup> 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 educational financial obligations.

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

#### **Federal Financial Aid Programs**

The federal government places the primary responsibility of educational costs on the student and the student's family. The student and the student's family are expected to contribute financially toward the student's cost of attendance. The Expected Family Contribution (EFC) is based on the family's income and assets. It is not uncommon for the EFC to be zero. Costs in excess of the expected contribution are considered financial need.



The federal government offers grant, work-study and loan programs to assist students in meeting their financial need. Generally, grant programs are offered only to students with a very low Expected Family Contribution (EFC). Student employment and loans are available to all students who have need. Some loan programs are not need-based.

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

#### **Title IV Programs**

#### Grants

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant

#### Work-study

• Federal Work-study

#### Loans

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

#### **State Programs**

Leveraging Educational Assistance Partnership

## Student Eligibility for Federal Financial Aid Programs

To be eligible for federal financial aid, the student must:

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

#### How to Apply for Federal Financial Aid

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

## Satisfactory Academic Process for Federal Financial Aid Recipients

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

## **Measurement of Satisfactory Academic Process Oualitative Measure**

• Students must maintain at least a 2.0 cumulative grade point average (GPA).

#### **Quantitative Measure**

• Maximum Time Frame

All hours attempted are considered when determining financial aid eligibility, whether or not financial aid was received.

Regardless of where the hours were attempted, Central Arizona College's Satisfactory Academic Progress policy will apply.

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

#### **Incremental Assessment**

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

#### **Return of Title IV Funds**

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

When a student withdraws, any loan a student received will enter the grace period (as provided by the terms of that loan)

and Central Arizona College will notify the lender(s) of the current status through the National Student Clearinghouse.

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

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

#### **Definition and/or Treatment of Terms**

#### **Incomplete Courses**

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

#### **Course Withdrawal**

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

#### **Repeat Courses**

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

#### **Change of Program of Study- Degree or Certificate**

A student may be considered not making satisfactory academic progress when a change in a program of study is made prior to completion of that program.

#### **Complete Withdrawal**

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

#### **Appealing a Decision**

If a determination is made that a student is not making satisfactory academic progress, a student may appeal that decision based on mitigating circumstances. Procedures and forms for the appeal process and the reinstatement of federal financial aid are available online at <a href="https://www.centralaz.edu/finaid">www.centralaz.edu/finaid</a> or by contacting the Financial Aid Office.

#### **Payment of Financial Aid**

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

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

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

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

## Institutional Scholarship Programs

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

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

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

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

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

#### **GED 1-SEMESTER SCHOLARSHIP**

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

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

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

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



#### **CAC INCENTIVE SCHOLARSHIP**

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

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

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

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

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

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

#### **NON-TRADITIONAL STUDENT SCHOLARSHIP**

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

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

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

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

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

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

## Co-curricular Scholarship Programs

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

#### **HONORS SCHOLARSHIP**

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

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

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

Value: \$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 10% of their high school graduating class at participating high schools.

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

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

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

# **Central Arizona College Foundation Scholarships**

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

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

To receive a Central Arizona College Foundation Scholarship, the student must meet the following minimum qualifications:

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

## CENTRAL ARIZONA COLLEGE FOUNDATION PROMISE FOR THE FUTURE SCHOLARSHIP

The following endowed scholarships sponsors have been established within the Promise for the Future Scholarship Fund:

A. M. & Pearl Clark, J. R. & Lola Waddle Scholarship ASML Trust Scholarship

Zhe (Joe) Fang Memorial Scholarship Claude and Isabell W. Gipson Scholarship Kemper & Ethel Marley Foundation Scholarship Stephen P. Terry Scholarship Fred & Eunice Wuertz Scholarship

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

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

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

**Value:** The amount is equivalent to in-state tuition up to 18 credits.



## JUDGE ROBERT R. BEAN MEMORIAL SCHOLARSHIP

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

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

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

**Scholarship Amount:** Varies

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

#### **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:** Varies

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

#### **GREAT WOMEN OF CAC/PINAL COUNTY**

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

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

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

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

Value: Varies

**Renewal Requirements:** None

## CASA GRANDE JR. CHAMBER OF COMMERCE SCHOLARSHIP

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

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

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

**Scholarship Amount:** Varies

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

## CENTRAL ARIZONA COLLEGE FOUNDATION SCHOLARSHIP ARAVAIPA CAMPUS

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

**Scholarship Amount:** Varies

#### MICHAEL CEPELLO SCHOLARSHIP

#### **Eligibility Requirements:**

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

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

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

**Scholarship Amount**: Varies



**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: Varies

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

#### **ZELDA (CHRIS) FERRYMAN SCHOLARSHIP**

Eligibility Requirements: Program of study in nursing.

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

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

**Scholarship Amount:** Varies

**Selection Process:** The Central Arizona College Financial Aid Office will select and present 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:** Varies

**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:** Varies

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

## JOANN HARTER MEMORIAL SCHOLARSHIP FOR NURSING

**Eligibility Requirements:** Must be a second year nursing student.



**Renewal Requirements:** Must maintain a cumulative GPA of 3.0 while at Central Arizona College.

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

Scholarship Amount: Varies

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

**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: Varies

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

#### **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: Varies

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

#### **TOM KUNZ VAQUERO SCHOLARSHIP**

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

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

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

Scholarship Amount: Varies

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

#### LIN LAURSEN SCHOLARSHIP

**Eligibility Requirements:** New and continuing students participating in athletics

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

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

Scholarship Amount: Varies

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

#### **JAMES LEE MUSIC SCHOLARSHIP**

Eligibility Requirements: Must be enrolled in music courses.

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

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

**Scholarship Amount:** Varies

**Selection Process:** James Lee and the Creative Arts Faculty will select the recipient.



## CLARA LOVETT UNIVERSITY FOUNDATION SCHOLARSHIP

#### **Eligibility Requirements:**

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

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

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

Scholarship Amount: Varies

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

#### **TEPI MADDOCK SCHOLARSHIP**

#### **Eligibility Requirements:**

- Must be a female;
- Program of study in physical education, nursing or premed;
- 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: Varies

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

#### 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: Varies

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

## PINAL COUNTY UNIVERSITY FOUNDATION SCHOLARSHIP

#### **Eligibility Requirements:**

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

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

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

Scholarship Amount: Varies

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

#### C.A. & NELLIE POPE SCHOLARSHIP

Eligibility Requirements: Program of study in art.

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

**Scholarship Amount:** Varies

**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: Varies

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

#### DR. R.F. SCHOEN SCHOLARSHIP

**Selection Process:** Awarded to outstanding "Freshman of the Year" at the Signal Peak Campus.

Scholarship Amount: Varies

#### SODEXO SCHOLARSHIP

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

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

Scholarship Amount: Varies

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

### KATHLEEN VAN CLEFT INDIAN SCHOLARSHIP FUND

Eligibility Requirements: Must be a Native American student.

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

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

Scholarship Amount: Varies

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

#### **ANN WILLIAMS SCHOLARSHIP**

**Eligibility Requirements:** Must participate in the Rodeo Program.

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

Central Arizona College. Must successfully complete a minimum of 6 credit hours each semester.

**Scholarship Amount**: Varies

**Selection Process**: Recipient(s) will be selected by the head

rodeo coach.

## Financial Aid Contact Information:

Central Arizona College

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

Aravaipa Campus

520-357-2800

**Signal Peak Campus** 

Student Services Center

520-494-5425 Fax: 520-494-5091

**Superstition Mountain Campus** 

480-677-7708

E-Mail

finaid@centralaz.edu

## More Information on Federal Financial Aid Programs:

#### **Federal Student Aid Information Center**

1-800-4-FED-AID (1-800-433-3243) TDD Number 1-800-730-8913

#### Information on the World Wide Web

For more information on federal financial aid programs:

- www.centralaz.edu Central Arizona College
- www.fafsa.gov FAFSA on the Web
- www.ed.gov Department of Education
- www.finaid.org The Financial Aid Information Page
- <u>www.students.gov</u> Student gateway to the U.S. Government
- <u>www.studentaid.ed.gov</u> Federal Student Aid for students
- <u>www.nslds.gov</u> 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 qualifies for in-state residency for tuition purposes. It is the responsibility of the Veteran to ensure they are classified under the correct residency status.

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

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

#### STUDENT 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 may be viewed on CAC's website at www.centralaz.edu

#### **Application for Graduation**

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

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

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

#### **Catalog Under Which a Student Graduates**

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

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



- 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 articulated credit and may be treated differently by another institution should the student transfer.

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

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

#### **Tech Prep**

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

- Student enrolls at CAC within two years after high school graduation; and
- Student has the high school send an official high school transcript to CAC to the attention of Records and Admissions.

 Student presents a written request for the articulated course credit to CAC Records and Admissions by either a form/certificate from the high school or a form generated from the Pinal County Tech Prep website.

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

#### **Conferring a Second Degree**

Students who complete an Associate in Arts, Associate in Applied Science, Associate in Business, Associate in Science, or Associate in General Studies degree program at Central Arizona College may earn a second degree. Students who wish to obtain an additional degree must meet the following criteria:

- Students must have *completed* the requirements for an associate degree.
- Students must meet all the requirements of the second degree as outlined in the catalog in effect at the time of initial enrollment in the second degree program.
- Students must complete a minimum of 16 credits beyond those previously earned in the awarded degree.
- Credits applied to the second degree must be completed with grades of "C" or better.
- Student must apply through the normal graduation application process.
- The Associate of General Studies will not be awarded as a second degree.

#### **ACADEMIC STANDARDS**

#### **Plagiarism**

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

#### **ATTENDANCE**

#### **Absence Policy**

#### **Excused Absences**

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

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

#### **Unexcused Absences**

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

### Make-Up Assignments and Exams

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

#### **Punctuality**

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

#### **Exception to Policy**

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

**Non-Credit Classes** 



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

#### **Attendance Requirements**

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

#### **Grading Information**

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

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

#### Incomplete (I) Grade

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

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

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

#### Audit (AU) Grade

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

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 of Hours		3. Total Points
4:÷_	=	
(Total Points)	(Total Number G of Hours)	PA

#### **Grade Change/Appeal**

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

#### **Academic Progress**

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

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

#### **Academic Probation**

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

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

#### **Academic Suspension**

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

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

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

#### **Academic Renewal Guidelines**

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

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

### **Academic Honors Recognition**

#### **Dean's and Honors List**

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

- Completion of 12 or more credits or;
- Completing 12 credits and enrolled in at least 6 credit hours each term.



#### **Graduation With Honors**

Students awarded an associate degree with a cumulative GPA of 3.5 or above will be awarded the distinction of "Graduating with Honors." An honor seal will be posted to the diploma.

#### Phi Theta Kappa

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

#### **Honors Program**

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

#### **Goals of the Program**

The following goals have been established for the Honors Program:

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

#### **Scholarships**

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

#### **Admission to the Honors Program**

Applicants should meet any one of the following criteria:

- 3.5 grade point average at high school graduation;
- Top 5 percent of high school graduating class;
- 30 on ACT;
- 2000 on SAT;
- 95 percent on GED;
- 3.5 grade point average at Central Arizona College with a minimum of 12 transferable credits.

In addition to the above criteria, prospective applicants must provide:

- Two current letters of recommendation from educators;
- A 250-word statement of the applicant's goals and his/her expectations of the Honors Program.

#### **Retention in the Honors Program**

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

#### **Graduation from the Honors Program**

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

#### **Bookstore**

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

#### **Bookstore Refund Policy**

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

#### **SERVICES**

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

#### **College & Career Transition Center**

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

and services for students to transition to the workplace and to further their academic studies.

#### **Career Transitions**

#### **Career Exploration**

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

#### **Internships**

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

#### **Student Employment**

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

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

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

#### **Employment Eligibility Requirements**

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

#### College Federal Work Study Program

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

• Must be enrolled in an eligible program of study.

- 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 webbased job board and students may apply for positions at their discretion. Off-campus job wages may be higher than oncampus 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 email, 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: <a href="mailto:centralhelpdesk@centralaz.edu">centralhelpdesk@centralaz.edu</a>. Central Arizona College Website: Help and FAQs provide a list of frequently asked questions. See front page of the CAC website.

#### **Service Desks:**

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

#### **Food Services**

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



Signal Peak offer food service for students, staff and guests. For menus, hours and locations visit, <a href="www.centralazdining.com">www.centralazdining.com</a> 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-loaded with any amount depending on frequency of use. The SoGo Cash Card can be used at any food service location at both the Signal Peak Campus and Aravaipa Campus.

SoGo Cash Cards may be activated and loaded at the register or online. The minimum amount required to activate at any register is \$5.00, the minimum amount required to activate online is \$25. The minimum amount required to re-load at any register or online is \$25.00. For more information, visit <a href="https://www.sogocashcard.com">www.sogocashcard.com</a>.

#### 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 eightlane all-weather track & field, baseball and softball fields, rodeo arena, tennis courts, and a 50-meter swimming pool. For more information, contact the athletic department at 520-494-5300 or 800-237-9814, ext. 5300.

#### **Learning Support Department**

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

#### Library

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

#### **Disability Resource Services**

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

#### Services may include, but are not limited to:

- Assistive Technology
- Note-taking Services
- Testing Accommodations
- · Sign Language interpreting
- Referral to Campus and Community Resources
- · Advocacy with Faculty and Staff

#### **Obtaining Services**

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

#### **Concern or Complaint**

If you have a concern or complaint about a disability related issue, please contact the Disability Resource Services Coordinator at 520-494-5409. If you need additional assistance

please contact the Assistant Dean of Student Affairs at 520-494-5420.

#### **TRIO Student Success Program**

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

#### **TRIO Summer Bridge**

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

For more information please visit the TRIO Summer Bridge website at <a href="www.centralaz.edu/summerbridge">www.centralaz.edu/summerbridge</a> or call 520-494-5060.

#### **Residence Life**

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

For more information about Residence Life, and to obtain a copy of the housing application, please visit the Residence Life website at: Home>Student Resources>Residence Life or contact the office directly at 520-494-5470 or via e-mail <a href="mailto:rlstaff@centralaz.edu">rlstaff@centralaz.edu</a>. 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 oncampus activities. Many activities include social, cultural, service, awareness and academic programs. Student Activities programs are FREE and open to all students, faculty, and staff. Students receive a weekly list of campus programs via The Vaquero Vibe.

#### **Student Clubs and Organizations**

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

#### **Campus Leadership Opportunities**

- Art Club
- Central Arizona Student Nurses Association (CASNA)
- Campus Crusades of Christ
- Funny Biz
- Health Occupations Student of America
- Jazz Choir Club

- Phi Theta Kappa International Honor Society
- Business Clubs (Collegiate DECA and PBL)
- The Science Technology Engineering and Math (STEM)
- Superstition Mountain PRIDE: LGBTQ & Straight Alliance
- Students Taking Action Now (STAN)
- TRiO Peer Mentors
- New Student Orientation Leaders
- Resident Student Leaders
- Student Leaders
- Intramurals



# Student Handbook





### STUDENT COMPLAINT PROCESS

#### **Student Code of Conduct**

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

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

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

## Student Concern or Complaint with a Specific Office

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

#### **Student Grade or Course Instructor Concern**

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

#### **Sexual Harassment**

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

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

If you have a concern about a disability related issue, please contact the Disability Resource Services Coordinator at 520-494-5409 ore reference the Discrimination Complaint Process. If you need additional assistance please contact the Dean of Students at 520-494-5341.

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

#### **Title IX Statement**

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

## COLLEGE POLICY STUDENT CODE OF CONDUCT

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

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

- 1. Conduct in violation of any offense prohibited by state or federal law. Any attempt to commit one or more acts of prohibited conduct may be sanctioned. Any attempt to conceal an act of prohibited conduct is subject to sanctions to the same extent as completed acts.
- **2.** All forms of student academic dishonesty, including but not limited to, cheating, inventing facts or sources, causing others to be dishonest, or representing another's words as one's own.

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

**3.** Endangering, threatening, or causing physical harm to any member of the College community or to oneself or causing reasonable fear of such harm.



- **4.** Violating the terms of any disciplinary action imposed for an earlier violation of the student code of conduct or other governing board or College rules.
- **5.** Violation of the Declaration of Civility and other published rules that may be adopted by the governing board or by the College.
- **6.** Furnishing false information, including false identification, or failure to provide information to the College or to any College employee or agent, including campus police officers and other agents, acting in good faith.
- **7.** Initiating, causing or contributing to any false report, warning or threat of fire, explosion or other emergency.
- **8**. Failure to comply with the directions of the College officials or agents, including campus police officers, acting in good faith and in the performance of their duties.
- **9.** Forgery, inventing facts or sources, unauthorized changes to any College document, record, or identification, including but not limited to, electronic software, data and records.
- **10.** Unauthorized presence in or unauthorized use of College property, resources or facilities.
- 11. Unauthorized access to, disclosure of, or use of any College document, record, or identification, including but not limited to electronic software, data, and records. Misuse of college computing facilities, telecommunications, networking systems, associated facilities, resources or equipment as outlined by College Policies.
- 12. Interfering with College or College-sponsored activities, including but not limited to classroom-related activities, studying, teaching, research, intellectual or creative endeavor, administration, a service or the provision of communication, computing or emergency services.
- **13.** Misrepresenting oneself or an organization as an agent of the College.
- **14.** Possession of property the student knows or has reason to believe may be stolen.
- **15.** Misuse, theft, misappropriation, destruction, damage, or unauthorized use, access, or reproduction of property, data, records, equipment or services belonging to the College or belonging to another person or entity.
- **16.** Violation of College Policy governing alcohol, including consumption, distribution and/or unauthorized sale or possession of alcoholic beverages. Alcohol is any fermented and/or distilled liquor or substance reasonably believed to be or portrayed by the student as fermented and/or distilled liquor.

No alcohol is allowed on campus. This applies to all students, visitors or guests. All students present in an environment where they are aware that alcohol is possessed and/or consumed, are considered to be in violation of the rule. It is not acceptable to be in an area where alcohol is present even if you "are not drinking."

- **17.** Unauthorized use, transfer or possession of any controlled substance. A controlled substance is:
  - a. Alcohol
  - b. Any narcotic or dangerous drug
  - 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:** The College may revoke the student's Residence Hall License for conduct code violations by giving not less than one day's written notice to the student. Notice shall be served personally upon the student or be posted in some suitable place upon the housing facility of the student.

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

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

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

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

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

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

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

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

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

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

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

A student who has been suspended at one campus will not generally be eligible for admission or re-enrollment at another campus until the student has met the conditions for reinstatement at the campus which imposed the suspension. The conditions for reinstatement may be waived in whole or in part at the discretion of the Chief Student Affairs Officer.

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

#### **Determining What Sanction to Impose**

When determining what sanction to impose, the College may consider:

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



#### **II. Due Process Procedures**

#### Filing Charges

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

#### **Removal from Class**

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

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

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

#### **Interim Action**

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

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

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

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

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

#### **Review and Decision**

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

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

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

At the meeting the student will be provided with the following:

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

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

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

The Student Affairs Dean/Designee will inform the student of the decision, in writing, within five (5) business days of the

student's last opportunity to respond. When feasible, this information will also be communicated in a face-to-face meeting.

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

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

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

#### **III. The Student Conduct Committee**

#### **Purpose of the Committee**

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

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

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

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

#### **Pre-Hearing Procedures**

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

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

The chairperson, who may be assisted by the Student Affairs Dean/Designee, will prepare and send a written notice to the

student no less than ten (10) business days prior to the date set for the hearing. The notice will be delivered personally or by mail directed to the address furnished by the student on his/her hearing request. The notice will include:

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

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

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

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

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

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

#### **Conduct of the Hearing**

The student who is charged with the misconduct may be assisted throughout the proceeding by an advisor. If the student is represented by an attorney, the chairperson/designee and or College Representative also may be assisted by an attorney.



In order to preserve the confidential nature of the disciplinary process, and to protect the privacy interests of the student who is charged with the violation and the witnesses who may be called to testify, the hearing conducted by the Hearing Board will be closed.

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

All witnesses shall be placed under oath before testifying.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **Hearing Board Deliberations and Recommendations**

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

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

Based solely upon the information presented during the hearing, the Hearing Board will formulate a recommendation, including the appropriate sanction, to the Chief Student Affairs Officer. At least three votes are necessary to make any



recommendation. The College Representative will present any prior misconduct to be considered when imposing the appropriate sanction. The student and the College Representative will be provided the opportunity to present their positions on the appropriate sanction.

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

#### IV. Miscellaneous

#### 1. Searches

- a. A search of a student or the student's personal property including a motor vehicle parked on College property may be conducted if the College has a reasonable suspicion that the student possesses or the property contains an item or items, the possession of which violates state, federal or local law, College policy or regulation.
- b. In conducting a search of a student or the student's personal property, the College must consider the intrusiveness of the proposed search in light of the age and sex of the student and the nature of the suspected infraction.

#### 2. Seizures

- a. Illegal items or other possessions reasonably determined to be a threat to the safety or security of others shall be seized by College personnel and/or legal authorities.
- b. Items which are or may be used to disrupt or interfere with the educational process may be removed from the student's possession.
- c. Items seized may be held by the College, returned to the student, or turned over to an appropriate law enforcement agency.

#### 3. Warrants

- 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:

- Residence Life code of conduct violation discipline process
- 2. Campus Police county court system
- 3. Student Affairs Dean student 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, may 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 San Tan, Maricopa and Aravaipa Campuses, and Casa Grande, Florence, 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: <a href="http://www.centralaz.edu/Documents/police/ANNUALSECURITYANDFIREREPORTOct2011.pdf">http://www.centralaz.edu/Documents/police/ANNUALSECURITYANDFIREREPORTOct2011.pdf</a> 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 157 degrees and certificates in a variety of disciplines. Many credentials may be completed over an extended period to accommodate the needs of nontraditional students. Four (4) associate degrees transfer directly to all Arizona public universities, specifically: Associate of Arts (A.A.), Associate of Science (A.S.), Associate of Business (A. Bus.), and Associate of Arts in Elementary Education (A.A.E.E.). In addition, many Associate of Applied Science (A.A.S.) degrees now transfer to the three Arizona public universities and other higher education institutions.

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

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

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

Students who are undecided about their academic program should meet with an academic advisor for assistance in

exploring career and life goals. Selecting a program that fits talents and interests and planning a timeline to achieve academic goals based on course offerings leads to successful degree/certificate completion.

#### **Grand Canyon Diploma**

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

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

http://www.azleg.gov/DocumentsForBill.asp?Bill\_Number=HB2731

## Arizona Transfer Degree Information

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

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

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

The Arizona public and tribal universities and community colleges collaboratively determine transfer articulation policies and procedures to help students easily transfer community



college credits to the universities. These "transfer articulation agreements" apply to all Arizona public and tribal community colleges and universities.

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

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

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

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

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

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

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

# Arizona General Education Curriculum (AGEC)

Each of the transfer associate degrees (A.A., A.Bus. and A.S) include at least 35 semester credits of general education studies known as the Arizona General Education Curriculum (AGEC). The AGEC fulfills lower-division general education

requirements for students planning to transfer to an Arizona public university or community college. The AGEC transfers as a block of 35 credits which meet the target institution's general education requirements provided students earn a minimum degree cumulative grade point average (CGPA) of 2.0 on a 4.0 scale. For assured admission to the universities, AGEC completers are required to earn a 2.5 in all AGEC courses.

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

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

In general, most bachelor's degrees can accommodate an AGEC; however, some majors are structured in such a way that students should or must complete select general education requirements at the university. See the **Major Guides**:

https://aztransmac2.asu.edu/cgibin/WebObjects/ATASS.woa/wa/MajorGuideAZ.

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

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

The Arizona public universities accept AGEC courses for transfer credit in any of the following categories: equivalent course (specific course and credit value are identified in the CEG), general elective credit (EC), or departmental elective credit (DEC). Access the **Course Equivalency Guide (CEG)** at https://aztransmac2.asu.edu/cgi-bin/WebObjects/Admin\_ CEG.



#### **Non-AGEC Institutions**

Coursework transferred from regionally accredited non-AGEC granting institutions may be applied to AGEC as follows (ie. Arizona public universities or out-of-state institutions):

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

#### **Upper Division Course Transfer**

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

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

## **Transfer Agreement Options**

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

## AAS to BAS Transfer Model: The Arizona University System Model

Students who complete an AAS degree at one of Arizona's community colleges have two special program options for transferring to a BAS degree program at one of the Arizona public universities.

#### The 60-60 Credit Hour Model\*

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

#### The 75-45 Credit Hour Model \*\*

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

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

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

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

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

- \* NAU's model is based on a 64 credit A.A.S. degree.
- \*\*There are A.A.S. to B.A.S. models with more than 75 credits which can be transferred. Consult a CAC academic advisor or an NAU advisor.

See Transfer Agreement options for AAS to BAS degree.

#### 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

## **Albright College (AC)**

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

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

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

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

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

#### **Albright Benefits:**

- The maximum number of lower-division credits that can be accepted and applied to the degree at AC is 78. This transfer credit limit will be the difference between total credits required for degree completion and college upperdivision requirements.
- The Associate of Arts, Associate of Business, and Associate of Science Degrees transfer as a block.
- The Associate of Applied Science and Associate of General Studies Degrees' general education coursework transfers fully as a block with the remaining coursework reviewed on a course-by-course basis.
- 4. All programs are full-time and consist of 16 courses. Classes meet one night a week for approximately 2 years. All instructional materials including textbooks are included with our comprehensive tuition.
- 5. A community college transfer scholarship of \$2,500 is available to all graduates of CAC. In addition, CAC employees and their spouses or partners will receive a tuition grant of \$1,600.

#### **Albright College Contact Information**

Albright College

1201 S. Alma School Road, Suite 5400, Mesa, AZ 85215

480-659-3608, dcpaz@alb.edu or mesa.albright.edu

# Arizona Christian University (ACU)

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

#### **Benefits to CAC Students:**

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

#### **Eligibility Requirements:**

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

#### **Terms of Agreement:**

- a. CAC students who meet other ACU admissions requirements and have a minimum cumulative GPA of 2.0 in courses numbered 100 and above are guaranteed admission to ACU.
- b. Tuition at ACU is evaluated by the Board of Trustees on an annual basis and currently is \$20,952 per year.
- c. Miscellaneous fees may apply and vary based on program of study.
- d. ACU's transfer priority deadline is April 1, 2013.
- e. Students transferring to ACU as part of this MOU may obtain an application fee waiver code by contacting a member of the ACU admission team.
- f. Eligible students will automatically receive an ACU Transfer Scholarship.

Advising Information/Contact: Contact the ACU admissions department at 602-386-4100 or by e-mail at admissions@arizonachristian.edu



# Arizona State University (ASU) Transfer Admission Guarantee Programs (TAGs), AAS to BAS, RN to BSN

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

#### **ASU TAG Benefits:**

- Guaranteed admission to the ASU degree program of your TAG.
- 2. Cost-effective pathway ensuring that all of your courses transfer and apply to your ASU degree.
- 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:**

- 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.
- 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.
- 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:

- 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).
- Guaranteed admission into ASU's RN-BSN program upon completion of pathway requirements.
- 3. Eligibility for participation in the **ASU Tuition Commitment** program.
- Access to ASU RN-BSN advisors and other preenrollment 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 coursework.

#### **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: <a href="https://webapp4.asu.edu/programs/t5/undergrad?init=false&nopassive=true">https://webapp4.asu.edu/programs/t5/undergrad?init=false&nopassive=true</a>.

## **Benedictine University (BU)**

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

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

#### Benefits of Attending Benedictine University at Mesa:

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

#### **Next Generation Learning:**

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

effectively, think critically, locate and use valid and reputable sources of information to support arguments, analyze situations and create solutions to problems. Regardless of major, the development of these skills will best prepare students for success in the real world.

#### **Transfer Friendly:**

Benedictine University at Mesa is dedicated to creating a smooth transfer process for Central Arizona College students by providing documents such as Course Equivalency Guides, Suggested Academic Plans and not limiting the number of transferable credits. Transfer resources can be found at: http://ben.edu/mesa/academics/transfer\_resources.cfm .

#### **Service Learning:**

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

#### Catholic and Benedictine Values-Based Education:

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

#### **BU Scholarships:**

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

#### **Small Class Sizes and Individual Attention:**

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

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

## Academic programs offered at Benedictine University at Mesa in Fall 2013:

- Bachelor of Arts in Communication Arts
- Bachelor of Arts in Criminal Justice
- Bachelor of Arts in Psychology
- Bachelor of Arts in Theology
- Bachelor of Business Administration in Management and Organizational Behavior
- Bachelor of Fine Arts
- Bachelor of Science in Nutrition
- Minor in Religious Studies



#### **Admissions Process:**

It is strongly recommended that students with interest in transferring schedule a time to meet with a Transfer Admissions Counselor early in their college career. Transfer Counselors will assist students throughout the transfer admission process as well as provide unofficial evaluations of current and future courses.

- 1. To apply to Benedictine University at Mesa
  - a. Download a hard copy at www.ben.edu/mesa
  - b. Call **(602) 888-5500** to receive an application by mail or via email.
- 2. Request all official college/university transcripts to be mailed to Benedictine University at Mesa, 51 E. Main St., Suite 105, Mesa, AZ 85201.
  - a. If less than 20 transferable credits have been earned, request your <u>official</u> High School Transcripts, and <u>official</u> ACT or SAT scores be sent to Benedictine University at Mesa.
  - If international credits are earned, order an evaluation from <u>ECE</u> to be sent to Benedictine University at Mesa
- 3. Your admissions counselor may request additional materials if you did not meet the minimum admission requirements. You may be asked to submit:
  - a. Personal statement
  - b. Letter of reference by an academic or professional Contact
- Once your completed application has been received and reviewed, an admission counselor will personally contact you by phone with your admission status.

#### **BU Transfer Admissions Requirements:**

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

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

• A minimum of 20 transferable semester hours (If a student has fewer than 20 semester hours of transfer credit, freshman requirements apply)

- A cumulative grade point average (CGPA) of 2.0 on a 4.0 scale or better from all colleges and universities previously attended
- No previous academic probation or academic dismissal

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

#### **Contact Information:**

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

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

## **Brigham Young University (BYU)**

#### **BYU Mission Statement**

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

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

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



#### **Tuition**

Tuition 2012-2013		
Undergraduate	Semester	
LDS	\$2,355	
Non-LDS	\$4,710	
Graduate		
LDS	\$2,975	
Non-LDS	\$5,950	
Law/Business Schools	\$5,475	
Non-LDS Law/Business	\$10,950	

#### Admission

Apply at besmart.com.

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

#### **BYU Admission criteria**

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

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

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

with more than 90 graded semester credit hours are unlikely to be admitted.

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

#### **BYU Transfer Credit**

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

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

#### **BYU Scholarships**

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

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

#### B4byu.com or Byu.edu

For transfer information, contact Susan Facer, BYU Transfer Evaluation Coordinator at: **801-422-8566**.



### **Chamberlain College of Nursing**

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

## **Chancellor University (CU)**

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

# **Columbia Southern University** (CSU)

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

## **Frontier Nursing University (FNU)**

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

#### Programs available include:

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

#### **Frontier Nursing University Benefits:**

- 1. Admission fee waived for CAC Nursing A.A.S. degree graduates.
- 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:**

- 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.



## **Grand Canyon University (GCU)**

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

For more information regarding GCU and its programs, please visit <a href="http://www.gcu.edu/">http://www.gcu.edu/</a> or call us at 1.855.428.8508. Students can also visit GCU's Transfer Center. GCU Eligibility Requirements:

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

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

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

### **Grantham University**

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

## Kaplan University (KU)

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

#### **KU Benefits:**

- 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.
- 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:**

- CAC degree graduates or students submitting a letter from the CAC Registrar indicating the student is in good standing, the expected graduation date, the associates degree expected to be earned and the program/major. Upon graduation, the student must submit proof of having been awarded an associate's degree.
- 2. Both of the above groups of students are reviewed as prequalified applicants for KU degree programs.
- 3. Kaplan will complete a review of all transfer credits submitted on official transcripts from CAC for students who have completed a certificate or diploma program.
- 4. Prior Learning Assessment Curriculum Evaluation (PLACE) may be developed to aid in the transfer credit evaluation process.
- 5. Kaplan reserves the right to make a final determination on all matters related to transferability and course equivalencies.



#### **Kaplan University Terms:**

- 1. Complete all Kaplan University admission requirements in force at the time of application.
- 2. Upon acceptance and signing of the Kaplan University enrollment agreement, transfer students will be subject to all Kaplan University policies, codes of conduct, college procedures and requirements.
- 3. CAC students unable to fulfill KU prerequisites at CAC must complete them at KU. Prerequisites vary by catalog and bachelor's degree program and emphasis chosen.
- 4. Fulfill all KU requirements, including completion of at least 25% of program requirements at Kaplan.
- 5. Fulfill at least 50% of the major requirements including the capstone course at Kaplan.
- Credit earned through any combination of Transfer Credit, Challenge Credit or Experiential Credit will not exceed 75% of total credits required for graduation.

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

### **National American University**

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

#### **Bachelor Degrees**

- Accounting
- Business Administration (also with emphasis in the following)

Accounting

Entrepreneurship

Financial Management

Human Resource Management

**Information Systems** 

**International Business** 

Management

Marketing

Supply Chain Management

Tourism and Hospitality Management

- Criminal Justice
- Healthcare Management
- Information Technology (block transfer)
- Management (block transfer)
- Nursing Online RN to BSN\*
- Organizational Leadership

#### **National American U Benefits**

We are committed to supporting students from their first contact with NAU until graduation through:

- Guaranteed admission to NAU degree programs
- Dedicated team of admissions, financial services, and academic advisors, student tutoring, counseling services and career services
- Classes offered online, depending on program and availability
- Existing credits and experience will be reviewed for potential transfer credit
- Curriculum designed with access to major courses in the first year

#### **Affordability**

Your financial service representative is dedicated to finding a financial plan that works for you based on your eligibility:

- Community College or Technical Training Scholarship of up to \$2000 per year (must be a CAC graduate)
- Grants, loans, and work study
- Military benefits
- Tuition reduction for CAC employees

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

Contact: National American University, Online Learning, 877-398-0122; ccadmissions@national.edu.

# Northern Arizona University (NAU)

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

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

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

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

## NAU Office at CAC Signal Peak and Other CAC Campuses

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

#### **CAC2NAU Partnership**

CAC and NAU are providing greater access and affordability for students to earn a bachelor's degree with the award-winning\* 2NAU program. CAC2NAU is a joint-admission program. As a participant in the program, you are admitted to Northern Arizona University while you attend your community college. While taking coursework at CAC, you pay the community college tuition rate. When you are ready to

transition into NAU coursework, you take advantage of the most affordable university tuition rate in the state. See the tuition comparison at:

**extended.nau.edu/TuitionComparison.aspx.** The unique elements of CAC2NAU help ensure a smooth transition to NAU!

\*Recipient of Arizona's Pathways to Postsecondary Education Award

#### **CAC2NAU Eligibility**

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

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

#### **CAC2NAU Benefits and Features**

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

#### **CAC2NAU Degree Options**

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

#### **Getting Started with CAC2NAU**

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

#### **CAC2NAU Terms**

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

#### **CAC2NAU Scholarships and Financial Aid**

NAU is prepared to support CAC2NAU students through scholarships and other financial support. 2NAU students may be eligible for the Joint Admission Transfer Scholarship and/or a variety of other opportunities; see:



nau.edu/FinAid/Scholarships/Merit/ and extended.nau.edu/FinancialAid.aspx.

#### **General Transfer to NAU**

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

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

#### **AAS to BAS Degrees**

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

#### 90 + 30 Program

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

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

#### **Bachelor's and Beyond**

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

#### NAU Bachelor's Programs

Visit the recommended websites for more specific details regarding majors and emphases.

#### **NAU Flagstaff:**

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

#### **NAU Extended Campuses-Pinal County:**

Visit <u>extended.nau.edu/DegreeSearch.aspx</u> for our most detailed and current list of bachelor's and master's programs available through Extended Campuses.



NAU Bachelor's Programs *Blended programs include in-person and online.	Online	In Person	Blended*	
Administration	٧		٧	
Business Administration				
Entrepreneurship and Small Business	٧		٧	
Global Business	٧		٧	
Logistics and Supply Chain Management	<b>V</b>		٧	
Management     Manusching	<b>√</b>		<b>√</b>	
Marketing  Career & Technical Education	√ 		V	
Comparative Cultural Studies	<u> </u>			
Art History	٧			
Asian Studies	٧			
Humanities	٧			
Religious Studies	٧			
_	√			
Criminology & Criminal Justice				
Dental Hygiene-Degree Completion	√ -/			
Early Childhood Education	٧	+ .		
Elementary Education		٧	_	
Emergency Services Administration	٧		٧	
Health Sciences				
Allied Health	٧			
Diagnostic Medical Imaging and Therapy     Madical Assisting	<b>√</b>			
<ul><li>Medical Assisting</li><li>Paramedic Care</li></ul>	٧			
Physical Therapist Assisting	٧			
Public Health	٧			
Respiratory Care	v			
Surgical Technology	V			
Hotel & Restaurant Management	٧			
Interdisciplinary Studies				
Administration	√			
<ul> <li>Arts and Letters</li> </ul>	٧			
Criminal Justice	٧			
Emergency Services (90-30)  House divise (90-30)	٧			
<ul><li>Humanities (90-30)</li><li>Justice Administration (90-30)</li></ul>	٧			
Public Management (90-30)	v			
Speech-Language Sciences and Technology	V			
Technology Management	V			
Justice Administration	٧		٧	
Logistics & Supply Chain Management	٧			
Nursing (RN to BSN)	٧			
Parks & Recreation Management				
Community and Commercial Recreation	V			
Individualized Study	٧			
<ul> <li>Outdoor Education and Leadership</li> </ul>	√			
Park Protection	٧			
• Tourism	√ .		_	
Public Management	٧		٧	
Special & Elementary Education		√		
Language Sciences & Technology	٧			
Technology Management	٧			



### **Ottawa University (OU)**

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

#### **Programs include:**

#### **School of Education:**

Bachelor of Arts in Elementary Education, Early Childhood Education, Secondary Education, and Special Education (crosscategorical)

Master of Arts in Education

#### School of Arts and Sciences:

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

Master of Arts in Counseling

#### **Angell Snyder School of Business:**

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

#### **Ottawa University Benefits**

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

#### **Ottawa University Terms**

- 1. Ottawa will award and transcript college-level credit earned through the successful completion of any associate degree program awarded by CAC. Varsity sports, developmental, remedial, and courses that are not applicable to CAC's degree will not transfer. Activity courses, such as skill building, physical, and musical activities, will be limited to four credits for each area. Coursework from other institutions accepted toward the CAC associate's degree will be evaluated and transcripted in compliance with Ottawa's transfer policy.
- 2. Ottawa will accept a maximum of 80 credits from CAC toward the Bachelor of Arts degree. Of the 128 semester hours of credit required for graduation, a minimum of 30 hours must be completed at Ottawa University, including a minimum of 12 hours of upper division coursework in the major. The student must also complete a minimum of 48 hours of upper division coursework.
- Ottawa's General Education requirements are organized into four areas called Breadth Areas; Art/Expression, Social/Civic Studies, Science/Description and Value/Meaning. Demonstration of competence in the Liberal Arts breadth areas includes completion of a minimum six semester credit hours. A student gaining an associate degree from CAC will typically have fulfilled Ottawa's breadth area requirements. Should breadth area courses be lacking, these will be available through the student's regular course of study at Ottawa University. Ottawa recognizes that learning in these four areas may be achieved in varied ways through different classes and/or tests, depending on students' needs, interests, and educational backgrounds. Students must also successfully complete the LAS sequence of courses at Ottawa, consisting of a minimum of LAS 30012, Creative Writing and Thinking in the Liberal Arts and LAS 45012, Global Issues in the Liberal Arts.
- 4. Only courses for which students have received a grade of "C" or better (2.0 on a 4.0 scale) can be transferred and applied toward degree requirements to satisfy major and breadth area requirements. Courses with a grade of "D" will be considered for application toward the required 128 credits needed for graduation. Students must have a minimum 2.00 cumulative grade point average or higher to graduate from Ottawa.

The Ottawa University website is found at: www.ottawa.edu Contact an enrollment advisor by calling 855-392-0002.



# Palmer College of Chiropractic (PCC)

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

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

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

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

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

#### Palmer College Eligibility Requirements:

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

## **Potomac College**

See the Potomac College website for details: http://www.potomac.edu/ or call: 602-734-4369.

## **Prescott College (PC)**

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

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

#### **Prescott College Benefits:**

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

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

#### **Prescott College Eligibility Requirements:**

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

#### **Prescott College Terms:**

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

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



## University of Arizona (UA)

## Transfer Admission Programs (TAPs), AAS to BAS Paths

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

#### **UA TAP Benefits:**

- Guaranteed transfer admission to UA TAP degree programs.
- 2. Cost-effective pathway ensuring that all courses transfer and apply to your UA degree.
- 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** 
  - o Diagnostic Medical Sonography A.A.S.
  - o Entertainment Industry Technology: 4 Tracks
  - o Equine Management A.A.S.
  - o Fire Science Technology A.A.S.
  - o Manufacturing Engineering A.A.S.
  - o Radiologic Technology A.A.S.
  - o Renewable Energy Technology A.A.S.
- A.S. with AGEC-S leading to Secondary Education Teacher Certification (3 online semesters +1 semester Student Teaching)
- B.A. Anthropology
- B.A. Communication
- B.A. English
- B.A.S. Supervision
- B.A.S. Network Administration (Coursework at CAC)
   Designed for students with work experience and an
   A.A.S., this degree meets industry demands, utilizes real world situations and allows students to use practical
   knowledge and to advance in their career.

- Human Services
- B.S. Agribusiness Economics and Management
- B.S. Agriculture Technology Management
- B.S. Environmental Science
- B.S. Family Studies and Human Development (FSHD)
- B.S. Molecular and Cellular Biology
- B.S. Nutritional Sciences
- B.S. Science Education Earth Science Option
- B.S. online leading to Teacher Certification NEW FOR 2013/2014
- B.A.S. Informatics
- B.S. Psychology
- B.A. Psychology

Contact a TAP CAC advisor for details at: http://admissions.arizona.edu/transfer.

## O | DEGI

## **DEGREES AND CERTIFICATES**

## University of Maryland University College (UMUC)

#### **Alliance Program**

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

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

For more information regarding UMUC and its programs, including the customized programs for CAC associate degree graduates, visit www.umuc.edu or

http://www.umuc.edu/students/academics/onlinelearning/ugonl ineprograms.cfm. See the articulated programs designed for CAC students at:

www.umuc.edu/students/admissions/transfer/ccalliances/ and select CAC.

#### **UMUC Alliance Program Benefits:**

- 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.
- Students must complete a minimum of 120 credits to earn the UMUC bachelor's degree of which at least 30 credits must be taken through UMUC and 45 credits must be upper division level coursework.
- 5. Access to UMUC transfer advising by phone, webcam, and in-person during regularly scheduled campus visits.
- 6. Waiver of UMUC \$50 admission application fee if student completes the application prior to graduating from CAC.
- 7. UMUC's Prior Learning program grants up to 30 college credits for knowledge gained from work, military service, and community and volunteer activities.
- 8. Eligibility to apply for the **UMUC Scholarship** program.
- 9. Scholarship opportunities for community college graduates with a minimum 3.0 GPA.

- 10. Access to the extensive University System of Maryland library, tutoring, writing assistance, career counseling, computer labs, 24-hour tech support and more.
- Dual enrollment options at your community college and UMUC.
- 12. Students can easily apply online: http://www.umuc.edu/

#### **UMUC Alliance Program Eligibility Requirements:**

- 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.
- 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:**

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

#### **Community College Transfer Scholarship**

CAC graduates may apply for the Community College Transfer Scholarship awarded for up to \$3,300 per year for full-time study and \$1,650 per year for part-time study or other scholarship opportunities as they become available. Students must meet scholarship qualifications:

- 1. Earn 3.0 GPA at CAC.
- 2. Complete CAC associate degree.
- 3. Verify U.S. citizen or permanent resident status.
- 4. Submit both UMUC admission and scholarship application.

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

#### **UMUC Scholarship for Alliance Faculty and Staff**

Pursue professional development through the Alliance Program. The scholarship program can save you money on any of UMUC's many award-winning and career-relevant bachelor,

master and doctoral degree programs. UMUC provides comprehensive student services to help foster student success. Awards are \$500 per fall/spring semester with an opportunity to renew up to three years.



#### **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
- Have a minimum cumulative 3.0 GPA from all previous institutions

#### **UMUC New Doctoral Student Option:**

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

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

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

### **University of Phoenix (U of PX)**

#### RN to BSN

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

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

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

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

## Benefits to CAC Students/Employees and Family Members:

#### From **Phoenix.edu**:

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

The University of Phoenix® College of Nursing is committed to helping prepare you to be a more essential part of a health care delivery team:

- Our RN to BSN degree program accredited by the Commission on Collegiate Nursing Education (CCNE).
- Regularly updated curricula that focus on evidence-based practice and stronger decision-making skills you can use now, not just after graduation.
- Faculty members whose average 18 years' experience bring life to the curricula.
- A flexible course schedule that can accommodate your busy life.
- More individual attention with an average 8-to-1 student-tofaculty ratio.
- Learning teams that reinforce new concepts and build teamwork skills.



For more information about on-time completion rates, the median debt incurred by students who completed this program, and other important information, please visit

phoenix.edu/programs/gainful-employment.html

#### **U** of PX Eligibility Requirements:

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

- a. Have earned an acceptable high school diploma, GED equivalent, California High School Proficiency Examination certificate or foreign secondary school equivalent. If you currently don't meet this requirement, you can arrange to take the GED through your state's GED administrator's office or search for the nearest GED testing center.
- b. Have earned an associate degree from a regionally or nationally accredited institution or earned a nursing diploma from a recognized school in the United States.
- c. Have a valid, unrestricted, unencumbered RN license from the United States in all states in which you hold an active license.
- d. Be a citizen or permanent resident of the United States or hold an approved, valid visa if residing in the United States.
- e. Have never been expelled from a previous institution.
- f. Complete all required forms for admission and submit official test scores and official transcripts from all colleges or universities attended.

#### **U** of PX Terms of Agreement:

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

- b. A minimum grade of "C" (2.0) is required to waiver any University undergraduate lower division-required course. c. Students must complete the BSN program with a minimum GPA of 2.00.
- d. Tuition cost: To learn more about tuition costs please visit: http://www.phoenix.edu/tuition\_and\_financial\_options/tuition\_and\_fees.html
- e. Fees: To learn more about fees please visit: http://www.phoenix.edu/tuition\_and\_financial\_options/tuition\_and\_fees.html
- d. Deadlines: N/A
- e. to learn more about special partner benefits, please visit www.phoenix.edu/centralAZ
- f. Credit by Exam options: Available by speaking to an advisor
- g. For any transfer credit limitations please refer to an advisor
- h. Scholarships available: To learn more about scholarships http://www.phoenix.edu/tuition\_and\_financial\_options/scholarships/institutional-scholarships.html.

**Enrollment information:** available by speaking with an Enrollment Advisor.

#### **U of PX Special Programs/Cohorts:**

List of transfer pathway 4-year degrees at UoPX and master's programs available to CAC employees and their families: UOPX CON offers LP/VN to BSN (at four campus locations; online is not an option), RN to BSN Completion Program (campus location or online), MSN (concentrations in Nursing Education and Nursing Administration—onsite or online), and Family Nurse Practitioner (at four campus locations; online is not an option). CON also offers certificate programs in FNP (at four campus locations), Post Master's Nursing Administration, and Post Master's Nursing Education.

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

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

### **Upper Iowa University**

See the UIU website for details: **http://www.uiu.edu/.** Or call: (563) 425-5200.



# **Western International University** (WIU)

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

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

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

#### **WIU Benefits:**

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

#### **WIU Eligibility Requirements:**

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

#### **WIU Bachelor Degree Programs:**

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

#### **WIU Master Degree Programs:**

- Business Administration (MBA)
- Finance (MBA)
- Information Systems Engineering (MS)
- Innovative Leadership (MA)
- Human Dynamics (MA)
- International Business (MBA)
- Management (MBA)
- Marketing (MBA)
- Public Administration (MPA)

## ASSOCIATE OF ARTS (A.A.) DEGREE (60-64 Credits)

#### District-Wide

The Associate of Arts (A.A.) Degree is appropriate for students who plan to transfer to the university to earn a baccalaureate degree. Major areas of study include: 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 (35-36 Credits)

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

### **General Education (35-36)**

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

#### Written Communications (6 Credits)

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

#### **Oral Communications (3 Credits)**

Select an AGEC Course.

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

#### **Arts and Humanities (6-9 Credits)**

Select a minimum of one Art (3) and one Humanities (3) AGEC course.

#### **Social and Behavioral Sciences (6-9 Credits)**

Select AGEC courses from different disciplines.

### Physical and Biological Sciences (8 Credits)

Select AGEC courses with a laboratory component.

#### **Mathematics (3-4 Credits)**

MAT141 College Mathematics, Standard (4) or higher

#### **Subject Options (0-6)**

Based on your major, review the specific A.A. Degree requirements in the CAC catalog, consult an academic advisor, and review Transfer Guides:

http://www.aztransfer.com/TransferGuides.

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

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

Select approved elective courses which transfer as "Elective or better" to all three Arizona public universities to complete the required A.A. Degree credit requirement. Consult the CEG.

**ICON LEGEND** 

AGEC: 🔕 Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS

SUN Course:



#### Requirements for A.A. Degree (3)

Reading Competency: RDG094 College Reading Rea

#### **Computer Competency (3):**

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

OR

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

#### Other A.A. Degree Requirements

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

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

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

Students must earn a grade of "C" or better in each A.A. Degree required course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

The Associate of Arts Degree requires 60-64 semester credits.

**ICON LEGEND** 

AGEC: 📵

Intensive Writing: /W Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS

SUN Course:



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

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

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

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

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

#### AGEC-B (35-36 Credits)

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

http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa.

### **General Education (35-36)**

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

#### **Written Communications (6 Credits)**

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

#### **Oral Communications (3 Credits)**

Select an AGEC course.

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

#### **ICON LEGEND**

Dual Enrollment: AGEC: 🔕 Intensive Writing: /W Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:

#### **Arts and Humanities (6-9 Credits)**

Select a minimum of one Art (3) and one Humanities (3) AGEC course.

#### **Social and Behavioral Sciences (6-9 Credits)**

Select AGEC courses from different disciplines.

#### Physical and Biological Sciences (8 Credits)

Select AGEC courses with a laboratory component.

#### **Mathematics (3-4 Credits)**

MAT211 Brief Calculus (4) or higher

#### **Computer Competency (3 Credits)**

CIS120 Survey of Computer Information Systems (3)

### Subject Options (0-3)

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

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (22-26 Credits)** ACC201 Financial Accounting (3)

ACC201	Financial Accounting (3)
ACC202	Managerial Accounting (3)
BUS201	Legal Environment of Business (3)
<b>BUS208</b>	Business Statistics (3)
ECN201	Principles of Macroeconomics (3) [3] (also fulfills
	Social/Behavioral Science requirement)
ECN202	Principles of Microeconomics (3) (also fulfills
	Social/Behavioral Science requirement)
MAT215	Math for Business Analysis (4) 🗟

### Electives (0-4)

Select approved elective courses which transfer as "Elective or better" to all three Arizona public universities. Consult the CEG. Students must complete a total of 60-64 credits to earn the Associate of Business Degree.



#### **Recommended Business Electives:**

ACC121	Income Tax Fundamentals (3)
BUS100	Introduction to Business (3)
BUS260	Applied Business Seminar (3)
CIS123	Introduction to Programming (3)
MAT151	College Algebra, Standard (4)

#### Requirements for A. Bus. Degree (3)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

CIS120 Survey of Computer Information Systems (3) (Fulfilled by AGEC-B requirement)

#### Other A. Bus. Degree Requirements

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

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

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

Students must earn a grade of "C" or better in each A. Bus. Degree required course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-B requirements.

The Associate of Business Degree requires 60-64 credits.

#### **ICON LEGEND**

AGEC: 🔃 Intensive Writing: /W Reading Required: RDG094: R Dual Enrollment:

Programs of Study/Tech Prep: POS





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

## Signal Peak & Superstition Mountain Campuses

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

For a list of Common Courses associated with specific programs of study, go to the **Common Course Matrix Archives** and select the year you completed the course(s): http://www.aztransfer.com/MatrixArchives.

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

### AGEC-S (35-37 Credits)

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

http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa.

#### **General Education (35-37)**

#### Written Communications (6 Credits)

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

For the two categories directly below, choose AGEC courses from the equivalent AGEC Category from the AGEC Course List in this catalog. Students are encouraged to choose coursework from more than one discipline for both Arts and Humanities and Social and Behavioral Science categories.

#### **Arts and Humanities (6 Credits)**

Select one Art (3) and one Humanities (3) AGEC course.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS SUN Course:

#### Social and Behavioral Sciences (6 Credits)

Select AGEC courses from different disciplines.

#### Physical and Biological Sciences (8 Credits)

#### **Life Science Majors:**

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

BIO181 General Biology I (4) plus
BIO182 General Biology II (4) c

#### **Physical Science Majors:**

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

#### **Mathematics (3-4 Credits)**

MAT221 Analytical Geometry and Calculus I (4) local or higher

#### **Subject Options (6-8)**

Based on your major, consult the **Transfer Guide** at http://www.aztransfer.com/TransferGuides.
Students may select mathematics or science courses. Select Mathematics courses above the first course in the calculus sequence and/or Science courses from: Agriculture, Astronomy, Biology, Botany, Chemistry (CHM151 or higher), Engineering, Environmental Science, Geology, Nutrition, Physical Geography, Physics or Zoology.

#### **Special Awareness Requirements (0-9)**

- 1. At least three semester credits of coursework in Intensive Writing and Critical Thinking
- 2. At least three semester credits of coursework in Ethnic/Race/Gender Awareness
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Electives**

Select approved elective courses which transfer as "Elective or better" to all three Arizona public universities. Consult the CEG. Students must complete a total of 60-64 credits to earn the Associate of Science Degree.



#### Requirements for A. S. Degree (3)

Reading Competency: RDG094 College Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

CIS120 Survey of Computer Information Systems (3)

 $\mathbf{OR}$ 

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

#### Other A. S. Degree Requirements

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

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

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

Students must earn a grade of "C" or better in each A.S. Degree required course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

Associate of Science Degree requires 60-64 credits.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: *IW*Reading Required: RDG094: *R* 

Dual Enrollment:

Programs of Study/Tech Prep: POS





# ARIZONA GENERAL EDUCATION CURRICULUM (AGEC) 2013-2014 🖸

Completion of the AGEC or AGEC Certificate fulfills lower division General Education Requirements and will be fully applicable to the baccalaureate degree upon transfer to an Arizona public university. Three tracks are available: AGEC-Arts, AGEC-Business and AGEC-Science. All require completion of 35-37 transferable credits.

Consult an academic advisor to select courses to meet the AGEC requirements that may also fulfill program requirements in your chosen university major.

#### **Multiple-Use Course Guideline:**

Students may use a course to fulfill an AGEC Category, such as the Social and Behavioral Sciences along with an AGEC Special Awareness Requirement Area, such as Intensive Writing. In addition, students may use the same course to fulfill certificate/degree core and/or elective requirements as well as CAC Requirements, i.e. Computer Competency course. Students must earn the minimum credits required for each credential. For example, an A.A. Degree with an AGEC-A requires a minimum of 60-64 credits, including a minimum of 20 credits earned from CAC.

#### AGEC (35-37 Credits)

#### **General Education**

When fulfilling the AGEC requirements, follow the instructions carefully. For example, students selecting the AGEC-A must earn a minimum of one course in the Arts Category and one course in the Humanities Category, i.e. ART 207 or ART208. Thus, the same Art course may not fulfill both the AGEC Arts and AGEC Humanities Categories (6-9 credit requirements).

#### **Written Communications (6 Credits)**

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

#### **Oral Communications (3 Credits)**

COM100 Fundamentals of Human Communication (3) COM101 Interpersonal Communication (3) COM202 Introduction to Group Communication (3)

COM206 Public Speaking (3)

COM263 Intercultural Communication (3)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: ROG094

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

#### **Arts and Humanities (6-9 Credits)**

#### Arts (Minimum of 3 credits)

ART100 Art Appreciation (3) ART101 Two-Dimensional Design (3) ART102 Three-Dimensional Design (3) **ART103** Beginning Jewelry and Metalwork (3) ART105 Ceramics I (3) Art History I (3) ART207 ART208 Art History II (3) EIT100 History of Rock n' Roll (3) LIT202 American Literature II (3) Music Appreciation (3) MHL100 **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) U.S. History II (3) HIS102 HIS103 History of Western Civilization I (3) History of Western Civilization II (3) HIS104 HIS108 Eastern Civilization–Beginnings to 1850 (3) Women in U.S. History (3) HIS201 **HIS208** Eastern Civilization–1850 to Modern Times (3) HMC250 Humanities in the Western World I (3) HMC251 Humanities in the Western World II (3) HMC252 Humanities in the Western World III (3) HNR204 Honors Colloquium I (3) HNR205 Honors Colloquium II (3) 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)

Introduction to Philosophy (3)

PHI105 Introduction to Ethics (3) PHI112 World Religions (3)

PHI101



### **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)
PHI105	Introduction to Ethics (3)
POS101	American Politics (3)
POS104	Contemporary Issues in World Politics (3)
POS220	U.S. and Arizona Constitutions (3)
PSY101	Introduction to Psychology (3)
PSY200	Social Psychology (3)
PSY203	Developmental Psychology (3)
PSY205	Personality and Social Adjustment (3)
PSY277	Human Sexuality (3) Cross Listed with SOC277
REC101	Recreation, Leisure, and the Quality of Life (3)
SOC100	Introduction to Sociology (3)
SOC102	Contemporary Issues in Society (3)
SOC200	Racial and Ethnic Minorities (3)
SOC203	Marriage and Family (3)
SOC212	Gender in Society (3)
SOC250	Family Violence (3)
SOC277	Human Sexuality (3) Cross Listed with PSY277

# **Physical and Biological Sciences** (8 Credits)

Associate of Science Degrees have unique Physical or Life Science requirements. Students pursuing an Associate of Science Degree should consult their academic advisor and follow the Arizona Transfer Guide for their major. Refer to the AGEC-S requirements in this catalog.

A C C 1 O 1	W-11-CD1(4)
AGS101	World of Plants (4)
AGS104	Agricultural Environmental Science (4)
AGS106	Entomology (4)
AGS221	Soil Science (4)
AGS240	Plant Biology (4)
AST101	Survey of Astronomy (4)
BIO100	Biology Concepts (4)
BIO109	Natural History of the Southwest (4)
BIO156	Human Biology for Allied Health (4)
BIO160	Introduction to Human Anatomy/Physiology (4)
BIO181	General Biology I (4)
BIO182	General Biology II (4)
BIO201	Human Anatomy – Physiology I (4)
BIO202	Human Anatomy – Physiology II (4) 🤎
BIO205	Microbiology (4)
CHM130	Fundamental Chemistry (4)
CHM151	General Chemistry I (4)
CHM152	General Chemistry II (4)
CHM235	General Organic Chemistry I (4)
CHM236	General Organic Chemistry II (4)
ENV101	Environmental Science (4)
GLG101	Physical Geology (4)
GLG102	Historical Geology (4)
GLG110	Environmental Geology (4)
NTR141	Nutrition and Wellness (4)
PHY100	Physical Universe (4)
PHY111	College Physics I (4)
PHY112	College Physics II (4)
PHY121	University Physics I: Mechanics (4)
PHY122	University Physics II: Electricity and
<b>-</b>	Magnetism (4)
	0 ( · / —

AGEC: 🔕 Intensive Writing: IW

Reading Required: RDG094: 🚜

Dual Enrollment:

Programs of Study/Tech Prep: POS SUN Course:



#### **Mathematics (3-4 Credits)**

Associate of Business and Associate of Science Degrees have unique Mathematics requirements dependent on the major. Contact an academic advisor and follow the Transfer Guide for your major to determine the required Mathematics sequence. Refer to page xxx for AGEC-B requirements and page xxx for AGEC-S requirements.

MAT141	College Mathematics, Standard (4)
MAT151	College Algebra, Standard (4)
MAT162	Applied Statistics (3)
MAT182	Trigonometry with Algebra Review (4)
MAT187	Pre-Calculus (5)
MAT201	Math for Elementary Teachers I (3)
MAT202	Math for Elementary Teachers II (3)
MAT211	Brief Calculus, Standard (4)
MAT212	Brief Calculus, Accelerated (3)
MAT215	Math for Business Analysis (4)
MAT221	Analytical Geometry and Calculus I (4) 퇸
MAT231	Calculus with Analytic Geometry II (4)
MAT241	Analytical Geometry and Calculus III (4)
MAT262	Ordinary Differential Equations (3)
MAT275	Modern Differential Equations (4) 💽

#### **Subject Options (Varies 0-8)**

See specific AGEC requirements.

# **Special Awareness Requirements** (0-9 Credits)

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

#### Intensive Writing/Critical Inquiry IW

AGS122	Natural Resources and Conservation (3) <i>IW</i>
AJS225	Criminology (3) <i>IW</i>
ENG203	Advanced Composition (3) <i>IW</i>
HIS208	Eastern Civilization – 1850 to Modern Times <i>IW</i>
HNR204	Honors Colloquium I (3) AND
HNR205	Honors Colloquium II (3) <i>IW</i>
	(Note: Must complete HNR204 and HNR205)
LIT201	American Literature I (3) <i>IW</i>
LIT202	American Literature II (3) <i>IW</i>
LIT203	English Literature I (3) <i>IW</i>
LIT204	English Literature II (3) <i>IW</i>
LIT233	American Ethnic Literature (3) <i>IW</i>
LIT254A	Literature and Film (3) <i>IW</i>
LIT256	Science Fiction Literature and Film (3) <i>IW</i>
LIT291	Children's Literature for Educators (3) <i>IW</i>
PHI105	Introduction to Ethics (3 <b>IW</b>
PSY203	Developmental Psychology (3) IW
PSY205	Personality and Social Adjustment (3) <i>IW</i>
SOC200	Racial and Ethnic Minorities (3) IW

### **Cultural Awareness (Ethnic/Race/Gender)**

	71141011000 (=111110/11400/0011401)
ART207	Art History I (3) 👂
ART208	Art History II (3) 🤎
ASB102	Cultural Anthropology (3)
ASB201	Indians of the Southwest (3)
COM263	Intercultural Communication (3)
EDU230	Cultural Values in Education (3)
ENG205	Introduction to the Study of Language (3)
GEO101	Introduction to Cultural /Historical Geography (3)
HIS105	Arizona History (3)
HIS106	Mexican-American History (3)
HIS107	African-American History I (3)
HIS108	Eastern Civilization–Beginning to 1850 (3)
HIS201	Women in U.S. History (3)
HMC250	Humanities in the Western World I (3)
HMC251	Humanities in the Western World II (3)
HMC252	Humanities in the Western World III (3)
LIT101	Introduction to Literature (3)
LIT201	American Literature I (3)
LIT202	American Literature II (3)
LIT206	World Literatures (3)
LIT233	American Ethnic Literature (3)
LIT291	Children's Literature for Educators (3)
MHL207	Survey of Jazz/Popular Music (3)
PSY277	Human Sexuality (3) Cross Listed with SOC277
SLG202	American Sign Language IV (4)
SOC200	Racial and Ethnic Minorities (3)
SOC212	Gender in Society (3)
SOC277	Human Sexuality (3) Cross Listed with PSY277

#### **ICON LEGEND**

AGEC: Intensive Writing: *IW*Reading Required: RDG094: *R* 

Dual Enrollment: Programs of Study/Tech Prep: Pos SUN Course:



# Global/International and Historical Awareness (3 Credits)

#### **Global/International Awareness**

AGS122	Natural Resources and Conservation (3)
ASB102	Cultural Anthropology (3)
ART207	Art History I (3)
ART208	Art History II (3) 🤎
FRE201	Intermediate French I (4) 👂
FRE202	Intermediate French II (4)
HIS103	History of Western Civilization I (3)
HIS104	History of Western Civilization II (3)
HIS107	African-American History I (3)
HIS108	Eastern Civilization–Beginning to 1850 (3)
HIS208	Eastern Civilization–1850 to Modern Times (3)
LIT206	World Literatures (3)
PHI112	World Religions (3)
POS104	Contemporary Issues in World Politics (3)
SPA201	Intermediate Spanish 1(4)
SPA202	Intermediate Spanish II (4)
THE100	Theater Appreciation (3)

#### **Historical Awareness**

	oui Amui onoco
ART207	Art History I (3)
ART208	Art History II (3)
ASB201	Indians of the Southwest (3)
GEO101	Introduction to Cultural/Historical Geography (3)
HIS101	U.S. History I (3)
HIS102	U.S. History II (3)
HIS103	History of Western Civilization I (3)
HIS104	History of Western Civilization II (3)
HIS105	Arizona History (3)
HIS106	Mexican-American History (3)
HIS201	Women in U.S. History (3)
HMC250	Humanities in the Western World I (3)
HMC251	Humanities in the Western World II (3)
HMC252	Humanities in the Western World III (3)
MHL100	Music Appreciation (3)
MHL207	Survey of Jazz/Popular Music (3)

#### See **AGEC-Web** for current information:

https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/1/wo/SxbrmcQdxS7r8YMgR8cvbg/0.0.45.2.1.1





# AGEC Course Designations 2013-2014 A † See Code Legend at bottom of page.

		b for current information: 2.asu.edu/cgi-bin/WebObjects/agec.woa	Core Areas					Awareness Areas				
Course #	Credits	Course Title	СМ	MA	АН	SB	PBS	IW	CU	GI	н	
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	GI	Н	
ART208	3	Art History II			AH				CU	GI	НІ	
ASB101	3	Physical Anthropology				SB						
ASB102	3	Cultural Anthropology				SB			CU	GI		
ASB201	3	Indians of the Southwest				SB			CU		Н	
AST101	4	Survey of Astronomy					PS					
BIO100	4	Biology Concepts					BS					
BIO109	4	Natural History of the Southwest					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					
CHM235 🗐	4	General Organic Chemistry I					PS					

<sup>†</sup> 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; /W=Intensive Writing; MA=Mathematics; OR=Oral Communications; PBS=Physical/Biological Sciences; PS=Physical Sciences; SB=Social/Behavioral Sciences; WR=Written Communications; \* HNR204 + HNR205 earned with grade of "C" or better fulfills /W requirement.



AGEC Course Designations 2013-2014 B † See Code Legend											
		leb for current information: ac2.asu.edu/cgi-bin/WebObjects/agec.woa		e Are	eas		Awareness Areas				
Course #	ຮ່	Course Title	СМ	MA	АН	SB	PBS	IW	CU	GI	НІ
CHM236	4	General Organic Chemistry II					PS				
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			АН						
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		НІ
GLG101	4	Physical Geology					PS				
GLG102	4	Historical Geology					PS				
GLG110	4	Environmental Geology					PS				
HIS101	3	U.S. History I			HU	SB					НІ
HIS102	3	U.S. History II			HU	SB					НІ
HIS103	3	History of Western Civilization I			HU					GI	НІ
HIS104	3	History of Western Civilization II			HU					GI	НІ
HIS105	3	Arizona History				SB			CU		HI
HIS106	3	Mexican-American History				SB			CU		НІ
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		НІ
HIS208	3	Eastern Civilization-1850 to Modern Times (3)			HU			IW		GI	

<sup>†</sup> 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; /W=Intensive Writing; MA=Mathematics; OR=Oral Communications; PBS=Physical/Biological Sciences; PS=Physical Sciences; SB=Social/Behavioral Sciences; WR=Written Communications; \* HNR204 + HNR205 earned with grade of "C" or better fulfills /W requirement.



MAT262 🗐

4

3

3

3

MAT275

MHL100

MHL207

MSC101

Ordinary Differential Equations

Modern Differential Equations

Survey of Jazz/Popular Music

Music Appreciation

Media and Society \*\*

# DEGREES AND CERTIFICATES

#### AGEC Course Designations 2013-2014 C † See Code Legend See AGEC-Web for current information: **Core Areas Awareness Areas** http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa Course Title CM MA AΗ SB **PBS** IW CU Course # GI HI HMC250 3 Humanities in the Western World I ΗU CU НΙ HMC251 HU CU 3 Humanities in the Western World II HI HMC252 3 Humanities in the Western World III CU HU НΙ HNR204 3 Honors Colloquium II HU HNR205 3 Honors Colloquium II ΗU HNR204+ 6 ΗU IW Honors Colloquium I and II HNR205 HNR255 3 Leadership Development ΗU LIT101 3 Introduction to Literature HU CU LIT201 3 American Literature I HU IW CU LIT202 3 American Literature II IW CU AΗ LIT203 3 English Literature I HU IW LIT204 3 English Literature II HU IW LIT206 World Literatures CU HU GI LIT233 CU 3 American Ethnic Literature HU IW LIT254A 3 Literature and Film ΗU 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** Trigonometry with Algebra Review MA 4 MAT187 🗐 Pre-Calculus MA MAT201 3 Math for Elementary Teachers I MA MAT202 MA 3 Math for Elementary Teachers II **MAT211** 4 Brief Calculus, Standard MA MAT212 3 Brief Calculus, Accelerated MA MAT215 4 Math for Business Analysis MA MAT221 🗐 Analytical Geometry and Calculus I 4 MA MAT231 🗐 4 Calculus with Analytic Geometry II MA MAT241 📵 Analytical Geometry and Calculus III MA

MA

MA

AR

AR

НΙ

НΙ

CU

<sup>†</sup> 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; /W=Intensive Writing; MA=Mathematics; OR=Oral Communications; PBS=Physical/Biological Sciences; PS=Physical/Sciences; SB=Social/Behavioral Sciences; WR=Written Communications; \* HNR204 + HNR205 earned with grade of "C" or better fulfills /W requirement.



# AGEC Course Designations Grid 2013-2014 D † See Code Legend

		b for current information: c2.asu.edu/cgi-bin/WebObjects/agec.woa	Core Areas					Awareness Areas			
Course #	ວ່	Course Title	СМ	MA	АН	SB	PBS	IW	CU	GI	н
NTR141	3	Nutrition and Wellness					BS				
PEH 101	3	Personal Health				SB					
PHI101	3	Introduction to Philosophy			HU						
PHI105	3	Introduction to Ethics			HU	SB		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 & Magnetism					PS				
POS101	3	American Politics				SB					
POS104 🗐	3	Contemporary Issues in World Politics				SB				GI	
POS220	3	U.s. and Arizona Constitutions				SB					
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			
PSY277	3	Human Sexuality (Cross Listed with SOC277)				SB			CU		
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					
SOC277	3	Human Sexuality (Cross Listed with PSY277)				SB			CU		
SPA201	4	Intermediate Spanish I				SB				GI	
SPA202 🗐	4	Intermediate Spanish II								GI	
THE100	3	Theatre Appreciation			AR					GI	
THE115	3	Introduction to Cinema			AR						
THE116	3	Contemporary Cinema			AR						

<sup>†</sup> 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 with grade of "C" or better fulfills IW requirement.



# Other Degree Information for Central Arizona College

CAC offers two other types of associate degrees: Associate of Applied Science (A.A.S.) and the Associate of General Studies (A.G.S.). These degrees prepare students to directly enter the workforce, to pursue a Bachelor of Applied Science Degree, or to select another degree path to a four-year college/university. Students who select a four-year bachelor's degree goal should earn an AGEC Certificate. The AGEC-Art, AGEC-Business and AGEC-Science Certificates align with many programs of study. Select your target four-year college/university, then consult an academic advisor. See the

Transfer Guides: http://www.aztransfer.com/TransferGuides.

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

#### Signal Peak Campus

The Associate of Applied Science (A.A.S.) Degree is appropriate for students who plan to directly enter the workforce or to pursue a four-year degree. Arizona and other state universities accept A.A.S. Degrees for transfer, including many or all of the credits. Students may choose to pursue the A.A.S. to Bachelor of Applied Science (B.A.S.) Degree paths. Consult your CAC academic advisor and the **Transfer Guides**: http://www.aztransfer.com/TransferGuides.

For a list of Arizona Common Courses associated with specific programs of study, go to the **Common Course Matrix (CCM) Archives** and select the year the course was completed; See: <a href="http://www.aztransfer.com/MatrixArchives">http://www.aztransfer.com/MatrixArchives</a>. Consult the Transfer/Articulation Agreement options in this catalog.

#### **General Education (19-23 Credits)**

For the following six categories, choose from the recommended courses or courses from the equivalent category on the **AGEC Course List** in this catalog or on the **AGEC-Web**. Students who may decide to pursue a bachelor's degree are strongly encouraged to select transferrable courses.

#### Written Communications (3 Credits)

ENG101 English Composition III (3) 0

OR

ENG121 Applied Technical Writing (3)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: R

#### **Oral Communications (3 Credits)**

Select a COM course, or an AGEC course if you plan to transfer to a bachelor's degree program.

#### **Arts and Humanities (3 Credits)**

Select Art, Humanities, Literature, Music, Philosophy and Theatre courses numbered 100 or above, or Arts and Humanities AGEC courses, especially those areas which suit major or minor areas of study.

#### **Social and Behavioral Sciences (3 Credits)**

Select Anthropology, Economics, Geography, History, Political Science, Psychology and Sociology courses numbered 100 or above, or Social and Behavioral Sciences AGEC courses, especially those areas which suit major or minor areas of study.

#### Physical and Biological Sciences (4 Credits)

Select Biological or Physical Science courses numbered 100 or above, or Physical and Biological Sciences AGEC courses, especially those areas which suit major or minor areas of study.

#### **Mathematics (3-4 Credits)**

Select a college-level Mathematics course

MAT101 Essential Mathematics (4) or higher **OR** 

BUS101 Business Mathematics (3)

# Core Requirements and Electives (41 or More Credits)

The number of credits required depends on the chosen major. See the specific A.A.S. Degree programs.

#### Requirements for A.A.S. Degree (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

CIS110 Fundamentals of Computer Literacy (3) or higher

Transferable Computer Competency course (Consult the Course Equivalency Guide to determine transferability to Arizona colleges and public universities.) Students intending to transfer to a B.A.S. Degree or other bachelor's degree are advised to select transferable courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn a minimum of 20 credits from CAC.

The A.G.S. Degree requires a minimum of 64 credits.



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

# Signal Peak Campus Superstition Mountain Campus

The Associate of General Studies (A.G.S.) Degree is appropriate for students who desire flexibility to select courses to build a degree. A.G.S. students typically complete the A.G.S. required 29-30 general education credits plus additional credits for a total of 64 credits. Some four-year colleges/universities accept the A.G.S. and apply many to all credits toward a bachelor's degree. Choosing the A.G.S. Degree and fulfilling the Arizona General Education Curriculum (AGEC) requirements, 35 general education credits, provides students the opportunity to attend an Arizona public university and to transfer the 35 credit AGEC Certificate.

Consult your CAC academic advisor and the **Transfer Guides** for Arizona State University, Northern Arizona University, and the University of Arizona in the major field for the Bachelor of Applied Science Degree. For more information, go to: http://www.aztransfer.com/TransferGuides .

For a list of Common Courses associated with specific programs of study, go to the **Common Course Matrix Archives** and select the year the course was completed; See http://aztransfer.com/MatrixArchives. Consult the Transfer/Articulation Agreement options in this catalog.

Upon completion of the A.G.S. Degree with an AGEC, students must complete both the A.G.S. Degree completion form and the AGEC Certificate Completion form.

#### General Education (29-30 Credits)

#### **Written Communications (3 Credits)**

ENG101 English Composition III (3) 🔊 🕄

Note: The AGEC requires 6 credits: ENG101 English Composition III (3) and ENG102 English Composition IV (3).

#### **Oral Communications (3 Credits)**

Select a COM course applicable to your designated degree.

#### **Arts and Humanities (6 Credits)**

Select Art, Humanities, Literature, Music, Philosophy and Theatre courses numbered 100 or above, or Arts and Humanities AGEC courses, especially those areas which suit major or minor areas of study.

#### **Social and Behavioral Sciences (6 Credits)**

Select Anthropology, Economics, Geography, History, Political Science, Psychology and Sociology courses numbered 100 or above, or Social and Behavioral Sciences AGEC courses, especially those areas which suit major or minor areas of study.

#### Physical and Biological Sciences (8 Credits)

Select Biological or Physical Science courses numbered 100 or above, or Physical and Biological Sciences AGEC courses, especially those areas which suit major or minor areas of study.

#### **Mathematics (3-4 Credits)**

Select a college-level Mathematics course

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

#### **Electives (30-31) Credits**

Select college-level courses numbered 100 or above to meet the A.G.S. Degree 64 credit requirement. Students electing to earn the 35 credit AGEC-A Certificate to prepare for transfer to a four-year institution are strongly encouraged to complete additional coursework in the following areas: English and Mathematics. See the AGEC-A Certificate requirements in this catalog.

#### Requirements for A.G.S. Degree (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

CIS110 Fundamentals of Computer Literacy (3) or higher

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn a minimum of 20 credits from CAC.

The Associate of General Studies Degree requires 64 credits.

**ICON LEGEND** 

AGEC: 📵

Dual Enrollment: 🥝

Intensive Writing: // Programs of Study/Tech Prep: POS

Reading Required: RDG094: 🚜

SUN Course:

# 0

### **DEGREES AND CERTIFICATES**

# COMMON STUDENT LEARNING OUTCOMES (CSLOs) for Central Arizona College

#### CAC College Policy 402 Revised 09/18/2012

The College shall strive to improve student success and academic achievement by providing quality education which encompasses continuous improvement in teaching and learning. The primary focus will be on the learning process that adds value to the learners.

Common Student Learning Outcomes indicate the comprehensive skills, abilities, attitudes and knowledge necessary for being a productive and educated citizen in the 21<sup>st</sup> century. CAC graduates attain these outcomes through cumulative quality learning experiences. The four Common Student Learning Outcomes are:

- Cultural and Civic Engagement Participate in diverse environments while demonstrating global citizenship and social consciousness
- Integrative Knowledge Identify, comprehend, apply and synthesize facts, concepts, theories and practices across broad and specialized knowledge areas
- Personal and Professional Skills Demonstrate skills which enhance personal and professional development
- Reasoning Skills Inquire and analyze to solve problems, draw logical conclusions, or create innovative ideas

The Governing Board expects the faculty, in conjunction with the instructional administration, to establish Learning Outcomes for assessing student achievement.

- Learning Outcomes are statements describing essential, measureable learning that students achieve and can reliably demonstrate at the end of a course or program.
- The Common Student Learning Outcome statements are the basis for student performance criteria used to evaluate the level of student achievement.



#### **CERTIFICATES**

Certificate programs prepare students for entry-level employment opportunities and some build toward a state of Arizona General Education Curriculum (AGEC) Certificate or a CAC A.A.S. or A.G.S. Degree. Full-time students can complete most certificate programs in one or two semesters.

In addition to offering advanced training or building foundations for future credentials, many certificates build toward an A.A.S. Degree which transfers to the state universities and other higher education institutions.

In Arizona, the public universities support the AAS to BAS Pathway where students may earn 75 credits at CAC and complete a 120 credit baccalaureate degree by earning the last 45 credits at the university/four-year college.

Certificates require the following:

- Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.
- Students must complete one-third of the certificate credits from CAC.

To view the Certificates and Degrees available at CAC, consult the Program of Study list in this catalog.

#### **ICON LEGEND**

AGEC (Arizona General Education): 🔕

Dual Enrollment: 🛂

Intensive Writing: /W

Programs of Study/Tech Prep: POS Reading Required: RDG094: R

SUN System Course:



# Arizona General Education Curriculum for Arts (AGEC-A) (35-36 Semester Credits)

#### **District-Wide**

The Arizona General Education Curriculum focused on the Arts (AGEC-A) is a 35 semester credit block that fulfills the lower division general education requirements of liberal arts majors (e.g., social science, fine arts, humanities). The AGEC-A requires a minimum of MAT141 or higher plus 32 credits. The AGEC block transfers to any Arizona public or tribal community college and to the three Arizona public universities. Students who intend to transfer into liberal arts majors should select the AGEC-A.

#### **General Education (35-36)**

#### **Subject Area Requirements**

An approved AGEC-A, together with the number of courses and number of semester credits, must contain the following Subject Areas.

#### **Written Communications (6 credits)**

ENG101 English Composition III (3) © ENG 1101 ENG102 English Composition IV (3) © ENG 1102

#### **Oral Communications (3 credits)**

Select an AGEC course.

#### Physical and Biological Sciences (8)

Select AGEC courses with a laboratory component.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) (a) or higher

# For the following two categories, select a total of 15 credits:

#### **Arts and Humanities (6-9 credits)**

Select a minimum of one Art (3) and one Humanities (3) AGEC course.

#### Social and Behavioral Sciences (6-9)

Select AGEC courses from at least two different disciplines.

# ICON LEGEND AGEC: Dual Enrollment: Dual Enrollme

Reading Required: RDG094:  $\mathcal{R}$ 

Intensive Writing: /W

Programs of Study/Tech Prep: POS

SUN Course:

#### **Subject Options (0-6)**

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

# Special Awareness Requirements (0-9 Credits)

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts and Humanities or the Social and Behavioral Sciences categories. Refer to the officially published TAG, TAP, CAC2NAU or other articulation pathway document for details and consult an advisor.

Students must earn a grade of "C" or better in each course. Students must earn at least one-third of the AGEC-A Certificate credits from CAC.



# Arizona General Education Curriculum for Business (AGEC-B) (35-36 Semester Credits)

Aravaipa, Maricopa, San Tan, Signal Peak and Superstition Mountain Campuses

#### **General Education (35-36)**

The Arizona General Education Curriculum focused on Business (AGEC-B) is a 35 semester credit block that fulfills the lower division general education requirements of many business programs and other programs that articulate with the Associate of Business Degree. The block transfers to any Arizona public or tribal community college, to the three Arizona public universities, and other higher education institutions. The AGEC-B requires a minimum of Brief Calculus plus 32 credits from specific AGEC categories.

#### **Subject Area Requirements**

An approved AGEC-B, together with the number of courses and number of semester credits, must contain the following Subject Areas.

#### **Written Communications (6)**

ENG101 English Composition III (3) © ©ENG 1101 ENG102 English Composition IV (3) © ©ENG 1102

#### **Oral Communications (3)**

Select an AGEC course.

#### Physical and Biological Sciences (8)

Select AGEC courses with a laboratory component.

#### Mathematics (3-4)

MAT211 Brief Calculus (4) or higher

#### **Computer Information Systems (3)**

CIS120 Survey of Computer Information Systems (3) ©CIS 1120

# For the following two categories, select a total of 15 credits.

#### **Arts and Humanities (6-9)**

Select a minimum of one Art (3) and one Humanities (3) AGEC course.

#### Social and Behavioral Sciences (6-9)

Select AGEC courses from at least two different disciplines.

#### Subject Options (0-3)

Based on your major, review the specific Associate of Business Degree requirements in the CAC Catalog, consult an academic advisor and see the Transfer Guides at http://www.aztransfer.com/TransferGuides.

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts and Humanities or the Social and Behavioral Sciences categories. Refer to the officially published TAG, TAP, CAC2NAU or other articulation pathway document for details and consult an advisor.

Students must earn a grade of "C" or better in each course. Students must earn at least one-third of the AGEC-B Certificate credits from CAC.



# Arizona General Education Curriculum for Science (AGEC-S) (35-37 Semester Credits)

Aravaipa, San Tan, Signal Peak and Superstition Mountain Campuses

#### **General Education**

The Arizona General Education Curriculum focused on the Sciences (AGEC-S) is a 35-37 semester credit block that fulfills the lower division general education requirements of many science programs and other programs that articulate with the Associate of Science Degree. The block transfers to any Arizona public or tribal community college, to the three Arizona public universities, and other higher education institutions. The AGEC-S requires a minimum of Analytical Geometry and Calculus I plus 32 credits from specific AGEC categories, including rigorous science requirements.

#### **Subject Area Requirements**

An approved AGEC-S, together with the number of courses and number of semester credits, must contain the following Subject Areas.

#### **Written Communications (6)**

ENG101 English Composition III (3) © ©ENG 1101 ENG102 English Composition IV (3) © ©ENG 1102

#### **Arts and Humanities (6)**

Select one Art (3) and one Humanities (3) AGEC course.

#### Social and Behavioral Sciences (6)

Select AGEC courses from at least two different disciplines.

#### Physical and Biological Sciences (8)

#### **Life Science Majors:**

CHM151 General Chemistry I (4) © CHM 1151 plus CHM152 General Chemistry II (4) © © CHM 1152 OR

BIO181 General Biology I (4) © BIO 1181 **plus** BIO182 General Biology II (4) © BIO 1182

# AGEC: Dual Enrollment: Untensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: ROG094: SUN Course:

#### **Physical Science Majors:**

CHM151 General Chemistry I (4) ©CHM 1151 **plus** CHM152 General Chemistry II (4) ©CHM 1152

OR

PHY121 University Physics I: Mechanics (4)

PHY122 University Physics II: Electricity and Magnetism (4) PHY 1131

#### Mathematics (3-4)

MAT221 Analytical Geometry and Calculus I (4) or higher MAT 2220

#### **Subject Options (6-8 credits)**

Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides and select mathematics courses above the first course in the calculus sequence and/or Science courses from: Agriculture, Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Nutrition, Physics or Zoology. Select CHM151 and higher Chemistry courses.

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts and Humanities or the Social and Behavioral Sciences categories. Refer to the officially published TAG, TAP, CAC2NAU or other articulation pathway document for details and consult an advisor.

Students must earn a grade of "C" or better in each course. Students must earn at least one-third of the AGEC-S Certificate credits from CAC.



#### PROGRAMS OF STUDY

#### **Accounting**

Accounting A.A.S. (85) Accounting Certificate (86)

#### **Administration of Justice**

Administration of Justice Studies A.A. (87) Administration of Justice A.A.S. (88) Administration of Justice Certificate (89)

#### **AGEC**

AGEC-Arts Certificate (80) AGEC-Business Certificate (81) AGEC-Science Certificate (82)

#### **Agriculture**

Agriculture A.A.(90) Agriculture A.S. (91) Agriculture Business Certificate (92) Agriculture General A.A.S. (93) Agriculture General Certificate (94)

#### **Animal Science**

Equine Management and Training A.A.S. (95) Equine Management and Training Certificate (96)

#### **Biology**

Biotechnology A.S. (97)

#### **Business**

Business A.A.S. (98)
Business Certificate (99)
Management Certificate (100)
Hotel and Restaurant Management A.A.S. (101)
Hotel and Restaurant Management
Certificate (102)

Recreation and Tourism Management A.A. (161) See **Sports and Fitness** 

Recreation Management Certificate (162)

See Sports and Fitness

#### Chemistry

Chemistry A.S.(103)

#### Computer

Application Development and Web Design Certificate (104) Computer Aided Design Certificate - See **Technology** Computer Applications for Business Users Certificate (104) Computer Programming A.A.S. (105) Computer Programming Certificate (106) Geographic Information Systems A.A.S. (106) GIS Drafting and Mapping Certificate (107) Microcomputer Business Applications A.A.S. (108) Microcomputer Business Applications Specialist Certificate (109) Network Administration Certificate (109) Network Systems Administration A.A.S. (110)

#### **Creative Arts**

Artist and Venue Management A.A.S. (111)
Artist and Venue Management Certificate (112)
Live Audio and Lighting A.A.S. (112)
Live Audio and Lighting Certificate (113)
Popular Music Performance A.A.S. (114)
Popular Music Performance Certificate (115)
Recording Engineering A.A.S. (115)
Recording Engineering Certificate (116)
Fine Arts A.A. (117)
Graphic Design A.A.S. (118)

#### **Culinary Arts**

Baking and Pastry Certificate (119) Culinary Arts A.A.S. (120) Culinary Arts I Certificate (122) Culinary Arts II Certificate (122)

#### **Diesel/Heavy Equipment**

Diesel and Heavy Equipment Technology A.A.S. (123) Diesel and Heavy Equipment Technology Certificate (124) Heavy Equipment Operator A.A.S.(125) Heavy Equipment Operator Certificate (126)

#### **Education**

Early Childhood Education – Family Childcare
A.A.S. (127)
Early Childhood Education – Family Childcare
Certificate (128)
Early Childhood Education – Infant/Toddler A.A.S. (128)
Early Childhood Education – Infant/Toddler
Certificate (129)
Early Childhood Education – Management A.A.S. (130)
Early Childhood Education – Management
Certificate (131)
Early Childhood Education – Preschool A.A.S.(131)
Early Childhood Education – Preschool Certificate (132)
Elementary Education A.A.E.E. (133)

#### **Emergency Medical Services**

Basic EMT Certificate (135) Critical Care for Paramedics Certificate (135) Paramedicine A.A.S. (136)



#### **Fire Services**

Firefighter Operations Certificate (137) Fire Science Technology A.A.S. (137) Wildland Firefighter I Certificate (138)

#### **Geographic Information Systems**

See Computer

#### **Geology and Planetary Science**

Geology and Planetary Science A.S. (139)

#### **Health Careers Center**

Clinical Laboratory Assistant Certificate (140)
Coding and Reimbursement Certificate (141)
Community Public Health A.S. (142)
Health Information Technology A.A.S.(143)
Massage Therapy A.A.S. (144)
Massage Therapy Certificate (145)
Medical Assistant A.A.S. (146)
Medical Assistant Certificate (147)
Pharmacy Technician Certificate (148)

#### Manufacturing

Field Programmable Gate Array (FPGA) Certificate (148) LabVIEW Programming Certificate (149) Manufacturing Electronics Certificate (149) Manufacturing Engineering A.A.S.(150) Nanofabrication Technology A.A.S. (151)

#### **Nutrition and Dietetics**

Community Nutrition Worker Certificate (152) Diabetes Care and Education Certificate (152) Dietary Manager Training Program Certificate (153) Dietetic Technician A.A.S. (153) Nutrition and Health Promotion Certificate (154)

#### **Renewable Energy Technology**

Biofuels Technician Certificate (155) Renewable Energy Technology A.A.S. (155) Solar Photo Voltaic Technician Certificate (156)

#### **Sports and Fitness**

Athletic Studies A.A. (157)
Athletic Training Education Program A.A. (158)
Group Fitness Instructor Certificate (160)
Personal Trainer Certificate (160)
Recreation and Tourism Management A.A. (161)
Recreation Management Certificate (162)
Sports Information Certificate (163)
Sports Management A.A.S. (163)

#### **Technology**

Computer Aided Design Certificate (165) Welding Certificate (165)

# PROGRAMS WITH SPECIAL REQUIREMENTS

The following degrees and certificates are also offered at Central Arizona College; however, they have special requirements which must be fulfilled before enrollment. Please see the individual listing for specific information.

#### **Agriculture**

Farm Business Management Certificate (166)

#### **Corrections**

Advanced Corrections Certificate (166) Corrections A.A.S. (167)

#### **Diesel/Heavy Equipment**

Heavy Equipment Mechanic's Apprenticeship Program Certificate (168) John Deere Construction and Forestry Equipment Technology A.A.S. (168) Operator's Apprenticeship Program Certificate (169)

#### **Health Careers**

Diagnostic Medical Sonography A.A.S. (170) Nursing A.A.S. (172) Practical Nursing Certificate (173) Radiologic Technology A.A.S. (174)



### ACCOUNTING

#### **ACCOUNTING A.A.S.**

Aravaipa, Maricopa, Signal Peak and Superstition Mountain Campuses

#### **Total Credits: 65**

The Accounting Degree prepares students for entry-level accounting positions. Students interested in pursuing a Baccalaureate Degree may consider the Associate of Business Degree or other Transfer Agreement options.

#### **Recommended Proficiencies**

A solid background in reading, math, and analytical skills is recommended.

#### **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

#### Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

ECN200 Contemporary Economic Issues (3) ECN201 Principles of Macroeconomics (3) ECN202 Principles of Microeconomics (3) OR Select a Social and Behavioral Science AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Science course numbered 100 or above, or an AGEC Biological and Physical Lab Science course.

#### **ICON LEGEND** Dual Enrollment: AGEC: Programs of Study/Tech Prep: POS Intensive Writing: IW Reading Required: RDG094: R SUN Course:

#### **Mathematics (3-4)**

Select a college-level Mathematics course

BUS101 Business Mathematics (3) (Recommended) **OR** 

MAT101 Essential Mathematics (4) or higher

#### **Core Requirements (39)**

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)

Income Tax Fundamentals (3)

**Business Communications (3)** CBA133A Spreadsheet Applications – Excel (3) Advanced Spreadsheet Applications Excel (3) CBA133B

Survey of Computer Information Systems (3)

CIS 1120

#### **Electives (6)**

**BUS207** 

**CIS120** 

Select electives from the following areas to total a minimum of 64 credits to complete the degree.

Accounting ACC

AGB Agriculture Business

BUS **Business** 

**CBA** Computer Business Applications CIS **Computer Information Systems** 

**ECN Economics** 

HNR Honors

Hospitality Management HRM

Real Estate **REA** 

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must complete at least 20 credits from CAC.

This A.A.S. Degree requires 65 semester credits.

<sup>\*</sup>Students may be advised to complete ACC100 prior to completing ACC201.



#### **ACCOUNTING CERTIFICATE**

#### **District-Wide**

#### **Total Credits: 18**

The Accounting Certificate prepares individuals for entrylevel 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)

<sup>\*</sup>Students may be advised to complete ACC100 prior to completing ACC201.

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: SUN Course:



# ADMINISTRATION OF **JUSTICE**

### **ADMINISTRATION OF JUSTICE** STUDIES A.A.

#### District-Wide

**Total Credits: 60-64** 

The Administration of Justice Studies A.A. Degree academically prepares students to transfer to an accredited university to pursue a career in local and federal law enforcement, the court system, corrections or probation.

### **General Education Requirements AGEC-A (35-36)**

#### **Written Communications (6)**

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

#### **Oral Communications (3)**

Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

#### Arts and Humanities (6-9)

Select an AGEC Art course.

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

#### Social and Behavioral Sciences (6-9)

SOC100 Introduction to Sociology (3) PSY101 Introduction to Psychology (3)

AJS101 Introduction to Administration of Justice (3) 🔁

(Also fulfills Core Requirement)

Or select an AGEC course.

#### Physical and Biological Sciences (8)

Select AGEC courses with a laboratory component.

#### Mathematics (3-4)

Reading Required: RDG094: R

MAT141 College Mathematics, Standard (4) 1 or higher

#### **ICON LEGEND** AGEC: Dual Enrollment: Intensive Writing: /W Programs of Study/Tech Prep: POS

### Subject Options (0-6)

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

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry (Fulfilled by AJS225)
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (18)**

AJS101 Introduction to Administration of Justice (3) 🗔 (Also fulfills Social and Behavioral Sciences requirement) Ethics and the Administration of Justice (3) AJS123 (Also fulfills Humanities requirement) Substantive Criminal Law (3) AJS209 AJS225 Criminology (3) **[1]** *IW* 

AJS230 The Police Function (3)

AJS260 Procedural Criminal Law (3)

# Electives (6-9)

Select AJS prefix courses.

### Other Requirements (3)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputer in Agriculture

CIS120 Survey of Computer Information Systems

#### 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.

SUN Course:



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

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

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

The Administration of Justice Studies A.A. Degree requires 60-64 semester credits.

# ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

# ADMINISTRATION OF JUSTICE A.A.S.

Aravaipa, Maricopa, San Tan, Signal Peak & Superstition Mountain Campuses and Casa Grande and Corporate Centers

#### **Total Credits: 65**

The Administration of Justice Studies A.A.S. Degree prepares students for professional careers in law enforcement, corrections, parole, probation, the judiciary and juvenile social work.

#### **General Education Requirements (25)**

#### **Written Communications (6)**

ENG101 English Composition III (3) (Recommended) ENG102 English Composition IV (3) (Recommended) **OR** 

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

#### **Arts and Humanities (3)**

AJS123 Ethics and the Administration of Justice (3) Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an Arts or Humanities AGEC course.

#### **Social Behavioral Sciences (6)**

SOC100 Introduction to Sociology (3) (Recommended) PSY101 Introduction to Psychology (3) (Recommended) OR select Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology courses numbered 100 or above, or AGEC courses.

#### **Physical and Biological Sciences (4)**

Select a Biological or Physical Science course numbered 100 or above, or a Biological and Physical Lab Science AGEC course.

#### **Mathematics (3)**

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

#### **Core Requirements (18)**

AJS101 Introduction to Administration of Justice (3) 🗟

AJS123 Ethics and the Administration of Justice (3) 🗔

AJS209 Substantive Criminal Law (3)

AJS225 Criminology (3) 🗟

AJS230 The Police Function (3)

AJS260 Procedural Criminal Law (3)



#### **AJS Electives (12)**

Select 12 credits from courses with the AJS prefix.

#### **General Electives (6)**

Credit may be granted for prior Police training upon departmental approval, including credit for AJS Core and Elective Requirements. See the CEG for University transferability status.

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

CIS110 Fundamentals of Computer Literacy (3) or higher

51101

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 semester credits.

# ADMINISTRATION OF JUSTICE CERTIFICATE

#### Signal Peak Campus

**Total Credits: 33.5** 

Central Arizona College offers a full range of courses for regular and reserve officer certification, as well as inservice 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**

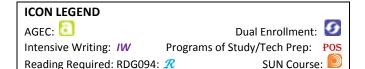
Meet AZ POST Standards for eligibility.

#### **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**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.





### **AGRICULTURE**

#### **AGRICULTURE A.A.**

Signal Peak Campus

**Total Credits: 60-64** 

Students pursuing this Agriculture A.A. Degree may transfer to a university to pursue a Bachelor of Arts Degree in Agriculture.

# **General Education Requirements AGEC-A (35-36)**

#### **Written Communications (6)**

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

#### **Oral Communications (3)**

Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

#### **Arts and Humanities (6-9)**

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

#### Social and Behavioral Sciences (6-9)

Select AGEC courses from different disciplines.

#### **Physical and Biological Sciences (8)**

Select AGEC courses with a laboratory component.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) 1 or higher

#### **Subject Options (0-6)**

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

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

 At least three semester credits of coursework in Intensive Writing and Critical Inquiry Historical Awareness

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROGUES SUN Course:

- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (10)**

AGB124 Microcomputers in Agriculture (3)

AGS240 Plant Biology (4)

ANS101 Animal Industry (3)

#### Electives (12-16)

Select 19 credits from college-level courses numbered 100 or higher to meet the Degree requirement. All electives must transfer to the chosen university or the student will be required to take additional credits at the university. Consult the CEG to determine course equivalency at the university.

#### Other Requirements (3)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3) (Fulfilled in Core Requirements)

#### Other A.A. Degree Requirements

Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

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

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

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

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



#### AGRICULTURE A.S.

#### Signal Peak Campus

#### **Total Credits: 60-64**

Students earning the Agriculture A.S. Degree may transfer to a university to pursue a Bachelor of Science Degree in Agriculture.

# General Education Requirements AGEC-S (35-37)

#### **Written Communications (6)**

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

For the following two categories, for each category select courses from different disciplines.

#### **Arts and Humanities (6)**

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

#### **Social and Behavioral Sciences (6)**

Select AGEC courses from two different disciplines.

#### Physical and Biological Sciences (8)

Select AGEC courses with a laboratory component.

#### **Life Science Majors:**

#### **Physical Science Majors:**

#### Mathematics (3-4)

MAT221 Analytical Geometry and Calculus I (4) or higher

# ICON LEGEND AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN 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, Engineering,
Environmental Science, Nutrition, or Zoology. Select CHM151 and higher Chemistry courses.

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (10)**

AGB124 Microcomputers in Agriculture (3)
(Fulfills computer competency requirement)
AGS240 Plant Biology (4) Animal Industry (3)

#### **Agriculture Electives (12-16)**

Select elective credits to meet the 60-64 credit Degree requirement. Consult the Course Equivalency Guide to determine how the course transfers to the target university.

AGB121	Resource and Environmental Economics (3)
AGB123	Agriculture Accounting (3)
AGB130	Agricultural Leadership (1)
AGB213	Introduction to Agricultural Commodity and
	Food Marketing (3)
AGB225	Agriculture Business Analysis (3)
AGB234	Agricultural Leadership Development (3)
AGS101	World of Plants (4) 💽
AGS104	Agricultural Environmental Science (4) 📵
AGS106	Entomology (4) 🖸
AGS122	Natural Resources and Conservation (3) 🕟
AGS221	Soil Science (4) 🖸
AGS235	Principles of Horticulture (3)
ANS111	Horseshoeing I (3)
ANS172	Introduction to Western Horsemanship (3)
ANS200	Introduction to Equine Science (3)
ANS211	Advanced Horseshoeing (3)
ANS213	Animal Genetics (3)



OR		
WLD110	Survey of Welding Processes (3)	
MAT121	Intermediate Algebra, Standard (4)	
	Operations (5)	
HEO100	Introduction to Heavy Equipment	
DIE132	Diesel Engines (12)	
CHM130	Fundamental Chemistry (4)	
BUS100	Introduction to Business (3)	
BIO100	Biology Concepts (4) 💽	
ANS226	Feeds and Feeding (3)	
ANS220	Artificial Insemination (3)	
ANS216	Equine Anatomy and Physiology (3)	
	Animals (4)	
ANS215	Anatomy and Physiology of Domestic	

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

#### Other Requirements (3)

Reading Competency: RDG094 College Reading R

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3) (Fulfilled in Core Requirements)

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

This A.S. Degree requires 60-64 semester credits.

# AGRICULTURE BUSINESS CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 27**

This Certificate provides students with specialized agricultural workplace skills for entry-level agribusiness positions.

#### **Core Requirements (21)**

<b>-</b> 0.0.1	<b>94</b> 9 (= 1)
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

#### 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**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.





#### **AGRICULTURE GENERAL A.A.S.**

#### Signal Peak Campus

#### **Total Credits: 65**

The A.A.S. Agriculture General Degree prepares students for entry level careers in agribusiness, agricultural systems management, and agricultural sustainability. This A.A.S. Degree transfers to the Arizona Bachelor of Applied Science (BAS) Degree. Students interested in pursuing a baccalaureate degree should review Transfer Agreement Options and meet with a CAC agriculture advisor.

#### **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre courses numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### **Physical and Biological Sciences (4)**

Select a biological or physical science course numbered 100 or above, or a Biological and Physical Lab Science AGEC course.

#### Mathematics (3-4)

Select a college-level Mathematics course BUS101 Business Mathematics (3) **OR** MAT101 Essential Mathematics (4) or higher

#### **Core Requirements (10)**

AGB124 Microcomputers in Agriculture (3) AGS240 Plant Biology (4) 🔁

ANS101 Animal Industry (3)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

#### **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) Agricultural Leadership Development (3) AGB234 World of Plants (4) AGS101 AGS104 Agricultural Environmental Science (4) 🗟 AGS106 Entomology (4) 📵 AGS122 Natural Resources and Conservation (3) Soil Science (4) 💽 AGS221 AGS235 Principles of Horticulture (3) ANS111 Horseshoeing I (3) Introduction to Western Horsemanship (3) ANS172 Introduction to Equine Science (3) ANS200 Advanced Horseshoeing (3) ANS211 ANS213 Animal Genetics (3) ANS215 Anatomy and Physiology of Domestic Animals (4) ANS216 Equine Anatomy and Physiology (3) Artificial Insemination (3) ANS220

ANS220 Artificial Insemination (3)
ANS226 Feeds and Feeding (3)
BIO100 Biology Concepts (4) 
BUS100 Introduction to Business (3)
CHM130 Fundamental Chemistry (4)
DIE132 Diesel Engines (12)

HEO100 Introduction to Heavy Equipment Operations (5) MAT121 Intermediate Algebra, Standard (4) WLD110 Survey of Welding Processes (3)

OR

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

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputer in Agriculture (3) (Fulfilled in Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 semester credits.



# AGRICULTURE GENERAL CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 32**

This Certificate introduces students to agricultural science and technology by focusing on general academic experiences in agriculture. This Certificate prepares students for entry-level careers in agri-science and agribusiness.

#### **Core Requirements (10)**

AGB124 Microcomputers in Agriculture (3)

AGS240 Plant Biology (4) 🔁

ANS101 Animal Industry (3)

#### Written Communications (3)

Select one of the following:

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3)

#### **Agriculture Electives (19)**

Select from the following courses:

AGB121 Resource and Environmental Economics (3)

AGB123 Agriculture Accounting (3)

AGB213 Introduction to Agricultural Commodity and

Food Marketing (3)

AGB225 Agriculture Business Analysis (3)

AGS101 World of Plants (4) 💽

AGS104 Agricultural Environmental Science (4) 🖸

AGS106 Entomology (4) 🖸

AGS110 Agricultural Mechanics I (3)

AGS122 Natural Resources and Conservation (3)

AGS140 Agricultural Mechanics II (3)

AGS221 Soil Science (4) 🗔

AGS235 Principles of Horticulture (3)

ANS102 Horsemanship I (3)

ANS111 Horseshoeing I (3)

ANS121 Equine Facilities Management I (1)

ANS122 Equine Facilities Management II (1)

ANS131 Training the Roping Horse I (3)

ANS172 Introduction to Western Horsemanship (3)

ANS195 Careers in Veterinary Science (1)

ANS200 Introduction to Equine Science (3)

ANS211 Advanced Horseshoeing (3)

ANS213 Animal Genetics (3)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: Reading Required: RDG094: Reading Required: RDG094: Reading Required: SUN Course:

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**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



### ANIMAL SCIENCE

# EQUINE MANAGEMENT AND TRAINING A.A.S.

#### Signal Peak Campus

#### **Total Credits: 64**

Equine Management and Training contains two options for the Associate of Applied Science Degree. Students complete a Horse Trainer or an Equine Business Management program of study. The degree prepares students for employment in a variety of areas in the horse industry. Classroom activities and practical laboratory experiences are provided in both options.

#### **General Education Requirements (19)**

#### **Written Communications (3)**

#### **Oral Communications (3)**

Select a COM course, or an AGEC course if you plan to transfer to a bachelor's degree program.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### **Physical and Biological Sciences (4)**

AGS221 Soil Science (4) 💽

NTR141 Nutrition and Wellness (4) 🗔

#### **Mathematics (3-4)**

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: SUN 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) Training the Roping Horse I (3) ANS131 ANS200 Introduction to Equine Science (3) ANS202 Horsemanship II (3) ANS216 Equine Anatomy and Physiology (3) Training for Timed Events (3) ANS223

Training the Roping Horse II (3)

#### Electives (15)

**ANS231** 

Select 15 credits from the following:

ANS101 Animal Industry (3)
ANS111 Horseshoeing I (3)
ANS211 Advanced Horseshoeing (3)
ANS213 Animal Genetics (3)
ANS226 Feeds and Feeding (3)

BUS100 Introduction to Business (3) BUS101 Business Mathematics (3)

(Also may fulfill Mathematics Requirement)
HEO100 Introduction to Heavy Equipment Operations (5)

HEO128 Diesel Equipment Service and Repair (4)

WLD Any Welding course (3)

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)
CIS110 Fundamentals of Computer Literacy (3) or higher

#### OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 semester credits.



# EQUINE MANAGEMENT AND TRAINING CERTIFICATE

#### Signal Peak Campus

**Total Credits: 32** 

The Equine Management and Training Certificate provides basic skills and information for equine handling. Courses for the certificate apply toward completion of the Equine Management and Training A.A.S Degree.

#### **Core Requirements (26)**

	•
ANS102	Horsemanship I (3)
ANS110	Horse Event Production (3)
ANS121	Equine Facility Management I (1)
ANS122	Equine Facility Management II (1)
ANS131	Training the Roping Horse I (3)
ANS200	Introduction to Equine Science (3)
ANS202	Horsemanship II (3)
ANS216	Equine Anatomy and Physiology (3)
ANS223	Training for Timed Events (3)
ANS231	Training the Roping Horse II (3)

#### **Electives (6)**

ANS101	Animal Industry (3)
ANS111	Horseshoeing I (3)
ANS211	Advanced Horseshoeing (3)
ANS213	Animal Genetics (3)
ANS226	Feeds and Feeding (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: 
SUN Course:



### **BIOLOGY**

#### **BIOTECHNOLOGY A.S.**

#### Signal Peak Campus

#### **Total Credits: 60-64**

The Biotechnology Associate of Science Degree is designed for those interested in career/transfer path degrees in biology, biotechnology, molecular biology, microbiology, genetic engineering and pre-medical or other pre-professional programs. The Degree also provides applied technical training for those interested in laboratory employment in the biotechnology industry, medical or an academic research institution.

# General Education Requirements AGEC-S (35-37)

#### **Written Communications (6)**

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

For the following two categories, for each category select courses from different disciplines.

#### **Arts and Humanities (6)**

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

#### Social and Behavioral Sciences (6)

Select AGEC courses from two different disciplines.

#### Physical and Biological Sciences (8)

Life Science Majors:

CHM151 General Chemistry I (4) o plus CHM152 General Chemistry II (4) c

#### Mathematics (3-4)

MAT221 Analytical Geometry and Calculus I (4) or higher

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROGUES SUN Course:

#### **Subject Options AGEC-S (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 Biology, Chemistry or Physics. Select CHM151 and higher Chemistry courses.

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (19)**

BIO181 General Biology I (4)

(Also counts toward AGEC-S)
BIO205 Microbiology (4)

(Also counts toward AGEC-S)

BIO206 Biotechnology Instrumentation I (4)

(Also counts toward AGEC-S)

BIO207 Biotechnology Instrumentation II (4)

BIO240 General Genetics (3)

#### Electives (9-13)

Select approved elective courses which transfer as "Elective or better" to all three AZ public universities to complete the required A.S. Degree credit requirement.

#### Students may choose:

BIO109 Natural History of the Southwest (4)

BIO182 General Biology II (4) Da

BIO299 Introduction to Co-Op: Biotechnology

Internship (1)

CHM235 General Organic Chemistry I (4)

CHM236 General Organic Chemistry II (4)

PHY111 College Physics I (4)

PHY112 College Physics II (4) 0

PHY121 University Physics I (4)

PHY122 University Physics II) (4) 0

Note: Students may use a course to fulfill an AGEC Core Area, such as the Social and Behavioral Sciences, and one Special Awareness Area (Intensive Writing, Cultural,



Global/International, or Historical Awareness). In addition, students may use the same course(s) to fulfill degree core and/or elective requirements. Students should consult a CAC Advisor.

#### Other Requirements (3)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

#### OR

CIS120 Survey of Computer Information Systems (3)

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

Biotechnology Associate of Science Degree requires 60-64 credits.

#### **BUSINESS**

#### **BUSINESS A.A.S.**

Aravaipa, Maricopa, Signal Peak & Superstition Mountain Campuses

#### **Total Credits: 64**

The Business A.A.S. Degree prepares students for entrylevel positions in business and provides skills necessary for helping them begin their own business.

#### **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) COM206 Public Speaking (3) C

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

BUS190 Principles of Management and Leadership (3) © ECN200 Contemporary Economic Issues (3) © ECN201 Principles of Macroeconomics (3) © © ECN202 Principles of Microeconomics (3) © © Or select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course

#### Physical and Biological Sciences (4)

numbered 100 or above, or an AGEC course.

Select a Biological or Physical Science course numbered 100 or above, or an Biological and Physical Lab Science AGEC course.

#### Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) (Recommended) **OR**MAT101 Essential Mathematics (4) or higher

#### **Core Requirements (30)**

ACC121 Income Tax Fundamentals (3)
ACC201 Financial Accounting (3)\*
ACC202 Managerial Accounting (3)
BUS100 Introduction to Business (3)



BUS123	Business Relations (3)
DIIC201	I and Davingson

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)

#### Electives (14)

Select 14 credits from the following list to total at least 64 credit hours for this degree.

ACC Accounting

AGB Agriculture Business

BUS Business

CBA Computer Business Applications
CIS Computer Information Systems

ECN Economics

HRM Hospitality Management

REA Real Estate

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn

a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 semester credits.

#### **BUSINESS CERTIFICATE**

#### District-Wide

#### **Total Credits: 24**

The Business Certificate prepares individuals for entrylevel 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 Macroeconomics (3) ECN202

ECN202 Principles of Microeconomics (3)

#### **Electives (6)**

Select six credits from courses with the following prefixes:

ACC Accounting BUS Business

CBA Computer Business Applications
CIS Computer Information Systems

ECN Economics

HRM Hospitality Management

REA Real Estate

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

AGEC: Dual Enrollment: Unitensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: SUN Course: SUN Course: Description of the Post Reading Required: RDG094: RDG

<sup>\*</sup> Students may be advised to complete ACC100 prior to Enrolling in ACC201 .



#### **MANAGEMENT CERTIFICATE**

#### **District-Wide**

#### **Total Credits: 30**

This Management Certificate focuses on communication, finances and legal issues including basic marketing and management principles that develop leadership and supervision skills. This certificate qualifies for sponsorship of the Retail Management Certificate Program with the Western Association of Food Chains (www.WAFC.com) or WAFC national partnership (see Business Division, Management Certificate for company listings and program details).

#### **Recommended Proficiencies**

RDG094 College Reading R

#### **Core Requirements (15)**

ACC100 Fundamentals of Accounting (3)

OR

ACC201 Financial Accounting (3)

BUS101 Business Mathematics (3)

BUS123 Business Relations (3)

BUS180 Introduction to Marketing (3)

BUS190 Principles of Management and Leadership (3) [3]

#### Select one of the following courses (3):

BUS100 Introduction to Business (3)

OR

BUS122 Small Business Management (3)

OR

BUS250 Planning the Entrepreneurial Venture (3)

#### Select one of the following courses:

BUS201 Legal Environment of Business (3)

ΛR

HRM208 Hospitality Law (3)

#### Select three of the following courses (9):

BUS207 Business Communications (3)

CIS110 Fundamentals of Computer Literacy (3)

CIS120 Survey Computer Information Systems (3)

ECN Select one ECN course (3)

HRM101 Facilities Management (3)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: RDG094

...

HRM102 Management of Guest Services (3) HRM103 Managing Food Service Operations (3) HRM106 Supervision in the Hospitality Industry (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# HOTEL AND RESTAURANT MANAGEMENT A.A.S.

Signal Peak Campus

#### **Total Credits: 66**

The Hotel and Restaurant Management A.A.S. Degree includes hospitality industry certified courses, university-level business courses and the Arizona General Education Curriculum (AGEC-A). ASU and UofA accept transfer of the AGEC and the remaining courses on a course-by-course basis. NAU School of Hotel and Restaurant Management accepts the AGEC and all HRM core courses, not to exceed 64 credits. (HRM103 + CUL105 or NTR105 or CUL205 are highly recommended for NAU transfer students). See Transfer Agreement Options and the CEG for details.

# General Education Requirements AGEC-A (35-36)

#### **Written Communications (6)**

#### **Oral Communications (3)**

COM263 Intercultural Communication (3) (Recommended) Or select an AGEC COM course.

# Arts & Humanities (6-9)

Arts (3)

ART208 Art History II (3) MHL100 Music Appreciation (3) THE100 Theater Appreciation (3) Cor select an Art AGEC course.

#### **Humanities (3)**

LIT201 American Literature I (3) LIT202 American Literature II (3) LIT203 English Literature II (3) LIT204 English Literature II (3) LIT233 American Ethnic Literature (3) LIT254A Literature and Film (3) LIT254A LITERATURE AGEC COURSE.

# ICON LEGEND AGEC:

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: ROG094

#### Social and Behavioral Sciences (6-9)

ECN201 Principles of Macroeconomics (3) © © ECN202 Principles of Microeconomics (3) © © Or select AGEC courses.

#### Select one from the list:

GEO101 Introduction to Cultural and Historical Geography (3) PSY101 Introduction to Psychology (3) SOC100 Introduction to Sociology (3) C

#### **Physical and Biological Sciences (8)**

BIO100 Biology Concepts (4) CHM130 Fundamental Chemistry (4) CENV101 Environmental Science (4) NTR141 Nutrition and Wellness (4) PHY100 Physical Universe (4) COr select an AGEC course.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) 🖸 or higher

#### **Subject Options (0-6)**

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

### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

Note: This A.A.S. Degree requires the AGEC-A. Students must apply for the AGEC-A Certificate.

#### **Core Requirements (30)**

CIS120 Survey of Computer Information Systems (3) 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)

ACC201 Financial Accounting (3)

CUL130 Culinary Principles & Applications I (3)

OR

Baking and Pastry I (3) CUL160

HRM100 Introduction to Hospitality (3)

REC101 Recreation, Leisure and Quality of Life (3)

#### Select one of the following courses:

CUL105 Food Safety Foundations (1) NTR105 ServSafe Certification (1) CUL205 HACCP Principles (1)

Select approved elective courses which transfer as "Elective or better" to all three AZ public universities to ensure transferability.

#### Other Requirements (4)

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

#### **Computer Competency (3):**

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn a grade of "C" or better in each AGEC-A course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

Note: This A.A.S. Degree requires the AGEC-A Certificate. The Hotel and Restaurant Management A.A.S. requires 66 credits.

### **HOTEL AND RESTAURANT** MANAGEMENT CERTIFICATE

#### District-Wide

#### **Total Credits: 18**

The Hotel and Restaurant Management Certificate provides specialized workplace skill enhancing options for progressive or lateral career options in hotel and lodging or restaurant management. Included are foundation concepts and skills in the hospitality industry, supervision, facilities and hospitality law.

HRM elective courses are highly recommended for hotel and lodging management interests and are certified by the Educational Institute of the American Hotel and Lodging Association.

CUL elective courses are highly recommended for restaurant management interests. All courses apply to the HRM A.A.S. Degree and most are eligible for transfer to universities offering bachelor's degree programs in Hotel and Restaurant Management.

#### **Core Requirements (12)**

HRM100 Introduction to Hospitality (3) HRM101 Facilities Management (3)

HRM106 Supervision in the Hospitality Industry (3)

HRM208 Hospitality Law (3)

#### **Electives (6)**

Select six credits from the following list.

#### HRM majors take HRM courses:

HRM102 Management of Guest Services (3) HRM103 Managing Food ServiceOperations (3)

#### **CUL** majors take CUL courses:

CUL170 Dining and Beverage Operations (2)

*Select one of the following (1):* 

CUL105 Food Safety Foundations (1)

CUL205 HACCP Principles (1)

NTR105 ServSafe Certification (1)

Culinary Principles and Applications I (3) **OR** 

CUL160 Baking and Pastry I (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

ICON LEGEND

AGEC: Intensive Writing: /W

Dual Enrollment:

Programs of Study/Tech Prep: POS Reading Required: RDG094: R

SUN Course:



#### **CHEMISTRY**

#### **CHEMISTRY A.S.**

Signal Peak Campus

#### **Total Credits: 60-64**

The Chemistry A.S. Degree is appropriate for students who plan to transfer to the university to earn a baccalaureate degree in physical science areas such as Chemistry and related preprofessional programs. It is also appropriate for students interested in becoming lab technicians.

# General Education Requirements AGEC-S (35-37)

#### **Written Communications (6)**

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

#### **Arts and Humanities (6)**

Select one Art (3) and one Humanities (3) AGEC course.

#### Social and Behavioral Sciences (6)

Select AGEC courses from two different disciplines.

#### **Physical and Biological Sciences (8)**

CHM151 General Chemistry I (4) CHM152 General Chemistry II (4) CHM152 General Chemistry II (4) CHM154

#### **Mathematics (3)**

MAT221 Analytical Geometry and Calculus I (4) or higher

#### **Subject Options (6-8)**

MAT231 Calculus with Analytical Geometry II (4) © © MAT241 Analytical Geometry and Calculus III (4) © © MAT262 Ordinary Differential Equations (3) © © BIO181 General Biology I (4) © © General Biology II (4) © © Microbiology (4) © ©

# ICON LEGEND AGEC: Dual Enrollment: Intensive Writing: /// Programs of Study/Tech Prep: POS Reading Required: RDG094: SUN Course:

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of courseworkemphasizing Global/International Awareness or Historical Awareness

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

#### **Core Requirements (16)**

CHM235 Organic Chemistry I (4) © c CHM236 Organic Chemistry II (4) © c PHY121 University Physics I: Mechanics (4) © c PHY122 University Physics II: Electricity and Magnetism (4) © c

#### **Transferable Electives (0-12)**

Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides and select mathematics courses above the second course in the calculus sequence and/or Science courses from: Astronomy, Biology, Chemistry, Engineering, Environmental Science, Geology or Physics.

Select elective credits that transfer to the chosen university. Consult the CEG.

#### Other Requirements (3)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

OR

CIS120 Survey of Computer Information Systems (3)

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

The Chemistry A.S. Degree requires 60-64 credits.

# **COMPUTER**

# APPLICATION DEVELOPMENT AND WEB DESIGN CERTIFICATE

Signal Peak Campus

**Total Credits: 29** 

This Application Development and Web Design Certificate offers students preparation for an entry-level position in application and web development.

#### **Recommended Proficiencies**

RDG094 College Reading (3) R

# **Core Requirements (29)**

CIS111	Introduction to the Internet (2)
CIS112	Web Page Design Fundamentals (3)
CIS120	Survey of Computer Information Systems (3)
CIS214	Application Development in Excel (3)
CIS217	Application Development in Access (3)
CBA133A	Spreadsheet Applications in Excel (3)
CBA134A	Database Management in Access (3)
CBA210	Web Development Tools (3)
CBA211	JavaScript Programming (3)
CBA212	Adobe Flash Animation (3)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: Round Sun Course:

# COMPUTER APPLICATIONS FOR BUSINESS USERS CERTIFICATE

Signal Peak Campus and Casa Grande Center

**Total Credits: 29** 

This Computer Applications for Business Users Certificate prepares students for positions within an office environment and includes specialized training in Microsoft Office programs. An employment readiness component provides instruction and skill building in the "soft skills" required to obtain and maintain employment.

# **Prerequisite**

SKL115 Employment Readiness Program Part I (3)

# Corequisite

SKL116 Employment Readiness Program Part II (3)

# **Recommended Proficiencies**

MAT082 Basic Arithmetic (3) RDG094 College Reading (3) **R** 

# **Core Requirements (29)**

CBA110A	Computers for Beginners (1)
CBA110C	MS Windows Basics (1)
CBA113A	MS Excel - Basic (1)
CBA113B	MS Excel - Intermediate (1)
CBA114A	MS Access - Basic (1)
CBA116A	MS PowerPoint - Basic (1)
CBA117A	MS Publisher - Basic (1)
CBA118	MS Outlook (1)
CBA122A	MS Word - Module 1 (2)
CBA122B	MS Word - Module 2 (2)
OAS101	Keyboard - Alphabetic (1)
OAS103	Keyboard - Speed/Accuracy (1)
OAS104	Ten-Key Pad (1)
SKL110	Life Math Skills (3)
SKL141	Overview of Office Assistant (2)
SKL142	Green Office Solutions (1)
SKL143	Basic Accounting Concepts (1)
SKL144	Proofreading for Accuracy (1)
SKL145	Communication Skills (3)
SKL149	Practicum for Computer Applications for
	Business Users (3)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



#### COMPUTER PROGRAMMING A.A.S.

# Signal Peak & Superstition Mountain Campuses

### **Total Credits: 65**

The Programming A.A.S. Degree focuses on the analysis, design and programming skills necessary for entry-level programming positions. Successful completion may lead to Certified Software Development Professional and Sun Certified Java Programmer.

# **General Education Requirements (19-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3) (SUN ENG 1101) OR ENG121 Applied Technical Writing (3)

# **Oral Communications (3)**

Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

# Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above or an AGEC course.

#### Social and Behavioral Sciences (3)

ECN201 Principles of Macroeconomics (3) ECN202 Principles of Microeconomics (3)

Or select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological or Physical Science course numbered 100 or above, or an AGEC course.

# **Mathematics (6-7)**

BUS101 Business Mathematics (3) plus

MAT121 Intermediate Algebra, Standard (4) or higher

# **Core Requirements (42)**

BUS100 Introduction to Business (3)

BUS207 Business Communications (3)

CIS112 Web Page Design Fundamentals (3)

#### **ICON LEGEND**

AGEC: Intensive Writing: /W Dual Enrollment:

Programs of Study/Tech Prep: POS

Reading Required: RDG094: <a>R</a>

SUN Course:

Survey of Computer Information Systems (3) CIS120

CIS121 Microcomputer Operating System

Fundamentals (3)

CIS123 Introduction to Programming (3)

CIS150 Windows Server (3)

CIS181 C#.Net (4)

CIS214 Application Development in Excel (3)

CIS216 Java Programming (4)

CIS217 Application Development in Access (3)

CIS218 C++ Programming (4)

CIS233 Web Application Development using PHP (3)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

# **Computer Competency (3):**

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.



# COMPUTER PROGRAMMING CERTIFICATE

Signal Peak & Superstition Mountain Campuses

# **Total Credits: 23**

The Computer Programming Certificate emphasizes knowledge and skills required to design, develop, test and document structured and object-oriented programs utilizing a variety of programming languages. It prepares students for entry-level positions in computer programming. Successful completion may lead to Certified Software Development Professional and Sun Certified Java Programmer.

# **Recommended Proficiencies**

RDG094 College Reading (3)  $\mathcal{R}$ 

# **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.

# ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

# GEOGRAPHIC INFORMATION SYSTEMS (GIS) A.A.S.

#### Signal Peak Campus

# **Total Credits: 64-67**

Creation, analysis, and mapping of Geographic Information Systems (GIS) data, including environmental transportation systems and or communities applications to prepare students for entry-level positions utilizing GIS, AutoCAD, GPH and GPS technology and/or to progress toward a baccalaureate degree.

# **Prerequisite:**

MAT101 Essential Mathematics (4) or higher

# **General Education Requirements (20-23)**

For the following six categories, choose from the recommended courses or select AGEC courses from the equivalent category.

#### **Written Communications (3)**

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

# **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) (Recommended)
Or select a COM course, or an AGEC course.

# **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

GEO101 Introduction to Cultural and Historical
Geography (3) OR Select any Social &
Behavioral Science course or an AGEC course.

# **Physical and Biological Sciences (8)**

GPH111 Introduction to Physical Geography (4) **plus** BIO100 Biology Concepts (4) Or select Physical & Biological courses, or AGEC Lab courses.

# **Mathematics (3-4)**

Select a college-level Mathematics course

MAT121 Intermediate Algebra, Standard (4)

OR

MAT162 Applied Statistics (3) (Recommended)

or higher



# **Core Courses (15)**

GIS101 Introduction to Geographic Information Technologies (3)

GIS102 Map and Image Interpretation (3)

GIS111 Introduction to GIS (3) GIS112 Intermediate GIS (3)

GIS113 Advanced GIS (3)

# **Course Electives (Select 23-26 credits)**

CET221 Basic Surveying and Grade Staking (4)

DFT127 AutoCAD I (3)

DFT128 AutoCAD II (3)

DFT131 AutoCAD III (3)

GIS150 GIS and Global Positioning Systems (GPS) (3)

GIS196 GIS Internship I (3)

GIS210 GIS Programming (3)

GIS230 Applied GIS: The Environment (3)

GIS231 Applied GIS: Transportation Systems (3)

GIS232 Applied GIS: Communities (3)

GIS250 Remote Sensing I (4)

GIS251 Remote Sensing II (4)

GIS296 GIS Internship II (3)

GIS299 GIS Research Methods (4)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

CIS120 Survey of Computer Information Systems (3) (Recommended)

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64-67 credits.

# **GIS DRAFTING AND MAPPING** CERTIFICATE

#### Signal Peak Campus

Creation, analysis, and mapping of Geographic Information Systems (GIS) data to prepare for positions utilizing GIS and GPS technology and/or to progress towards the GIS A.A.S. Degree.

**Total Credits: 30** 

# **Prerequisite:**

MAT101 Essential Mathematics (4) or higher

# **Core Requirements (30)**

GIS101 Introduction to Geographic Information

Technologies (3)

GIS102 Map and Image Interpretation (3)

GIS111 Introduction to GIS (3)

GIS112 Intermediate GIS (3)

GIS113 Advanced GIS (3)

DFT127 AutoCAD I (3)

DFT128 AutoCAD II (3) DFT131 AutoCAD III (3)

GIS150 GIS and Global Positioning Systems (GPS) (3)

GIS196 GIS Internship I (3)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

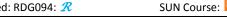


AGEC: 🗐

Dual Enrollment:



Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R





# MICROCOMPUTER BUSINESS APPLICATIONS A.A.S.

# Signal Peak & Superstition Mountain Campuses

# **Total Credits: 66**

The Microcomputer Business Applications A.A.S. Degree prepares students to select and use computer business application tools in a variety of business situations. Students learn basic web page skills for interaction between business application data and web pages. Successful completion may lead to Microsoft Certified Office User and Certified Internet Webmaster.

# **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

# **Oral Communications (3)**

Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

# Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological or Physical Science courses numbered 100 or above, or an AGEC Lab course.

#### **Mathematics (3-4)**

Select a college-level Mathematics course BUS101 Business Mathematics (3) **OR** MAT101 Essential Mathematics (4) or higher

# **Core Requirements (46)**

ACC100	Fundamentals of Accounting (3)
BUS100	Introduction to Business (3)
BUS123	Business Relations (3)
BUS207	Business Communications (3)
BUS260	Applied Business Seminar (3)
CBA122A	MS Word - Module 1 (2)
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)

#### **Electives**

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

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

# **Computer Competency (3):**

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 66 credits.



# MICROCOMPUTER BUSINESS APPLICATIONS SPECIALIST CERTIFICATE

Aravaipa, Signal Peak & Superstition Mountain Campuses

# **Total Credits: 20**

The Microcomputer Business Applications Specialist Certificate provides students with skills in business application software required for entry-level employment in an office environment.

# **Core Requirements (18)**

	-1
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):

	J J
OAS101	Keyboard – Alphabetic (1)
OAS103	Keyboard – Speed/Accuracy (1)

OAS104 Ten-Key Pad (1)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

# NETWORK ADMINISTRATION CERTIFICATE

# Signal Peak Campus

# **Total Credits: 27**

This Certificate prepares students for an entry-level position as a network administrator. Successful completion may lead to Microsoft Certified System Administration, Network+ certification, and Network Technician Certification.

# **Recommended Proficiencies**

RDG094 College Reading (3)  $\mathcal{R}$ 

# **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)
	CIS121 CIS130 CIS150 CIS152 CIS153 CIS213 CIS215

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: X SUN Course:



# **NETWORK SYSTEMS ADMINISTRATION A.A.S.**

### Signal Peak Campus

# **Total Credits: 65**

This A.A.S. Degree prepares students for an entry-level position as a network administrator. Graduates may enter a Baccalaureate Degree program and/or sit for Network+ Certification and A+ Network Certification examinations.

# **General Education Requirements (19-23)**

### **Written Communications (3)**

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

# **Oral Communications (3)**

COM263 Intercultural Communication (3) (Recommended) or select a COM or an AGEC course.

#### Arts and Humanities (3)

PHI105 Introduction to Ethics (3) (Recommended) Or select an Art or Humanities course, or an AGEC course.

### Social and Behavioral Sciences (3)

ECN201 Principles of Macroeconomics (3) Or select a Social/Behavioral Science course, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological or Physical Science courses numbered 100 or above, or an AGEC course.

#### Mathematics (3-4)

Select a college-level Mathematics course BUS101 Business Mathematics (3) **OR** 

MAT121 Intermediate Algebra, Standard (4) or higher

# **Core Requirements (45)**

BUS100 Introduction to Business (3) **BUS207** Business Communications (3)

CIS120 Survey of Computer Information Systems (3)

(Fulfills Computer Competency requirement)

ICON	LEGEND
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AGEC: 🗐 Dual Enrollment: Intensive Writing: /W Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:

CIS121	Microcomputer Operating System
	Fundamentals (3)
CIS123	Introduction to Programming (3)
CIS130	Networking Essentials (3)
CIS135	Principles of Telephony and
	Telecommunications (3)
CIS150	Windows Server (3)
CIS152	Networking Infrastructure (3)
CIS153	Network Security (3)
CIS213	Linux Server (3)
CIS215	CISCO Routers (3)
CIS219	Exchange Server (3)
CIS220	Security for Wireless Networks (3)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

ECN202 Principles of Microeconomics (3)

# **Computer Competency (3):**

CIS120 Survey of Computer Information Systems (3)

For students transferring to the University of Arizona B.A.S. Network Administration program, SPA101 and SPA102 are strongly recommended.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.



# **CREATIVE ARTS**

# ENTERTAINMENT INDUSTRY TECHNOLOGY

# ARTIST AND VENUE MANAGEMENT A.A.S.

# Signal Peak Campus

# **Total Credits: 70**

The Artist and Venue Management A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of business, entertainment law, marketing, management and the ability to manage entertainment facilities or performers.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

ENG101 English Composition III (3) (Recommended)
OR

ENG121 Applied Technical Writing (3)

# **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) **Or select a COM course, or an AGEC course.** 

#### **Arts and Humanities (3)**

EIT100 History of Rock n' Roll (3) (Recommended) Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

# Social and Behavioral Sciences (3)

PSY101 Introduction to Psychology (3) [2] (*Recommended*)

Or select a Social and Behavioral Science course, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: SUN Course:

# Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (47)**

ACC100	Fundamentals of Accounting (3)
ACC121	Income Tax Fundamentals (3)
BUS100	Introduction to Business (3)
BUS122	Small Business Management (3)
BUS190	Applied Business Management (3)
CBA210	Web Development Tools (3)
EIT101	Introduction to Entertainment (3)
EIT120	Entertainment Law (3)
EIT130	Live Audio Production I (3)
EIT140	Lighting I (3)
EIT151	Digital Audio Workstation (3)
EIT203	Entertainment Capstone Project (2)
EIT221	Entertainment Marketing and Promotion (3)
EIT222	Artist Management (3)
EIT223	Events and Venue Management (3)
EIT296	Entertainment Internship (3)

# **Other Requirements (4)**

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 70 credits.



# ARTIST AND VENUE MANAGEMENT CERTIFICATE

### Signal Peak Campus

# **Total Credits: 35**

The Artist and Venue Management Certificate prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of business, entertainment law, marketing, management and the ability to manage entertainment facilities or performers.

# Core Requirements (35)

	•
ACC100	Fundamentals of Accounting (3)
ACC121	Income Tax Fundamentals (3)
BUS100	Introduction to Business (3)
BUS122	Small Business Management (3)
EIT100	History of Rock n' Roll (3) 🖸
EIT101	Introduction to Entertainment (3)
EIT120	Entertainment Law (3)
EIT203	Entertainment Capstone Project (2)
EIT221	Entertainment Marketing and Promotion (3)
EIT222	Artist Management (3)
EIT223	Events and Venue Management (3)
EIT296	Entertainment Internship (3)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND** AGEC: Dual Enrollment:

Intensive Writing: /W Programs of Study/Tech Prep: POS

Reading Required: RDG094: R SUN Course:

# LIVE AUDIO AND LIGHTING A.A.S.

# Signal Peak Campus

#### **Total Credits: 67**

The Live Audio and Lighting A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry. It provides skills necessary to work with touring entertainers and audio/lighting companies in the set up operation of live concert productions.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

ENG101 English Composition III (3) (Recommended) OR

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) Or select a COM course, or an AGEC course.

# **Arts and Humanities (3)**

EIT100 History of Rock n' Roll (3) (Recommended) Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

PSY101 Introduction to Psychology (3) (Recommended) Or select a Social and Behavioral Science course, or an AGEC

# Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# Mathematics (3-4)

Select a college-level Mathematics course BUS101 Business Mathematics (3) **OR** MAT101 Essential Mathematics (4) or higher

# Core Requirements (44)

BUS122	Small Business Management (3)
CBA210	Web Development Tools (3)
EIT101	Introduction to Entertainment (3)
EIT120	Entertainment Law (3)
EIT130	Live Audio Production I (3)
EIT140	Lighting I (3)
EIT151	Digital Audio Workstation (3)
EIT203	Entertainment Capstone Project (2)
EIT221	Entertainment Marketing and Promotion (3)

Live Audio Production II (3)

Equipment Maintenance (3)

EIT231

**EIT232** 



EIT241 Concert Lighting (3)

EIT242 Rigging (3)

EIT296 Entertainment Internship (3)

ELC122 Direct Current and Alternating Current Circuit

Analysis (3)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 67 credits.

# LIVE AUDIO AND LIGHTING CERTIFICATE

#### Signal Peak Campus

# **Total Credits: 35**

The Live Audio and Lighting Certificate prepares individuals for entry-level positions in the entertainment industry. It provides skills necessary to work with touring entertainers and audio/lighting companies in the set up operation of live concert productions.

#### **Recommended Proficiencies**

RDG094 College Reading (3)  $\mathcal{R}$ 

# **Core Requirements (35)**

EIT100	History of Rock 'n Roll (3) 🛜
EIT101	Introduction to Entertainment (3)
EIT130	Live Audio Production I (3)
EIT140	Introduction to Lighting (3)
EIT203	Entertainment Capstone Project (2)
EIT221	Entertainment Marketing and Promotion (3)
EIT231	Live Audio Production II (3)
EIT232	Equipment Maintenance (3)
EIT241	Concert Lighting (3)
EIT242	Rigging (3)
EIT296	Entertainment Internship (3)
ELC122	Direct Current and Alternating Current Circuit

# **Other Requirements**

Analysis (3)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

**ICON LEGEND** 

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: RDG094: SUN Course:



# POPULAR MUSIC PERFORMANCE A.A.S.

Signal Peak Campus

# **Total Credits: 64**

The Popular Music Performance A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of skills needed for live songwriting, all aspects of live pop music performance and recording.

# **Prerequisite**

The soloist or group must perform a live audition for the coordinator of the Entertainment Industry Technology program.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

ENG101 English Composition III (3) (Recommended) OR

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) or select a COM course, or an AGEC course.

# Arts and Humanities (3)

EIT100 History of Rock n' Roll (3) (Recommended) Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

# Social and Behavioral Sciences (3)

PSY101 Introduction to Psychology (Recommended)
Or select a Social and Behavioral Science course, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# ICON LEGEND AGEC:

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROGUES SUN Course:

# Core Requirements (43.5)

BUS122	Small Business Management (3)
CIS112	Web Page Design Fundamentals (3)
EIT101	Introduction to Entertainment (3)

EIT101 Introduction to Entertainme EIT120 Entertainment Law (3)

EIT130 Live Audio Production I (3)

EIT140 Lighting I (3)

EIT151 Digital Audio Workstation (3)

EIT170 Performance Skills (1)

(Must enroll four (4) times for credit)

EIT171 Songwriting I (2)

EIT203 Entertainment Capstone Project (2)

EIT221 Entertainment Marketing and Promotion (3)

EIT222 Artist Management (3)
EIT272 Songwriting II (2)
ENG200 Creative Writing (3)
MTC100 Fundamentals of Music (3)

MTC101 Aural Fundamentals (.5)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

CIS112 Web Page Design Fundamentals (3) (Recommended, also fulfills Core requirement)

ÖR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Popular Music Performance A.A.S. Degree requires 64 credits.



# POPULAR MUSIC PERFORMANCE CERTIFICATE

# Signal Peak Campus

#### **Total Credits: 35.5**

The Popular Music Performance Certificate prepares individuals for entry-level positions in the music entertainment industry by providing an opportunity to gain a broad knowledge of skills needed for song writing and all aspects of live popular music performance and recording.

#### **Recommended Proficiencies**

RDG094 College Reading R

# **Core Requirements (35.5)**

	- ' '
EIT100	History of Rock n' Roll (3) 📵
EIT101	Introduction to Entertainment (3)
EIT120	Entertainment Law (3)
EIT130	Live Audio Production I (3)
EIT140	Introduction to Lighting (3)
EIT151	Digital Audio Workstation (3)
EIT170	Performance Skills (1)
	(Must enroll two (2) times for credit)
EIT171	Songwriting I (2)
EIT203	Entertainment Capstone Project (2)
EIT221	Entertainment Marketing and Promotion (3)
EIT222	Artist Management (3)
EIT272	Songwriting II (2)
MTC100	Music Fundamentals (3)
MTC101	Aural Fundamentals (.5)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

# **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

#### **RECORDING ENGINEERING A.A.S.**

# Signal Peak Campus

# **Total Credits: 67.5**

The Recording Engineering A.A.S. Degree prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of creating a home recording studio or a professional multi-track studio. Skills include recording, production, editing, and arranging various types of audio recordings.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

ENG101 English Composition III (3) (Recommended) OR

ENG121 Applied Technical Writing (3)

# **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) **Or select a COM course, or an AGEC course.** 

#### **Arts and Humanities (3)**

EIT100 History of Rock n' Roll (3) (Recommended)
Or select an Art, Humanities, Literature, Music, Philosophy or
Theatre course numbered 100 or above, or an AGEC course.

# **Social and Behavioral Sciences (3)**

PSY101 Introduction to Psychology (3) (Recommended) Or select a Social and Behavioral Science course, or an AGEC course.

# Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

### Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

#### **Core Requirements (44.5)**

DOD122	Silian Dusiness Management (3)
CBA210	Web Development Tools (3)
EIT101	Introduction to Entertainment (3)
EIT120	Entertainment Law (3)
EIT130	Live Audio Production I (3)
EIT151	Digital Audio Workstation (3)
EIT153	Recording Engineering I (3)
EIT203	Entertainment Capstone Project (2)

BUS122 Small Business Management (3)



EIT221 EIT231 EIT232 EIT254 EIT255 EIT296	Entertainment Marketing and Promotion (3) Live Audio Production II (3) Equipment Maintenance (3) Recording Engineering II (3) Recording Engineering III (3) Entertainment Internship (3)
_	
EIT296	Entertainment Internship (3)
MTC100	Fundamentals of Music (3)
MTC101	Aural Fundamentals (.5)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

Microcomputers in Agriculture AGB124

CIS110 Fundamentals of Computer Literacy or higher

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 67.5 credits.

# RECORDING ENGINEERING CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 35**

The Recording Engineering Certificate prepares individuals for entry-level positions in the entertainment industry by providing an opportunity to gain a broad knowledge of creating a home recording studio or a professional multi-track studio. Skills include recording, production, editing and arranging various types of audio recordings.

#### **Recommended Proficiencies**

RDG094 College Reading R

# **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)

Digital Audio Workstation (3) EIT151

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

EIT231 Live Audio Production II (3)

EIT232 Equipment Maintenance (3)

Recording Engineering II (3) EIT254

Recording Engineering III (3) EIT255 EIT296 Entertainment Internship (3)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least onethird of the certificate credits from CAC.

# **ICON LEGEND**

AGEC:

Dual Enrollment:



Intensive Writing: /W Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:



# **FINE ARTS A.A.**

#### Signal Peak Campus

#### **Total Credits: 60-64**

The Fine Arts A.A. Degree prepares students to transfer to a university B.A., B.F.A. or Bachelors of Teaching in the Arts degree program. Those seeking Art History or Museum Studies as majors may need additional foreign language courses.

# General Education Requirements AGEC-A (35-36)

### **Written Communications (6)**

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

#### **Oral Communications (3)**

Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

# Arts & Humanities (6-9) Arts (3)

Fulfilled by the Studio Art Core Requirements.

#### **Humanities (3)**

Select an AGEC course.

# Social and Behavioral Sciences (6-9)

Select AGEC courses from different disciplines.

#### **Physical and Biological Sciences (8)**

Select AGEC courses with a laboratory component.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) 🖸 or higher

# Subject Options (0-6)

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

# **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

# **Special Awareness Requirements (0-9)**

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 in Global/International Awareness or Historical Awareness (*Fulfilled by the Core Requirements*)

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

# **Core Requirements (30)**

ART107 Drawing I (3) ART109 Color Theory (3)

ART207 Art History I (3)

ART208 Art History II (3) To MSC205 Portfolio Preparation (3)

Transferable Studio Electives (9)

Fulfillment of the Core Requirements may also fulfill the AGEC-A Arts Requirements.

#### **Electives**

Select approved elective courses which transfer as "Elective or better" to all three AZ public universities to complete the required A.A. Degree credits.

# Other Requirements (3)

Reading Competency: RDG094 College Reading Reading

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

# **Other A.A. Degree Requirements**

Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

Check your university catalog, Transfer Guides at http://www.aztransfer.com/TransferGuides, or meet with an



academic advisor. Students may demonstrate proficiency by completion of coursework and/or a proficiency test.

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

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

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

#### **GRAPHIC DESIGN A.A.S.**

# Signal Peak Campus

# **Total Credits: 65**

Hands-on Graphic Design training prepares students for employment in entry-level positions in Advertising, Marketing, Print and Web Design fields.

#### **Recommended Proficiencies**

RDG094 College Reading (3)  $\mathcal{R}$ 

# **General Education Requirements (25)**

# **Written Communications (6)**

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

# **Oral Communications (3)**

Select a COM course, or an AGEC course.

# **Arts and Humanities (6)**

Select two of the following:

ART100 Art Appreciation (3) 🗟

ART207 Art History I (3)

ART208 Art History II (3)

Or select Art, Humanities, Literature, Music, Philosophy or Theatre courses numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select a Social and Behavioral Science course, or an AGEC course.

# Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (36)**

ART101 Two-Dimensional Design (3) 🖸

ART102 Three-Dimensional Design (3)

ART107 Drawing I (3)

ART109 Color Theory (3)

BUS122 Small Business Management (3)

MSC101 Introduction to Mass Communication (3)

MSC120 Graphic Design and Adobe InDesign (3)

MSC122 Introduction to Web Design (3)

MSC125 Introduction to Illustrator (3)

# AGEC: Dual Enrollment: Untensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:



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 *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.

# **CULINARY ARTS**

#### **BAKING AND PASTRY CERTIFICATE**

Maricopa and Signal Peak Campuses

**Total Credits: 18** 

This Certificate is designed to prepare students for employment in such establishments as retail bakeries, fine dining restaurants and hotels, upscale pastry and bake shops, commercial baking and entrepreneurships. The core courses will help students develop a solid foundation in basic baking skills. The student may tailor the degree to meet individual goals in areas such as bread baking, cake decorating, wedding cake production, and/or chocolate and sugar show pieces. Students pursuing an Associate of Applied Science (AAS) Culinary Arts Degree may specialize in Baking and Pastry. All courses in the Baking and Pastry Certificate are requirements for the Culinary Arts A.A.S. Degree. High school diploma or GED are recommended.

# **Prerequisites:**

RDG094 and MAT082 or equivalent placement test scores.

# **Recommended Proficiencies:**

High school diploma or GED recommended.

# **Core Requirements (14)**

NTR105 ServSafe Certification (1)

CUL105 Food Safety Foundations (1)

CUL160 Baking and Pastry I (3)

CUL260 Baking and Pastry II (3)

NTR223 Food Service Management (3)

HRM103 Managing Food Service Operations (3)

NTR104 Nutrition (3) plus NTR104L Personal Wellness Lab (1)

OR

NTR104 Nutrition (3) plus (1) Culinary Arts elective

CUL268 Nutrition and Special Needs Baking (3) plus CUL (1) elective

OR

NTR141 Nutrition and Wellness (4) 🔁

(NTR141 may also fulfill Physical and Biological Sciences

Requirement for Culinary A.A.S. Degree)

# **ICON LEGEND**



Dual Enrollment:



Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:



#### **Electives: Choose 4 or more**

CUL161 Cake Decorating (1)

CUL162 Cake, Fillings and Frostings (1)

CUL261 Advanced Cake Decorating (1)

CUL262 Wedding Cakes (1)

CUL263 Everything Chocolate (1)

CUL264 Confectionary Show Pieces (1)

CUL265 Artisan and Specialty Breads (1)

CUL266 Advanced Pastry (1)

# **Other Requirements**

Reading Competency: RDG094 College Reading Reading

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of one-third of required Certificate credits from CAC.

# **CULINARY ARTS A.A.S.**

#### Maricopa and Signal Peak Campuses

# **Total Credits: 65**

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

#### **Recommended Proficiencies**

College level math and English Placement test scores. High school diploma or GED recommended.

# **General Education Requirements (19-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

Select a COM course, or an AGEC course.

### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

# Physical and Biological Sciences (4)

NTR141 Nutrition and Wellness (4) (Recommended) Or select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

#### **Mathematics (3-4)**

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (27)**

CUL125 Sustainable Food Practices (1)

CUL130 Culinary Principles and Applications I (3)

CUL160 Baking and Pastry I (3)

CUL170 Dining and Beverage Operations (2)

# **ICON LEGEND**

AGEC: 🗐

Dual Enrollment: 🥨



Intensive Writing: // Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:



CUL185 Catering Operations (2)

CUL230 Culinary Principles and Applications II (3)

CUL260 Baking and Pastry II (3)

CUL290 Commercial Cooking Practicum (2)

CUL105 Food Safety Foundations (1)

OR

NTR105 ServSafe Certification (1)

Select one of the following (4):

NTR104 Nutrition (3) plus

NTR104L Personal Wellness Lab (1)

OR

NTR104 Nutrition (3) plus CUL elective (1)

OR

CUL268 Nutrition and Special Needs Baking (3) plus CUL

elective (1)

OR

NTR141 Nutrition and Wellness (4) 🔂

(NTR141 also fulfills Physical and Biological Sciences)

If the Physical and Biological Sciences requirement is fulfilled by NTR141, select four (4) additional credits.

*Select one of the following (3):* 

NTR223 Food Service Management (3)

OR

HRM103 Managing Food Service Operations (3)

# Electives (15)

Students may choose electives from all four of the categories listed below. Many of the electives are part of the Baking and Pastry Certificate, the Culinary Arts Certificate, and the Hotel and Restaurant Management Certificate. Careful selection of electives makes it possible for a student to earn multiple certificates while earning an AAS degree.

# **Culinary Arts Electives**

CUL110 Asian Cuisine (1)

CUL112 Italian Cuisine (1)

CUL114 Mexican and Latin American Cuisine (1)

CUL121 Culinary Concepts (1)

CUL205 HACCP Principles (1)

CUL292 Study Abroad: Italian Cuisine and Culture (4)

NTR142 Applied Food Science (3)

# **Baking and Pastry Electives**

CUL161 Cake Decorating (1)

CUL162 Cake, Fillings and Frostings (1)

CUL261 Advanced Cake Decorating (1)

CUL262 Wedding Cakes (1)

CUL263 Everything Chocolate (1)

CUL264 Confectionary Show Pieces (1)

CUL265 Artisan Specialty Breads (1)

CUL266 Advanced Pastry (1)

CUL268 Nutrition and Special Needs Baking (3)

# **Nutrition and Dietetics Electives**

NTR 135 Healthy Weight for Adults (1)

NTR191 Nutrition Counseling Skill Development (3)

NTR232A Food and Culture (1)

NTR240 Clinical Nutrition (3)

# **Business/Hospitality Electives**

ACC100 Fundamentals of Accounting (3)

BUS100 Introduction to Business (3)

BUS122 Small Business Management (3)

BUS123 Business Relations (3)

BUS180 Introduction to Marketing (3)

BUS 201 Legal Environment of Business (3)

BUS250 Business Entrepreneurship (3)

HRM100 Introduction to Hospitality (3)

HRM101 Facilities Management (3)

HRM102 Management of Guest Services (3)

HRM106 Supervision in the Hospitality Industry (3)

HRM208 Hospitality Law (3)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

#### OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.

**ICON LEGEND** 

AGEC: 🗐

Dual Enrollment: 🥨



Intensive Writing: /W Programs of Study/Tech Prep: POS



# **CULINARY ARTS CERTIFICATE I**

# Maricopa and Signal Peak Campuses

# **Total Credits: 16**

Culinary Arts Certificate I prepares students to become entry-level culinary professionals within a commercial food service operation. Credits earned may be applied toward the Culinary Arts Certificate II or the Culinary Arts A.A.S. Degree.

#### **Recommended Proficiencies**

College level math and English Placement test scores. High school diploma or GED recommended.

# **Core Requirements (16)**

	- 4
CUL130	Culinary Principles and Applications I (3)
CUL160	Baking and Pastry I (3)
CUL170	Dining and Beverage Operations (2)
CUL105	Food Safety Foundations (1)
	OR
NTR105	ServSafe Certification (1)
NTR223	Food Service Management (3)
	OR
HRM103	Managing Food Service Operations (3)

### Select one of the following (4):

<b>U</b> 1 /
Nutrition (3) <b>plus</b>
Personal Wellness Lab (1)
OR
Nutrition (3) <b>plus</b> CUL elective (1)
OR
Nutrition and Wellness (4) 🔁
OR
Nutrition and Special Needs Baking (3) plus
CUL elective (1)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: X SUN Course:

# **CULINARY ARTS CERTIFICATE II**

# Maricopa and Signal Peak Campuses

# **Total Credits: 25**

Culinary Arts Certificate II provides training in basic and advanced culinary skills, including the principles of professional cooking and baking, volume food production, food safety and sanitation, customer service, food service management skills, basic nutrition concepts and menu and facility planning. This Certificate prepares students for entry-level positions as cooks, chefs or food service managers.

#### **Recommended Proficiencies**

College level math and English Placement test scores. High school diploma or GED recommended.

# **Required Courses (25)**

CUL125	Sustainable Food Practices (1)
CUL130	Culinary Principles and Applications I (3)
CUL160	Baking and Pastry I (3)
CUL170	Dining and Beverage Operations (2)
CUL185	Catering Operations (2)
CUL230	Culinary Principles and Applications II (3)
CUL260	Baking and Pastry II (3)
CUL105	Food Safety Foundations (1)
	OR
NTR105	ServSafe Certification (1)
NTR223	Food Service Management (3)
	OR
HRM103	Managing Food Service Operations (3)

# Select one of the following (4):

		<b>0</b> 1 /
N	TR104	Nutrition (3) <b>plus</b>
N	TR104L	Personal Wellness Lab (1)
		OR
N	TR104	Nutrition (3) <b>plus</b> CUL elective (1)
		OR
N	TR141	Nutrition and Wellness (4) 🖸
		OR
C	UL268	Nutrition and Special Needs Baking (3) plus
		CUL elective (1)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# DIESEL/HEAVY **EQUIPMENT**

# **DIESEL AND HEAVY EQUIPMENT TECHNOLOGY A.A.S.**

#### Signal Peak Campus

# **Total Credits: 73**

This Degree prepares students for employment as diesel and heavy equipment technicians with an array of career opportunities within the industry. A typical graduate will seek employment with an equipment dealer, equipment rental company, or a heavy highway construction company. Students receive training applicable for serving and repairing all types of diesel equipment.

# **Prerequisites**

Students must be admitted to D&HET Cohort and hold current and valid driver license, or instructor's consent.

# **General Education Requirements (19)**

# **Written Communications (3)**

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

# **Oral Communications (3)**

Select a COM course, or an AGEC course.

#### Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

# Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# **ICON LEGEND**

AGEC: Intensive Writing: IW Dual Enrollment:



Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:

# **Mathematics (3)**

Select a college-level Mathematics course BUS101 Business Mathematics (3) OR MAT101 Essential Mathematics (4) or higher

# **Core Requirements (44)**

DIE110	Introduction to Diesel Engines and Fuel Systems
	(3)
DIE111	Introduction to Electricity/Electronics (3)
DIE112	Introduction to Mobile Hydraulics (3)
DIE113	Introduction to Power Trains (3)
DIE114	Introduction to Power Train Repair and
	Diagnostics (4)
DIE115	Introduction to Diesel Engine Repair and
	Diagnostics (4)
DIE118	Computer Systems for Equipment
	Technicians (3)
DIE210	Advanced Diesel Engines and Fuel Systems (5)
DIE211	Advanced Electrical/Electronic Systems (3)
DIE212	Advanced Mobile Hydraulics (3)
DIE214	Advanced Power Train Repair and
	Diagnostics (5)
HEO121	Heavy Equipment Operations I (5)

# **Electives:** Select three of the following

courses (9)	
AGB124	Microcomputers in Agriculture (3)
CIS120	Survey of Computer Information Systems (3)
DIE116	Introduction to Diesel Technology (3)
DIE117	Workplace Success Principles, Practices, and
	Strategies (3)
DIE222	Mobile Refrigeration (3)
WLD	Any Welding course (3)
DIE196	Diesel Equipment Technology and HEO
	Internship I (3) <b>plus</b>
DIE296	Diesel Equipment Technology and HEO
	Internship II (3)

# **Other Requirements (1-4)**

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture OR **CIS110** Fundamentals of Computer Literacy or higher (Select CIS120 from Electives)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 73 credits.



# DIESEL AND HEAVY EQUIPMENT **TECHNOLOGY CERTIFICATE**

### Signal Peak Campus

#### **Total Credits: 53**

The Diesel and Heavy Equipment Technology Certificate prepares students for employment as diesel and heavy equipment technicians with an array of career opportunities within the industry. A typical graduate will seek employment with an equipment dealer, equipment rental company, or a highway heavy construction company. Students receive training applicable for servicing and repairing all types of diesel equipment.

# **Prerequisites**

Students must be admitted to D&HET Cohort; current and valid driver license; or instructor consent.

# Core Requirements (44)

DIE110	Introduction to Diesel Engines & Fuel Systems
	(3)

DIE111	Introduction to Electricity/Electronics (3)	

- Introduction to Mobile Hydraulics (3)
- Introduction to Power Trains (3) DIE113
- DIE114 Introduction to Power Train Repair &
- 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)
- Advanced Power Train Repair and Diagnostics (5) DIE214
- HEO121 Heavy Equipment Operations I (5)

#### Electives: Select three courses (9)

- AGB124 Microcomputers in Agriculture (3)
- CIS120 Survey of Computer Information Systems (3)
- DIE116 Introduction to Diesel Technology (3)
- DIE117 Workplace Success Principles, Practices, and

Strategies (3)

- DIE222 Mobile Refrigeration (3)
- ENG121 Applied Technical Writing (3)
- Any Welding course (3) WLD

#### **ICON LEGEND**

AGEC: 📵

Dual Enrollment:



Intensive Writing: /W Reading Required: RDG094: R

Programs of Study/Tech Prep: POS

SUN Course:

DIE196 Diesel Equipment Technology and HEO Equipment Internship I (3) plus

DIE296 Diesel Equipment Technology and HEO Equipment Internship II (3)

# **Other Requirements**

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# **HEAVY EQUIPMENT OPERATOR** A.A.S.

### Signal Peak Campus

#### **Total Credits: 68**

The Heavy Equipment Operator A.A.S. degree prepares students to operate, maintain and service heavy equipment and layout construction projects.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

ENG101 English Composition III (3) (SUN ENG 1101) **OR** ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

Select a COM course, or an AGEC course.

#### Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

# Social and Behavioral Sciences (3)

Select a Social and Behavioral Science course, or an AGEC course.

# Physical and Biological Sciences (4)

AGS221 Soil Science (4) 🖸 Any Geology course (4) GLG PHY100 Physical Universe (4) 🔂

Or select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

#### **Mathematics (3-4)**

Select a college-level Mathematics course BUS101 Business Mathematics (3) **OR** MAT101 Essential Mathematics (4) or higher

# **Core Requirements (37)**

Introduction to Earthmoving Methods and CET125

Operations (3)

Basic Surveying and Grade Staking (4) CET221

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)
	HEO122 HEO127 HEO128 HEO221

# Electives: Select from the following courses (8)

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) Introduction to Group Communication (3) 🗟 COM202

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)

HEO100

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3) CIS110 Fundamentals of Computer Literacy (3) or higher

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 68 credits.





# HEAVY EQUIPMENT OPERATOR CERTIFICATE

### Signal Peak Campus

#### **Total Credits: 40**

The Heavy Equipment Operator Certificate focuses on the operation, maintenance and service of heavy equipment, layout of construction projects, and supervisory duties in the field of Heavy Equipment Operators.

# **General Education Requirements (6)**

### **Communications (3)**

Select a COM course, or an AGEC course.

#### **Mathematics (3-4)**

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (23)**

CET125 Intro to Earthmoving Methods & Operations (3)
CET221 Basic Surveying and Grade Staking (4)
DIE225 Preventive Maintenance (2)
HEO121 Heavy Equipment Operations I (5)
HEO122 Heavy Equipment Operations II (5)

# Choose one of the following courses (4):

HEO127 Heavy Equipment Reconditioning (4) HEO128 Diesel Equipment Service and Repair (4)

# **Computer Competency (3)**

Select one:

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

#### Electives (8)

AGS221 Soil Science (4) 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)

# **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: X SUN Course:

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

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# **EDUCATION**

# EARLY CHILDHOOD EDUCATION FAMILY CHILDCARE A.A.S.

Signal Peak Campus

# **Total Credits: 64**

The Early Care and Education Program provides coursework to fulfill the education/training requirements for an A.A.S. Degree in the Family Childcare specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. The Degree program prepares individuals to operate a Childcare business in their home.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

### **Oral Communications (3)**

Select a COM course, or an AGEC course.

# **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select a Social and Behavioral Science course, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (24)**

ECE117 Guidance for Family Childcare (3) ECE121 Health for Family Childcare (1) ECE122 Safety for Family Childcare (1)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROGO94: SUN Course:

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 Reading

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.



# EARLY CHILDHOOD EDUCATION FAMILY CHILDCARE CERTIFICATE

#### Signal Peak Campus

**Total Credits: 24** 

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in the Family Childcare specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. The Certificate program prepares individuals to operate a home Childcare business.

# **Core Requirements (24)**

	,
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**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

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

Aravaipa, Maricopa, San Tan, Signal Peak & Superstition Mountain Campuses and Casa Grande and Corporate Centers

#### **Total Credits: 64**

The Early Care and Education Program's Associate of Applied Science Degree (A.A.S.) provides solid foundational knowledge, field experiences and common skills and strategies that prepare students for multiple roles in the Infant-Toddler field.

# **General Education Requirements (19-23)**

# **Written Communications (3)**

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

#### **Oral Communications (3)**

Select a COM course, or an AGEC course.

# **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select a Social and Behavioral Science course, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

#### **Mathematics (3-4)**

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

#### Core Requirements (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

# Electives (15)

Select college-level electives to meet the 64 credit requirement.

ECE271 Creating Early Childhood Environments (3)

# Other Requirements (4)

Toddlerhood (1)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

OR

CIS110 Fundamentals of Computer Literacy or higher (CIS120) is recommended for students planning to transfer and complete a bachelor's degree.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.

# EARLY CHILDHOOD EDUCATION INFANT-TODDLER CERTIFICATE

### Signal Peak Campus

# **Total Credits: 29**

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in the Infant-Toddler specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential.

# **Core Requirements (13)**

ECE120B	Providing a Healthy Environment (1)
ECE120D	Ensuring a Safe Environment for Children (1)
ECE125A	Nutrition (1)
ECE229	Professional Portfolio Preparation (3)
ECE250	Professionalism (1)
ECE280	Inclusion of Children with Special Needs (3)
ECE283	Valuing Families and Diversity (3)

# Specialization Requirements for Infant-Toddler (16)

ECE128A Environments for Infants and Toddlers (1)

ECE126A	Environments for infants and Toddiers (1)
ECE129B	Observation Skills in the Infant and Toddler
	Program (1)
ECE129C	Record Keeping Skills: Infant and Toddler
	Programs (1)
ECE176	Early Childhood Development and Theories (3)
ECE183	Curriculum and Learning Materials for Infants (1)
ECE184	Curriculum and Learning Materials for Toddlers (1)
ECE226A	Cognitive Development of Infants and Toddlers (1)
ECE226C	Language Development of Infants and Toddlers (1)
ECE227B	Guidance and Discipline of Infants and Toddlers (1)
ECE227C	Enhancing Social Competency of Infants and
	Toddlers (1)
ECE228B	Physical Development in Infancy and
	Toddlerhood (1)
ECE271	Creating Early Childhood Environments (3)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.





# EARLY CHILDHOOD EDUCATION MANAGEMENT A.A.S.

Aravaipa, Maricopa, Signal Peak & Superstition Mountain Campuses and Casa Grande, Corporate, San Tan Center

#### **Total Credits: 64**

The Early Childhood Education Management A.A.S. Degree program provides for the development of skills and competencies in operating a Childcare program. The degree program prepares individuals to supervise, market and manage a Childcare program.

# **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

Select a COM course, or an AGEC course.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

# **Social and Behavioral Sciences (3)**

ECE276 Child Development (3) (Also fulfills Core Requirement)

Or select a Social and Behavioral Science course, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

#### Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROGUESE: SUN Course:

# **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 ECE283	Inclusion of Children with Special Needs (3) 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  $\mathcal{R}$ 

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

OR

CIS110 Fundamentals of Computer Literacy or higher (CIS120) is recommended for students planning to transfer and complete a bachelor's degree.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.



# EARLY CHILDHOOD EDUCATION MANAGEMENT CERTIFICATE

# Signal Peak Campus

#### **Total Credits: 31**

The Early Childhood Education Management Certificate program provides for the development of skills and competencies in managing a Childcare program.

# **Recommended Proficiencies**

RDG094 College Reading (3) R

# **Core Requirements (31)**

ECE220	Managing Food, Health, and Safety in Childcare
	Programs (3)
ECE221	ECE Program Financial Management (3)
ECE222	Managing and Evaluating ECE Programs (3)
ECE223	Planning and Promoting an ECE Program (3)
ECE224	Supervision in Early Childhood Programs (3)
ECE229	Professional Portfolio Preparation (3)
ECE248	Early Childhood Program Philosophies (1)
ECE276	Child Development (3) 🔽
ECE280	Inclusion of Children with Special Needs (3)
ECE283	Valuing Families and Diversity (3)
CIS120	Survey of Computer Information Systems (3)
	(Recommended for students planning to transfer)

# **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

# PRESCHOOL A.A.S.

**EARLY CHILDHOOD EDUCATION** 

Aravaipa, Maricopa, San Tan, Signal Peak & Superstition Mountain Campuses and Casa Grande and Corporate Centers

#### **Total Credits: 64**

The Early Care and Education Program provides coursework to fulfill the education/training requirements for an AAS Degree with a Preschool specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. Graduates will be prepared to function as a teacher or aide in an Early Childhood program setting.

# **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

# **Oral Communications (3)**

Select a COM course, or an AGEC course.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

ECE276 Child Development (3) (Also fulfills Core Requirement)

Or select a Social and Behavioral Science course, or an AGEC course.

# Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

#### Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (35)**

ECE116 Guiding and Observing Children (3)
ECE120B Providing a Healthy Environment (1)
ECE120D Ensuring a Safe Environment for Children (1)
ECE125A Nutrition (1)

AGEC: Intensive Writing: //W Programs of St

Dual Enrollment: 🥝





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 Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

#### OR

CIS110 Fundamentals of Computer Literacy or higher (CIS120) is recommended for students planning to transfer and complete a bachelor's degree.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.

# EARLY CHILDHOOD EDUCATION PRESCHOOL CERTIFICATE

### Signal Peak Campus

# **Total Credits: 28**

The Early Care and Education Program provides coursework to fulfill the education/training requirements for a Certificate of Completion in the Preschool specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential.

# **Core Requirements (25)**

	•
ECE116	Guiding and Observing Children (3)
ECE120B	Providing a Healthy Environment (1)
ECE120D	Ensuring a Safe Environment for Children (1)
ECE125A	Nutrition (1)
ECE176	Early Childhood Development and Theories (3)
ECE229	Professional Portfolio Preparation (3)
ECE250	Professionalism (1)
ECE271	Creating Early Childhood Environments (3)
ECE276	Child Development (3) 🔂
ECE278	Effective Curriculum Design for Teachers of
	Young Children (3)
ECE283	Valuing Families and Diversity (3)

# **Other Requirements (3)**

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

CIS course

#### OR

Computer Competency course

CIS120 Survey of Computer Information Systems (3) (Recommended for students planning to transfer.)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# ELEMENTARY EDUCATION A.A.E.E.

#### District-Wide

# **Total Credits: 60-64**

The Associate of Arts in Elementary Education (A.A.E.E.) Degree is appropriate for students who require practical and professional skills and knowledge that can lead to upper division programs in elementary and special education, and prepares para-educators.

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

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

#### **Recommended Proficiencies**

College level English, math and reading courses or placement test scores to demonstrate proficiency

# AGEC-A (35-36 Credits)

The Arizona General Education Curriculum focused on the Arts (AGEC-A) is a 35 semester credit block that fulfills the lower division general education requirements of liberal arts majors (e.g., social science, fine arts, humanities). The AGEC-A requires a minimum of MAT141 or higher plus 32 credits. The AGEC block transfers to any Arizona public or tribal community college and to the three Arizona public universities.

#### **General Education Requirements**

For the following eight categories select the recommended AGEC course, or an AGEC course from the equivalent AGEC category.

#### **Written Communications (6)**

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

# **Oral Communications (3)**

Select an AGEC course.

# ICON LEGEND AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:

For the following two categories, for each category select courses from different disciplines.

# **Arts & Humanities (6-9)**

# Arts (6)

Select Art AGEC courses.

# **Humanities (3)**

LIT291 Children's Literature for Educators (3) (Also fulfills AGEC Intensive Writing Requirement)
Or select a Humanities AGEC course.

#### Social and Behavioral Sciences (6-9)

HIS101 United States History I (3) (Also fulfills AGEC Global Awareness Requirement)

ECE276 Child Development (3)

### **Biological/Life Lab Sciences (4)**

Select one AGEC course: AGS101 World of Plants (4) 📵 Agricultural Environmental Science (4) 🗔 AGS104 Entomology (4) 🖸 **AGS106** Soil Science (4) 🖸 AGS221 AGS240 Plant Biology (4) 🔕 Biology Concepts (4) 🗟 BIO100 **BIO156** Human Biology for Allied Health (4) BIO160 Introduction to Human Anatomy/Physiology (4) 💽 General Biology I (4) **BIO181** General Biology II (4) **BIO182 BIO201** Human Anatomy & Physiology I (4) **BIO202** Human Anatomy & Physiology II (4) Microbiology (4) (2) **BIO205** NTR141 Nutrition and Wellness (4) (Consult the CEG.)

# Physical Lab Sciences (4)

Select one AGEC course: AST101 Survey of Astronomy (4) CHM130 Fundamental Chemistry (4) [2] CHM151 General Chemistry I (4) CHM152 General Chemistry II (4) CHM235 General Organic Chemistry I (4) General Organic Chemistry II (4) 00 CHM236 ENV101 Environmental Science (4) (Consult the CEG.) Physical Geology (4) GLG101 Historical Geology (4) **GLG102** Environmental Geology (4) 🗟 **GLG110** Physical Universe (4) PHY100 PHY111 College Physics I (4) College Physics II (4) PHY112

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

Magnetism (4)



# **Mathematics (3-4 Credits)**

MAT141 College Mathematics, Standard (4) or higher

# **Subject Options (0-6)**

Select one of the three specialty tracks below or select a combination of the courses below to total the number of credits required to earn this A.A. Degree.

**Upper Elementary majors** select two of the following courses:

ENG205 Introduction to the Study of Language (3) 🗔

EDU225 Relationships in the Classroom (3)

EDU228 Behavior Management (3)

OR

Early Childhood K-3 Teaching majors:

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

OR

**Special Education majors:** 

EDU225 Relationships in the Classroom (3)

EDU228 Behavior Management (3)

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

# **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

1. Intensive Writing/Critical Inquiry (3)

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

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

3. Global/International/Historical Awareness (3)

HIS101 United States History I (3)

(Also fulfills AGEC Social/Behavioral Sciences

Requirement)

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

# **Core Requirements (18)**

EDU221 Introduction to Education (3) 🗔

EDU222 Introduction to Special Education (3)

**ICON LEGEND** 

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: 

SUN Course:

EDU230 Cultural Values in Education (3) (Also fulfills AGEC Cultural Awareness Requirement)

EDU240 Provisional Structured English Immersion (SEI) (3)

MAT201 Math for Elementary Teachers I (3)

MAT202 Math for Elementary Teachers II (3)

# Other Requirements (3)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3)

OR

CIS120 Survey of Computer Information Systems (3)

Additional transferable electives to achieve a minimum of 60-64 credit hours for the A.A.E.E. Degree.

# Other A.A.E.E. Degree Requirements

For students who plan to transfer to a four-year baccalaureate degree program, some programs require demonstrated proficiency in a Second Language, i.e. up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

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

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

Note: Some Transfer Articulation Agreements require a specific number of credits in the Arts & Humanities or the Social and Behavioral Sciences AGEC categories. Refer to the official published TAG, TAP, CAC2NAU or other articulation pathway documents for details and consult an advisor.

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

The A.A.E.E. Degree requires a minimum of 60-64 credits.



# EMERGENCY MEDICAL SERVICES

# **BASIC EMT CERTIFICATE**

Aravaipa & Superstition Mountain Campuses and Corporate Center

**Total Credits: 8.5** 

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

# **Prerequisites**

Ninth grade reading level, immunizations, CPR Certification-Healthcare Provider or Professional Rescuer

# **Core Requirements (8.5)**

EMS100 CPR for Professionals (.5) EMS125 Emergency Medical Technician (8)

# **Other Requirements**

Students must receive a course completion card and be scheduled to take the National Registry of EMT exam.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

# CRITICAL CARE FOR PARAMEDICS CERTIFICATE

# Superstition Mountain Campus

### **Total Credits: 6.25**

Advanced level education and training in Emergency Medical Services with specific training in Critical Care for nurses, physicians, and paramedics. The EMS275 course prepares students to function as a member of the critical care transport team. Students gain a higher level of understanding of patient care in the pre-hospital setting. EMS275 combined with Advanced Cardiac Life Support (ACLS) and the course prerequisites prepares student to apply for a completion certificate.

# **Prerequisites**

- EMS272A Advanced Emergency Medical Technology/ Paramedic, Module I (17.5)
- EMS272B Advanced Emergency Medical Technology/ Paramedic Module II (8.5)
- EMS272C Advanced Emergency Medical Technology/ Paramedic, Module III (8.5)
- EMS272D Advanced Emergency Medical Technology/ Paramedic Practicum I (6)
- EMS272E Advanced Emergency Medical Technology/ Paramedic Practicum II (6)

#### OR

Certified Paramedic or Registered Nurse, or Physician or equivalent

# AND all of the following

- 1. EMS100 CPR for Professionals (.5) or current Cardio Pulmonary Resuscitation (CPR) certification per American Heart Association standards or equivalent
- 2. Current Advanced Cardiac Life Support (ACLS) certification per American Heart Association standards, BTLS or PHTLS, PALS or PEPP;
- Current ARC Certification or AHA BLS Health Care Provider, or NSC Green Cross Professional Rescuer or Division Chair consent.

#### **Core Requirements (6.25)**

EMS275 Critical Care for Paramedics (CCEMTP) (5.25) EMS240 Advanced Cardiac Life Support (ACLS) (1)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: RDG094: SUN Course:



# PARAMEDICINE A.A.S.

# Superstition Mountain Campus

# **Total Credits: 69.5**

The Paramedicine A.A.S. Degree prepares students to work as paramedics with knowledge and skills required for emergency care, stabilization and immobilization of victims of illness and injury.

# **Prerequisites**

EMS100 CPR for Professionals (CPR at the Professional

Rescuer level or Health Care Professional level

or equivalent) (.5)

Emergency Medical Technician (certified in the **EMS125** 

State of Arizona) (8)

Hazardous Materials First Responder Operations FSC129

(or equivalent) (3)

The above three courses and their respective credits are not calculated into the total number of credits required for the A.A.S. Degree.

#### **Recommended Proficiencies**

If students are enrolled at CAC for the EMS272A, B, C, D and E courses, students must advance through each section (A, B, C, D and E) successfully with a grade of "C" or higher. Also, students must meet eligibility requirements established by Arizona Department of Health Services, Bureau of EMS.

# **General Education Requirements (19-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3) OR

ENG121 Applied Technical Writing (3) (Recommended)

### **Oral Communications (3)**

Select a COM course, or an AGEC course.

# Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

PSY101 Introduction to Psychology (3)

SOC100 Introduction to Sociology (3)

Or select a Social and Behavioral Science course, or an AGEC course.

# Physical and Biological Sciences (4)

BIO160 Introduction to Human Anatomy and Physiology (4) (Recommended)

Or select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.

# **Mathematics (3-4)**

Select a college-level Mathematics course Business Mathematics (3) OR BUS101 MAT101 Essential Mathematics (4) or higher

# **Core Requirements (46.5)**

EMS272A Advanced Emergency Medical Technology/

Paramedic, Module I (17.5)

EMS272B Advanced Emergency Medical Technology/

Paramedic, Module II (8.5)

EMS272C Advanced Emergency Medical Technology/

Paramedic, Module III (8.5)

EMS272D Advanced Emergency Medical Technology/

Paramedic Practicum I (6)

EMS272E Advanced Emergency Medical Technology/

Paramedic Practicum II (6)

# Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

Transferable Computer Competency course (Consult the CEG.)

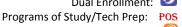
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 69.5 credits.

AGEC: 🗐 Intensive Writing: /W

Reading Required: RDG094: R

Dual Enrollment:





# **FIRE SERVICES**

# FIREFIGHTER OPERATIONS CERTIFICATE

#### **Total Credits: 19**

The Firefighter Operations Certificate of Completion is designed to prepare future firefighters for a career in the fire service. The program curriculum and course of instruction will provide the student with the knowledge and skills to effectively perform the essential functions of an entry level firefighter.

#### Recommendations

- 1. If pursuing the bachelor's degree program, contact department advisor
- 2. Some courses require
  - a. State of Arizona Fire Marshal Certification(s)
  - b. State of Arizona Department of Health Services Certification(s)
  - c. American Heart, Red Cross, or other certifying agency course completion in CPR
  - d. International Fire Service Accreditation Council (IFSAC) Certification

# **Prerequisites**

EMS125	Emergency Medical Technician (8)
FSC129	Hazardous Materials First Responder
	Operations (3)

FSC134 Fitness and Conditioning for Firefighters (3)

# **Core Requirements (19)**

FSC106	Introduction to	<b>Emergency</b>	Services (3)
ECC140	Dinafialatan I O	II (12)	

FSC140 Firefighter I & II (13) FSC180 Wildland Fire, Module I (3)

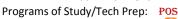
# **Other Requirements**

Students must earn a grade of "C" or better in all courses within the Certificate. Cumulative grade point average of at least a 2.0 on a 4.0 scale. Minimum of one-third of required Certificate credits completed at CAC. Upon successful completion of the fire academy (FSC 140), students sit for the State proctored examinations; successful students will be awarded State of Arizona certification through the Arizona Center for Fire Service Excellence Fire Service Accreditation.

# **ICON LEGEND**

AGEC: Intensive Writing: //

Dual Enrollment:



Reading Required: RDG094: R

#### FIRE SCIENCE TECHNOLOGY A.A.S.

# Signal Peak Campus

# **Total Credits: 65**

The Fire Science Technology A.A.S. Degree offers advanced training for professional firefighters, including practical firefighting, hazardous materials, related operations, history and theory and fire service management.

#### Recommendations

- Students should use the Major Map when they consult their Academic Advisor.
- 2. Some courses require:
  - 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 (19-23)**

# Written Communications (3)

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3) (Recommended)

ENG121 Applied Technical Witting (3) (Recommende

#### **Oral Communications (3)**

COM206 Public Speaking (3) (Recommended) Or select a COM or AGEC course.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above or an AGEC course.

# Social and Behavioral Sciences (3)

SOC100 Introduction to Sociology (3) © (Recommended) Or select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological and Physical Lab Science course numbered 100 or above, or an AGEC Science Lab course.



# Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

# **Core Requirements (37)**

FSC106 Introduction to Emergency Services (3)
FSC108 Fundamentals of Fire Prevention (3)
FSC117 Fire Apparatus and Equipment (3)
FSC119 Fire Service Ethics (3)
FSC129 Hazardous Materials First Responder Operations (3)
FSC134 Fitness Conditioning for Firefighters (3)
FSC140 Firefighter I & II (13)
FSC180 Wildland Fire, Module I (3)
FSC208 Firefighter Safety/Building Construction (3)

# **Electives (6)**

Choose FSC or EMS related courses, except EMS100 and EMS125:

FSC118 Fire Hydraulics (3) FSC202 Supervisory Trainin

FSC202 Supervisory Training for Firefighters (3) FSC204 Firefighter Tactics and Strategy (3)

FSC205 Command Strategies for Major Emergencies (4)

FSC209 Fire Cause and Determination (3) FSC250 Ladder Company Officer (3) FSC252 Engine Company Officer (3)

# **Other Requirements (4)**

PAC or DAN (1) (Fulfilled by FSC134) Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

# **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a minimum grade of "C" or better in all course work, including the prerequisites.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

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

This A.A.S. Degree requires 65 credits.

# AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: RDG094: SUN Course:

# WILDLAND FIREFIGHTER I CERTIFICATE

#### Signal Peak Campus

# **Total Credits: 13**

Advanced training in Wildfire Firefighting per the requirements established by the National Wildfire Coordinating Group (NWCG). This certification is designed for the professional firefighter currently employed with an agency that responds to Wildland fire incidents. This certificate of completion course of instruction will provide the student the (NWCG) educational requirements that lead up to the level of Single Resource Boss.

In order to qualify and complete the certificate, students must acquire a minimum of 120 hours total, half of those hours (60 hours) must be hotline.

# **Prerequisites:**

FSC129 Hazardous Materials First Responder Operations (S-110 and I-100) (3) **plus**FSC180 Wildland Fire, Module 1 (S-130/190, S-133, S-134, L-180) (3)

Complete the above OR Program Director consent

# **Core Requirements (13)**

FSC181 NWCG Advanced Firefighter Training (S-131) (.5) FSC182 NWCG Portable Pumps and Water Use (S-211) (1) FSC186 NWCG Crew Boss (Single Resource) (S-230) (1.5) FSC187 NWCG Engine Boss (Single Resource) (S-231) (.5) FSC189 **NWCG Interagency Incident Business Management** FSC190 NWCG Basic Air Operations (S-270) (1.5) NWCG Intermediate Wildland Fire Behavior FSC191 (S-290)(2)FSC192 Initial Attack Incident Commander (S-200) (1) FSC193 Followership to Leadership (L-280) (1) FSC203 Fire Operations in the Wildland/Urban Interface

# **Other Requirements**

(S-215)(2)

Students must earn a grade of "C" or better in all courses within the Certificate, including the prerequisites.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# GEOLOGY AND PLANETARY SCIENCE

# GEOLOGY AND PLANETARY SCIENCE A.S.

#### Signal Peak Campus

# **Total Credits: 60-64**

The Associate of Science in Geology and Planetary Science Degree prepares students to transfer to a university to earn a baccalaureate degree in Geology or a related field.

# General Education Requirements AGEC-S (35-37)

#### **Written Communications (6)**

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

# **Arts and Humanities (6)**

Select one Art (3) and one Humanities (3) AGEC course.

# **Social and Behavioral Sciences (6)**

Select AGEC courses from two different disciplines.

# **Physical and Biological Sciences (8)**

AST101 Astronomy (4)

GLG101 Physical Geology (4) 0

#### Mathematics (3-4)

MAT221 Analytical Geometry and Calculus I (4) or higher

# **Subject Options (6-8)**

ENV101 Environmental Science (4) 🖸

GLG102 Historical Geology (4) 🗟

GLG110 Environmental Geology (4) 🔂

# **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry

# At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender) At least three semester credits of coursework in

3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

# **Core Requirements (20)**

CHM151 General Chemistry I (4)

CHM152 General Chemistry II (4) 6

MAT231 Calculus with Analytical Geometry II (4)

PHY121 University Physics I: Mechanics (4)

PHY122 University Physics II: Electricity and Magnetism (4)

# Transferable Electives (0-8)

Based on your major, consult the Transfer Guide at www.aztransfer.com/TransferGuides and select mathematics courses above the second course in the calculus sequence and/or Science courses from: Astronomy, Biology, Chemistry, Engineering, Environmental Science, Geology or Physics.

Select elective credits that transfer to the chosen university to meet 60-64 credit A.S. Degree requirement.

# **Other Requirements (3)**

Reading Competency: RDG094 College Reading Reading

# **Computer Competency (3):**

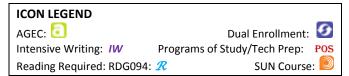
AGB124 Microcomputers in Agriculture

ΛD

CIS120 Survey of Computer Information Systems (3)

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

This A.S. Degree requires 60-64 credits.





## **HEALTH CAREERS**

## **CLINICAL LABORATORY ASSISTANT** CERTIFICATE

Signal Peak Campus

**Total Credits: 27** 

The Clinical Laboratory Assistant Certificate prepares entry-level clinical laboratory assistants to perform various laboratory procedures including phlebotomy, specimen processing and quality control procedures under the supervision of physicians, laboratory scientists or technologists in a clinical laboratory setting.

#### **Prerequisites:**

High School Diploma or GED; MAT082, RDG094 R

#### **Pre-Program Requirements:**

Pass the required HESI tests with a score of 70 or above on each test AND apply for admission to the Certificate program with the HCC Division Chair before enrollment in the program Specialty courses.

#### **Co-requisite:**

Certified Phlebotomist (Recommended)

**OR** complete

HKS155 Introduction to Phlebotomy (3) plus

HKS255 Phlebotomy Practicum (3)

#### **Pre-Program Requirements (8)**

Healthcare Law and Ethics (2) HCC111

HCC112 Interpersonal Skills (2)

Math and Dosage Calculations for Health HCC113

Occupations (1)

HCC116 Medical Terminology Accelerated (3)

#### **Specialty Requirements (19)**

Introduction to Human Anatomy and BIO160

Physiology (4) 💽

HPM169 Clinical Laboratory Assistant Basics I (4) HPM170 Clinical Laboratory Assistant Basics II (4) Administrative Medical Procedures (4) HPM171

HPM175P Clinical Laboratory Assistant Practicum (3)

#### **ICON LEGEND**

Dual Enrollment: AGEC: 🛄

Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R

# SUN Course:

#### **Other Requirements**

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

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.

Students must earn a cumulative grade point average

at least one-third of the certificate credits from CAC.

(CGPA) of at least a 2.0 on a 4.0 scale. Students must earn



# CODING AND REIMBURSEMENT CERTIFICATE

District-Wide

**Total Credits: 34** 

The Coding and Reimbursement Certificate prepares entry-level medical coders and reimbursement specialists. The competencies covered in this program include revised coding standards, health records, data content, accreditation standards, reimbursement methodologies, privacy, confidentiality, legal and ethical issues.

The Certificate prepares students to sit for the Certified Coding Associate (CCA) credentialing exam from AHIMA at the national level as well as the AMBA Certified Medical Reimbursement Specialist (CMRS).

#### **Prerequisite:**

High School Diploma or GED; MAT082, RDG094 **?** 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) (2)

HIM115 Health Information Technology I (3)

HIM131 Introduction to Insurance and Insurance Billing I (3)

HIM138 ICD Coding (3)

HIM158 CPT Coding (3)

HIM161 Introduction to Insurance and Insurance Billing II

(3)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM173 Pathophysiology (3)

HIM175I Practicum Coding and Reimbursement (4)

#### **Optional Added Elective**

HIM208 Advanced Coding (2)

#### **Other Requirements**

Students must earn a grade of "C" or better in all required courses.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:



#### **COMMUNITY PUBLIC HEALTH A.S.**

#### Signal Peak Campus

#### **Total Credits: 61-64**

The Community Public Health Associate of Science degree establishes a foundational understanding of health and disease factors based on community public health principles. The degree prepares graduates for professional positions in community public health focused on improving the quality of life of individuals and communities.

#### **Prerequisites:**

High School Diploma or GED

MAT121 Intermediate Algebra, Standard

RDG094 College Reading 
RDG094

ENG101 English Composition III 00

## **General Education Requirements AGEC-S** (35-37)

#### Written Communications (6)

ENG101 English Composition III (3)

ENG102 English Composition IV (3)

#### Arts and Humanities (6)

Select one Art and one Humanities AGEC course:

PHI105 Introduction to Ethics (3)

(Recommended, also fulfills Core Requirement and Intensive

Writing IW AGEC Requirement)

#### Social and Behavioral Sciences (6)

Select AGEC courses from two different disciplines.

Recommended:

PSY101 Introduction to Psychology (3)

SOC100 Introduction to Sociology (3)

#### **Physical and Biological Sciences (8)**

**BIO181** General Biology I (4)

General Biology II (4) BIO182

#### Mathematics (3-4)

MAT221 Analytical Geometry and Calculus I (4)

or higher

#### **ICON LEGEND**

Intensive Writing: /W

AGEC: 🔲

Dual Enrollment:



Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

# SUN Course:

2013-2014 College Catalog | 142 | Visit www.centralaz.edu

#### **Subject Options (6-8)**

CHM151 General Chemistry I (4) 6

Based on your major, consult the Transfer Guide at http://www.aztransfer.com/TransferGuides and select mathematics courses above the first course in the calculus

sequence and/or Science courses from Biology, Chemistry, Environmental Science, Nutrition and Dietetics or Physics. Select CHM151 and higher Chemistry courses.

#### **Special Requirements (0-9 Credits)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in **Intensive Writing and Critical Inquiry** (Fulfilled by PHI105 Introduction to Ethics)
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender) (Fulfilled by COM263 Intercultural Communications)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (28)**

BIO201 Human Anatomy and Physiology I (4)

BIO202 Human Anatomy and Physiology II (4)

COM263 Intercultural Communications (3) 🔁 (Also fulfills Cultural Awareness)

CPH100 Introduction to Public Health (3)

Personal Health and Community Wellness (3) CPH178

Community Public Health Internship (2) CPH296

MAT162 Applied Statistics (3) 🗔 NTR200 Human Nutrition (3)

PHI105 Introduction to Ethics (3)

(Also fulfills Intensive Writing requirement)

#### Other Requirements (3)

Reading Competency: RDG094 R

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture (3) OR

Survey of Computer Information Systems (3) CIS120

(Recommended)

Students must earn a grade of "C" or better in each Associate of Science degree required course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-S requirements.

For transfer into the School of Public Health at the University of Arizona, a grade of "B" or better is required for

ENG102. This A.S. Degree requires 61-64 credits.



# HEALTH INFORMATION TECHNOLOGY A.A.S.

#### District-Wide

#### **Total Credits: 71**

The Health Information Technology (HIT) A.A.S. Degree program prepares students with the knowledge and technical skills necessary for managing and improving the quality of information within the healthcare delivery system. This Degree's focal points are the American Health Information Management Association (AHIMA) entry-level competencies.

The Health Information Technology Degree is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM); Graduates from this program are eligible to sit for the Registered Health Information Technician (RHIT) credentialing exam.

#### **Prerequisites**

High School Diploma or GED; MAT082, RDG094 R

#### **Pre-Program Requirements**

Students must apply to the Health Information Director for admission to the HIT Degree after earning a score of 70 or above on the HESI test. Accepted HIT students may then request permission from the Director to enroll in the Degree Specialty courses.

#### **General Education Requirements (23)**

#### Written Communications (3)

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

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) COM206 Public Speaking (3) C

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

# ICON LEGEND AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: RDG094: SUN Course:

#### Social and Behavioral Sciences (3)

Select a Social and Behavioral Science course, or an AGEC course.

#### **Physical and Biological Sciences (8)**

BIO201 Human Anatomy - Physiology I (4) **plus**BIO202 Human Anatomy - Physiology II (4) **plus** 

#### **Mathematics (3-4)**

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

#### **Core Requirements (44)**

CBA113A MS Excel Basic (1)
CBA114A MS Access Basic (1)
HCC111 Healthcare Law and Ethics (2)
HCC116 Medical Terminology Accelerated (3)
HIM115 Health Information Technology I (3)
HIM117 Health Information Technology II (3)
HIM121 Legal Aspects of Health Information (2)
HIM138 ICD Coding (3)

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 Reading

#### **Computer Competency (3):**

CIS120 Survey of Computer Information Systems (3)

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Health Information Technology A.A.S. Degree requires 71 credits.



#### **MASSAGE THERAPY A.A.S.**

### Signal Peak and Superstition Mountain **Campuses**

#### **Total Credits: 64**

The 700 hour Massage Therapy A.A.S. Degree prepares individuals for entry-level positions in medical settings performing massage therapy using a thorough knowledge of medical terminology, anatomy and physiology, pathophysiology, proper body mechanics and legal and ethical issues. The Degree also includes instruction in relaxation massage, therapeutic massage, massage therapy for special populations and spa treatments and hydrotherapy.

#### **Prerequisites**

High School Diploma or GED; MAT082, RDG094 R

#### **Pre-Program Requirements:**

Students must apply for admission to the degree program with the Massage Therapy Director before enrolling in the degree specially courses.

#### **General Education Requirements (19-23)**

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

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

Or select a COM course.

#### Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

PSY101 Introduction to Psychology (3) **P** Or select Social/Behavioral Science course, or AGEC course.

#### Physical and Biological Sciences (4)

BIO160 Introduction to Human Anatomy and Physiology (4) 💽

#### **ICON LEGEND**

Dual Enrollment: AGEC: 🔲 Intensive Writing: /W Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

#### **Mathematics (3-4)**

Select a college-level Mathematics course BUS101 Business Mathematics (3) **OR** MAT101 Essential Mathematics (4) or higher

### **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 Biological Science requirement)

Business Skills for Massage Therapy (3) HPM136 HPM150 Chiropractic Assistant Training (2) HPM151 Study of Acupuncture for Health Care Professionals (1)

HPM152 Study of Physiotherapy for Health Care Professionals (1)

Applied Anatomy for Massage Therapy (3) HPM160

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) Therapeutic Massage II (3) **HPM181** 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 *R* 

#### **Computer Competency (3):**

CIS 120 Survey of Computer Information Systems (3) Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64 credits.





#### **MASSAGE THERAPY CERTIFICATE**

# Signal Peak and Superstition Mountain Campuses

#### **Total Credits: 38**

Massage Therapy includes 700 hours of core curriculum which prepares individuals for entry-level positions performing massage therapy in a variety of settings. This program includes relaxation massage, therapeutic massage, massage therapy for special populations, and spa treatments and hydrotherapy. Topics also include physiotherapy, body mechanics, acupuncture, anatomy, pathophysiology, business skills, medical law and ethics.

#### **Prerequisites**

#### **Pre-Program Requirements:**

Apply for admission to the certificate program with the Massage Therapy Program Director before enrolling in the specialty requirements.

#### **Core Requirements (38)**

	•
BIO160	Introduction to Human Anatomy and
	Physiology (4)
HCC111	Health Care Law and Ethics (2)
HPM136	Business Skills for Massage Therapy (3)
HPM150	Chiropractic Assistant Training (2)
HPM151	Study of Acupuncture for Chiropractic
	Assistants (1)
HPM152	Study of Physiotherapy for Chiropractic
	Assistants (1)
HPM160	Applied Anatomy for Massage Therapy (3)
HPM173	Pathophysiology (3)
HPM180	Therapeutic Massage I (3)
HPM181	Therapeutic Massage II (3)
HPM280	Therapeutic Massage III (3)
HPM281	Therapeutic Massage IV (3)
HPM282	Therapeutic Massage V (3)
HPM175L	Practicum – Massage Therapy, Relaxation
	(Massage) (1)
HPM175M	Practicum – Massage Therapy, Therapeutic
	Massage (1)
HPM175N	Practicum - Massage for Special Populations (1)
HPM175O	Practicum – Massage Therapy, Spa and
	Hydrotherapy Treatment (1)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: 
SUN Course:

#### **Other Requirements**

Prior to enrollment in any practicum courses, mandatory requirements must be met.

CPR certification must be current for at least six months at the start of the Practicum.

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



#### **MEDICAL ASSISTANT A.A.S.**

# Signal Peak and Superstition Mountain Campuses

#### **Total Credits: 66**

Preparation of entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains as established by the American Association of Medical Assistants (AAMA). This Degree includes general education requirements and prepares individuals to perform administrative and clinical procedures in ambulatory settings, including physician's offices, clinics and group practices.

#### **Prerequisites**

High School Diploma or GED; MAT082, RDG094 R

#### **Pre-Program Requirements:**

After successful completion of all the General Education requirements, CIS120, physical education activity, CBA112A, CBA112B, OAS101, OAS103, HCC110A and HCC110B, students must pass the required HESI tests with a score of 70 or above in each test, AND apply for admission to the program with the HCC Division Chair before enrollment in the Degree program.

## **General Education Requirements (19-23)**

#### Written Communications (3)

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

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) **Or select a COM course, or an AGEC course.** 

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select the Recommended course or a Social and Behavioral Science course, or an AGEC course.

PSY101 Introduction to Psychology (3) © (Recommended)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: ROG094

#### **Physical and Biological Sciences (4)**

BIO160 Introduction to Human Anatomy & Physiology (4) (2)

#### Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

#### **Core Requirements (14)**

HCC100 Introduction to Health Care (3)
HCC110A Medical Terminology A (3)
HCC110B Medical Terminology B (3)
HCC111 Health Care Law and Ethics (2)
HCC112 Interpersonal Skills (2)
HCC113 Math and Dosage Calculations for Health

#### **Specialty Requirements (29)**

Occupations (1)

HIM131 Introduction to Insurance and Insurance Billing I (3)

HPM140 Medical Assisting Skills I (4) HPM141 Medical Assisting Skills II (4)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM171 Administrative Medical Procedures (4)

HPM173 Pathophysiology (3)

HPM175C Medical Assistant Degree Practicum (4)

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

CBA112A MS Word - Basic (1)

CBA112B MS Word - Intermediate (1)
OAS101 Keyboard - Alphabetic (1)
OAS103 Keyboard - Speed/Accuracy (1)

## Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher **OR** Transferable Computer Competency course (Consult the CEG.)

Healthcare Provider CPR and First Aid certification is required before enrolling in HPM175C and must be current for at least 6 months after the start of HPM175C

Students must earn a grade of "C" or better in all required courses for this AAS degree.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least 20 of the certificate credits from CAC.



#### **MEDICAL ASSISTANT CERTIFICATE**

# Signal Peak and Superstition Mountain Campuses

#### **Total Credits: 37**

This Certificate prepares competent entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to perform administrative and clinical procedures in ambulatory settings, including physicians' offices, clinics, and group practices. These domains have been established by the American Association for Medical Assistants (AAMA).

#### **Prerequisites**

High School Diploma or GED; MAT082, RDG094 R

#### **Pre-Program Requirements:**

Pass the required HESI tests with a score of 70 or above in each test before enrollment in the program AND apply for admission to the program with the HCC Division Chair before enrollment in the program.

#### **Core Requirements (12)**

BIO160	Introduction to Human Anatomy and
	Physiology (4) 🔝
HCC111	Health Care Law and Ethics (2)
HCC112	Interpersonal Skills (2)
HCC113	Math and Dosage Calculations for Health
	Occupations (1)
HCC116	Medical Terminology Accelerated (3)

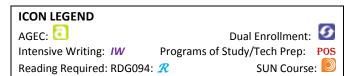
#### **Specialty Requirements (25)**

	• • • • • • • • • • • • • • • • • • • •
HIM131	Introduction to Insurance and Insurance Billing I
	(3)
HPM140	Medical Assisting Skills I (4)
HPM141	Medical Assisting Skills II (4)
HPM162	Basic Pharmacology for Health Occupations (3)
HPM171	Administrative Medical Procedures (4)
HPM173	Pathophysiology (3)
HPM175E	Medical Assistant Certificate Practicum (4)

#### **Other Requirements**

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.





# PHARMACY TECHNICIAN CERTIFICATE

Signal Peak Campus

**Total Credits: 36** 

The Pharmacy Technician Certificate prepares entry-level Pharmacy Technicians by emphasizing medical and pharmaceutical terminology, calculations, record keeping, pharmaceutical techniques, medical law and ethics.

#### **Prerequisites**

High School Diploma or GED MAT082; RDG094 R

#### **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)**

	- q (= · /
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 Rasic Pharmacology for He

HPM162 Basic Pharmacology for Health Occupations (3)

HPM164 Pharmacy Certification Review (2)

HPM173 Pathophysiology (3)

HPM175H Practicum - Pharmacy Technician (4)

#### **Other Requirements**

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: SUN Course:

# LAW ENFORCEMENT and ADMINISTRATION OF JUSTICE STUDIES A.A. AND A.A.S.

See Administration of Justice.

## **MANUFACTURING**

# FIELD PROGRAMMABLE GATE ARRAY (FPGA) CERTIFICATE

Signal Peak Campus

**Total Credits: 18** 

The Field Programmable Gate Array (FPGA) Certificate provides the basis for an entry-level career or the professional training required of a working engineer. FPGA, embedded fundamentals and MicroBlaze processor applications are emphasized.

#### **Recommended Proficiencies**

Computer programming and basic electronics coursework prepare students for success in this Certificate program.

### Core Requirements (18)

ELT128 FPGA Fundamentals (3)

ELT223 Microcontroller Fundamentals (3) ELT260 Advanced FPGA Concepts (3)

ELT265 MicroBlaze1 (3) ELT270 MicroBlaze2 (3)

ELT275 Embedded Fundamentals (3)

#### **Other Requirements**

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

## LABVIEW PROGRAMMING CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 16**

The LabVIEW Certificate provides the basis for an entrylevel career in the LabVIEW programming environment using National Instruments hardware.

#### **Recommended Proficiencies**

Computer programming and basic electronics coursework prepare students for success in this Certificate program.

#### **Core Requirements (16)**

MET261	LabVIEW 1 Programming (3)
MET262	LabVIEW 2 Programming (3)
MET263	LabVIEW 3 Programming (3)
MET264	LabVIEW FPGA Applications (3)
MET265	LabVIEW Overview (4)

#### **Other Requirements**

Reading Competency: RDG094 College Reading Reading

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn at least one-third of the certificate credits from CAC.

## **MANUFACTURING ELECTRONICS CERTIFICATE**

#### Signal Peak Campus

#### **Total Credits: 32**

The Certificate provides the basis for an entry-level career in the electronics and related fields of both manufacturing and service-maintenance as technicians and provides upgrading of skills for persons presently employed.

#### **Recommended Proficiencies**

Fundamental computer usage skills.

## **Core Requirements (32)**

CHM130 Fundamental Chemistry (4)	
ELC123 Direct Current Circuit Analysis (3)	
ELC124 Alternating Current Circuit Analysis (3)	
ELC128 Intro to Programmable Logic Controllers (	3)
ELC220 Active Circuits (3)	
ELC223 Integrated Circuit Devices (3)	
ELT128 FPGA Fundamentals (3)	
ENG121 Applied Technical Writing (3)	
MAT121 Intermediate Algebra, Standard (4)	
MET132 Fluid Power (Hydraulics-Pneumatics) (3)	
MET221 Electro-Mechanical Technology (3)	

#### **Other Requirements**

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



AGEC: 🗐 Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:





# MANUFACTURING ENGINEERING A.A.S.

#### Signal Peak Campus

#### **Total Credits: 67**

The Manufacturing Electronics A.A.S. Degree program provides opportunities for students to gain knowledge, skills and understanding of the concepts and applications of electronics in manufacturing. This Degree has been developed in cooperation with the semiconductor manufacturing industries. Students are prepared for employment in the electronics, service maintenance, and related manufacturing fields as entry level technicians. For those presently employed in the industry it provides an opportunity to upgrade skills.

#### **Recommended Proficiencies**

Fundamental computer usage skills.

#### **General Education Requirements (24)**

Select AGEC approved courses if A.A.S. to B.A.S. Degree desired.

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

Select a COM course, or an AGEC course.

#### **Arts and Humanities (3)**

ART207 Art History I (3) MHL100 Music Appreciation (3) MHL207 Survey of Jazz/Pop Music (3) THE100 Theater Appreciation (3) Theater Appreciation (3)

Or select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

ECN201 Principles of Macroeconomics (3)
Or select a Social and Behavioral Science course, or an AGEC course.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: ROG094

#### **Physical and Biological Sciences (8)**

CHM130 Fundamental Chemistry (4) PHY100 Physical Universe (4) or higher

Or select a Biological or Physical Science course, or an AGEC Lab course.

#### Mathematics (3-4)

ELC220

Select a college-level Mathematics course
MAT121 Intermediate Algebra, Standard (4) or higher

#### **Core Requirements (33)**

ELC122 Direct Current and Alternating Current

Circuit Analysis (3) 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 *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a grade of "C" or better in all required courses for this AAS degree.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.



# NANOFABRICATION TECHNOLOGY A.A.S.

#### Signal Peak Campus

#### **Total Credits: 70**

The Nanofabrication Technology Degree program offers students the opportunity to enter the exciting world of Nanotechnology. Nanofabrication and nanotechnology is engineering at the atomic length scale, a size range which until recently was only available to nature. Being able to engineer such small structures opens the door to a multitude of new opportunities in the fields of chemical technology, bio-technology, biopharmaceutical labs, micro-technology labs, material science labs and electronic technology.

#### **Recommended Proficiencies**

Strong math and science background.

#### **Prerequisites**

CHM130 Fundamental Chemistry 

MAT092 Introductory Algebra

RDG094 College Reading 

College Reading 

RDG094 RDG094 College Reading 

RDG094 RDG09

#### **General Education Requirements (36)**

#### **Written Communications (3)**

ENG100 English Composition III (3) or higher ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) or higher

#### **Arts and Humanities (3)**

Select as Art, Humanities, Literature, Music, Philosophy or Theater course numbered 100 or above or an AGEC course.

#### Social and Behavioral Sciences (3)

PSY101 Introduction to Psychology (3) Or select a Social and Behavioral Science course, or an AGEC course.

#### ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: 
SUN Course:

#### Physical and Biological Sciences (16)

CHM151 General Chemistry I (4) © CHM152 General Chemistry II (4) © CHHY111 College Physics I (4) © CHHY112 College Physics II (4) © CHHY112 College Physics II (4) © CHHY112 C

#### **Mathematics (8)**

Select a college-level Mathematics course MAT151 College Algebra (4)

MAT182 Trigonometry with Algebra Review (4)

#### **Core Requirements (30)**

ELC122 Direct Current and Alternating Current Circuit Analysis (3) ELC200 Radio Frequency RF/High Vacuum HV (3) Active Circuits (3) ELC220 MET230 Semiconductor I-Seminar (3) MET290 Material, Safety and Equipment Overview for Nanotechnology (3) Basic Nanotechnology Processes (3) MET291 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  $\mathcal{R}$ 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

OR

Transferable Computer Competency course (Consult the CEG.)

Students must earn a grade of "C" or better in all required courses for this AAS degree.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 70 credits.

# NUTRITION AND DIETETICS

# COMMUNITY NUTRITION WORKER CERTIFICATE

#### **District-Wide**

#### **Total Credits: 16**

The Community Nutrition Worker Certificate provides the opportunity for individuals to develop skills and competencies in the areas of food, nutrition and health necessary for careers in public health nutrition.

#### **Recommended Proficiencies**

High school diploma or GED

#### **Core Requirements (16)**

NTR123	Nutrition throughout the Life Cycle (3)
NTR127	Breastfeeding and Human Lactation (1)
NTD124	Healthy Weight for Kide (1)

NTR134 Healthy Weight for Kids (1)

NTR191 Nutrition Counseling Skill Development (3)

NTR232A Food and Culture (1)

#### Select one of the following options (4):

NTR141 Nutrition and Wellness (4) 🕟

OR

NTR104 Nutrition (3) plus

NTR104L Personal Wellness Lab (1)

# Select at least three credits from the following options (3):

	•
NTR130	Diabetes Overview (1)
NTR131	Introduction to Diabetes (3)

NTR136 Management of Gestational Diabetes (1)

NTR137 Carbohydrate Counting (1) NTR201 Nutrition Literacy (1)

NTR247 Weight Management Theory (3) NTR272 Certified Breastfeeding Counselor (3)

#### Other Requirements

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

# DIABETES CARE AND EDUCATION CERTIFICATE

#### District-Wide

#### **Total Credits: 16**

The Diabetes Care and Education Certificate provides current training and information to paraprofessionals working with people at risk for developing diabetes or developing complications from diabetes.

#### **Recommended Proficiencies**

High school diploma or GED

#### **Prerequisites**

RDG094 College Reading R

Core Requirements (10)

NTR131 Introduction to Diabetes (3)

NTR141 Nutrition and Wellness (4) 🖸

OR

NTR104 Nutrition (3) plus

NTR104L Personal Wellness Lab (1)

NTR191 Nutrition Counseling Skill Development (3)

#### Electives (6)

Select from the following options:

NTR134 Healthy Weight for Kids (1) NTR135 Healthy Weight for Adults (1)

NTR136 Management of Gestational Diabetes (1)

NTR137 Carbohydrate Counting (1) NTR201 Nutrition Literacy (1) NTR232A Food and Culture (1)

NTR247 Weight Management Theory (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# DIETARY MANAGER TRAINING PROGRAM CERTIFICATE

#### District-Wide

#### **Total Credits: 16**

The Dietary Manager Training Certificate prepares food service workers and/or supervisors for management in health care facilities and various other food service establishments. This training program has been approved by the Association of Nutrition and Foodservice Professionals (ANFP). Upon successful completion, graduates are eligible to take the National Certification exam for the Certified Dietary Manager and the Certified Food Protection Professional credentials (CDM, CFPP).

#### **Recommended Proficiencies**

High school diploma or GED

#### **Core Requirements (16)**

NTR156	Foundations	of Dietary	Manager	Internshir	os (2)

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 (3):* 

NTR104 Nutrition (3)

NTR141 Nutrition and Wellness (4) 💽

NTR200 Human Nutrition (3)

Select one credit from the following (1):

NTR134 Healthy Weight for Kids (1)

NTR232A Food and Culture (1)

NTR136 Management of Gestational Diabetes (1)

NTR137 Carbohydrate Counting (1)

NTR130 Diabetes Overview (1)

NTR or CUL Elective (1) with Program Director consent

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: X SUN Course:

#### **DIETETIC TECHNICIAN A.A.S.**

#### District-Wide

#### **Total Credits: 64**

The Dietetic Technician Degree is designed for highly motivated individuals who would like to work in healthcare, schools and wellness. Students who successfully complete the coursework and internship are eligible to take the National Registration Examination for Dietetic Technicians (DTR) offered by the Commission on Dietetic Registration (CDR), the credentialing agency for the Academy of Nutrition and Dietetics. This program is approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) located at 120 S. Riverside Plaza, Suite 2000, Chicago, IL 60606-6995; 1-800-877-1600 or 312-899-0040, ext. 5400.

Note: Contact the Dietetic Education Program office for advising.

#### **Recommended Proficiencies**

High school diploma or GED

## **General Education Requirements (22-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3) OR

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

COM100 Fundamentals of Human Communication (3) Or select a COM course, or an AGEC course.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### Physical and Biological Sciences (7)

BIO160 Introduction to Human Anatomy/Physiology (4) 🗔

OR

BIO201 Human Anatomy and Physiology I (4) **plus** 

BIO202 Human Anatomy and Physiology II (4)

#### AND

CHM130 Fundamentals of Chemistry (4)

OR

CHM138 Chemistry for Allied Health (3) (equivalent or higher)



#### **Mathematics (3-4)**

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher

#### Core Requirements (35)

Nutrition throughout the Life Cycle (3) NTR123 NTR129 Introduction to Health Care for Nutrition Professionals (3) NTR142 Applied Food Science (3) NTR150 Overview of Nutrition Professions (1) NTR157 Foundations of Dietetic Technician Internship (2) NTR191 Nutrition Counseling Skill Development (3) NTR200 Human Nutrition (3) NTR201 Nutrition Literacy (1) NTR222 Nutrition Assessment (3) Food Service Management (3) NTR223 NTR232A Food and Culture (1) NTR240 Clinical Nutrition (3) NTR295 Dietetic Technician Professional Practice Internship (1) NTR296 Dietetic Technician Internship (6) CUL105 Food Safety Foundations (1) **OR** NTR105 ServSafe Certification (1)

#### Elective (1)

Select any NTR or CUL course (1)

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher **OR** Transferable Computer Competency course (Consult the CEG.)

Completion of NTR and CHM course requirements within five (5) years of beginning the program.

Meet all ACEND requirements. CAC recommends that students work in a nutrition-related field which is desirable for obtaining a supervised practice site.

Students must earn a grade of "C" or better in all required courses for this A.A.S. degree. Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC. This A.A.S. Degree requires 64 credits.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: ROG094

# NUTRITION AND HEALTH PROMOTION CERTIFICATE

#### District-Wide

#### **Total Credits: 25**

The Nutrition and Health Promotion Certificate is designed to provide knowledge and training for people who are working with individuals who need education and coaching to lead a healthy lifestyle. This certificate is based on health promotion and disease prevention.

#### **Recommended Proficiencies**

High school diploma or GED

#### **Prerequisites**

RDG094 College Reading R

#### **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)

OF

NTR200 Human Nutrition (3) AND NTR104L Personal Wellness Lab (1)

NTR150 Overview of Nutrition Professions (1) NTR191 Nutrition Counseling Skill Development (3)

NTR222 Nutrition Assessment (3) NTR232A Food and Culture (1) NTR240 Clinical Nutrition (3)

NTR247 Weight Management Theory (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# RENEWABLE ENERGY **TECHNOLOGY**

## **BIOFUELS TECHNICIAN** CERTIFICATE

Signal Peak Campus

**Total Credits: 16** 

The Biofuels Technician Certificate provides students with an applied foundation in Biofuels production technology, incorporating all three of the major production areas: biodiesel, bioethanol fuel and biogas. The curriculum is designed to prepare students for entry level employment or further study in the field.

#### **Prerequisite**

RDG094 College Reading (3)  $\mathcal{R}$ 

#### **Core Requirements (16)**

RET250 Ethanol Process Fundamentals (3)

RET252 Biofuels Facilities Design and Boiler Systems (3)

Distillation and Evaporation Theory (3) RET255

RET275 Biodiesel Production and Design (3)

RET296 Renewable Energy Technology Internship (4)

(Take one time for credit)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

### ICON LEGEND

AGEC: 🛄 Intensive Writing: IW Dual Enrollment:



## RENEWABLE ENERGY **TECHNOLOGY A.A.S.**

Signal Peak Campus

**Total Credits: 64-65** 

The Renewable Energy Technology A.A.S. Degree provides solid foundational knowledge, skills, strategies and field experience to prepare students for multiple roles within alternative energy fields. Students select a specialization area of either Biofuels or Photovoltaic Technology.

#### **Prerequisite**

RDG094 College Reading (3)

#### **General Education Requirements (22-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3) OR

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

Select a COM course, or an AGEC course.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### Physical and Biological Sciences (8)

World of Plants (4) 🔂 AGS101

AGS104 Agricultural Environmental Science (4) 🗟

BIO100 Biology Concepts (4)

Fundamental Chemistry (4) CHM130

ENV101 Environmental Science (4) 🖸

Physical Universe (4) PHY100

Or select Biological and Physical Lab Science courses numbered 100 or above, or aAGEC Science Lab courses.

#### Mathematics (2-4)

Select a college-level Mathematics course

MAT111 Math for Electricians (2)

MAT121 Intermediate Algebra, Standard (4) or higher

MAT162 Applied Statistics (3) 🗟

## **Core Requirements (14)**

RET105 Introduction to Renewable Energy (3)

RET160 OSHA Safety for Renewable Energy (1)

Renewable Energy Technology Internship (4) RET296



#### 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)

Select one:

BUS100 Introduction to Business (3)

BUS101 Business Mathematics (3)

BUS122 Small Business Management (3)

ELC126 Residential Wiring (3)

ELC201 Solar Photo Voltaic I (3)

ELC202 Solar Photo Voltaic II (3)

POS101 American Government and Politics (3)

SKL115 Employment Readiness Part 1 (3)

SKL116 Employment Readiness Part 2 (3)

Elective (3) Consult CAC RET Advisor.

#### Other Requirements (4)

PAC or DAN Course (1)

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher **OR** 

Transferable Computer Competency course (Consult the CEG.)

Students must earn a cumulative grade point average

(CGPA) of at least a 2.0 on a 4.0 scale. Students must earn

a minimum of 20 credits from CAC.

This A.A.S. Degree requires 64-65 credits.

#### **ICON LEGEND**

AGEC:

Dual Enrollment: 🥝



Intensive Writing: *IW* Pr Reading Required: RDG094: *R* 

Programs of Study/Tech Prep: POS

SUN Course:

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# SOLAR PHOTO VOLTAIC TECHNICIAN CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 9**

The Solar PV Technician Certificate program offers students the opportunity to gain experience, knowledge and safety practices of solar photo voltaic systems. 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)

#### **Other Requirements**

ELC202

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

Solar Photo Voltaic II (3)



## SPORTS AND FITNESS

#### **ATHLETIC STUDIES A.A.**

Signal Peak Campus

**Total Credits: 60-64** 

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

#### **Recommended Proficiencies**

College-level Reading and Mathematics placement test scores or coursework.

# General Education Requirements AGEC-A (35-36)

#### **Written Communications (6)**

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

#### **Oral Communications (3)**

Select an AGEC course.

For the following two categories, for each category select courses from different disciplines.

#### **Arts and Humanities (6-9)**

Select Art and Humanities AGEC courses.

#### Social and Behavioral Sciences (6-9)

Select AGEC courses from at least two different disciplines.

PEH101 Personal Health (3) 🗔

PSY101 Introduction to Psychology (3)

## **Physical and Biological Sciences (8)**

Select AGEC courses with a laboratory component.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) or higher MAT162 Applied Statistics (3)

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

#### **Subject Options (0-6)**

Based on your major, review the specific A.A. Degree requirements in the catalog, consult an academic advisor and see the Transfer Guides at <a href="http://www.aztransfer.com/TransferGuides">http://www.aztransfer.com/TransferGuides</a>.

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- 3. At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (26)**

Advanced Weight Training (2)
History and Philosophical Foundations of Sport
and Physical Education (3)
History of Intercollegiate Athletics (3)
The Management of Sports (3)
Foundations of Exercise (3)
Women and Sport in the U.S. (3)
Introduction to Strength Training (3)
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  $\mathcal{R}$ 

#### **Computer Competency (3):**

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



#### Other A.A. Degree Requirements

Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

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

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

Students must earn a grade of "C" or better in each A.A. degree required course.

Students must earn a minimum of 20 credits from CAC which includes the AGEC-A requirements.

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

# ATHLETIC TRAINING EDUCATION PROGRAM A.A.

#### Signal Peak Campus

#### **Total Credits: 60-64**

The Athletic Training Education Program (ATEP) A.A. Degree provides both academic instruction and hands-on clinical application to prepare the student to transfer an Associate of Arts degree with a specialization in Athletic Training to an accredited university. Athletic training education includes taping, rehabilitation, modalities, practice, and event coverage of varsity athletic teams.

#### **Recommended Proficiencies**

Previous experience in a High School athletic program is desirable but not necessary.

College level reading, writing and oral communication skills recommended.

# **General Education Requirements AGEC-A** (35-36)

#### **Written Communications (6)**

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

#### **Oral Communications (3)**

Select an AGEC course.

#### **Arts and Humanities (6)**

Select one Arts and one Humanities AGEC course.

#### Social and Behavioral Sciences (6-9)

Select AGEC courses from at least two different disciplines. PSY101 Introduction to Psychology (3)

#### Physical and Biological Sciences (8)

BIO201 Human Anatomy & Physiology I (4) © 3 BIO202 Human Anatomy & Physiology II (4) © 3 Or select an AGEC Lab course.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) 🖸 or higher

#### **Subject Options (0-6)**

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





#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

#### **Core Requirements (26)**

	- 4 (= - /
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 Reading

#### **Computer Competency (3):**

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

#### Other A.A. Degree Requirements

Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

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

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

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

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

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

# GROUP FITNESS INSTRUCTOR CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 19**

Upon completion, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Group Fitness Instructor. The Group Fitness Instructor Certificate core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Group Fitness Instructor. Courses include introductions to biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures and health screening.

#### **Recommended Proficiencies**

College-level Reading, Writing and Oral Communication skills recommended

#### **Core Requirements (19)**

NTR141	Nutrition and Wellness (4) 🖸
PED103	Foundations of Exercise (3)
PED104	Anatomical Kinesiology (3)
PEH200	Sports Safety Training (3)
PEH203	Group Fitness Instructor Methods (3)

#### **Three Physical Activity Courses required (3)**

The following courses are recommended:

PAC101J Basic and Beginning Techniques of Weight

Training (1)

PAC101K Basic and Beginning Techniques of Yoga (1)

PAC105 Physical Fitness: Core Emphasis (1)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### PERSONAL TRAINER CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 19**

Upon completion of this Personal Trainer Certificate, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Personal Trainer. The program core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Personal Trainer. Courses include introductions to biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures and health screening.

#### **Recommended Proficiencies**

College level reading, writing and oral communication skills recommended

#### **Core Requirements (19)**

NTR141	Nutrition and Wellness (4)
PED103	Foundations of Exercise (3)
PED104	Anatomical Kinesiology (3)
PEH200	Sports Safety Training (3)
PEH204	Personal Training Methods (3)

#### **Three Physical Activity Courses required (3)**

The following courses are recommended:

PAC101J Basic and Beginning Techniques of Weight Training (1)

PAC101K Basic and Beginning Techniques of Yoga (1)

PAC105 Physical Fitness: Core Emphasis (1)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.





# RECREATION AND TOURISM MANAGEMENT A.A.

Signal Peak Campus

**Total Credits: 60-64** 

This A.A. Degree prepares students for employment in recreation and tourism management and program delivery positions in diverse public, nonprofit and private organizations such as municipal and county parks and recreation departments, state and national resource agencies, YMCAs, Boys and Girls Clubs of America, and other nonprofit agencies, clinical rehabilitation centers, hospitals, visitor and convention bureaus, senior centers, resorts, destination management companies and other components of the tourism/commercial recreation industry. Since this Degree includes the AGEC-A, general education requirements, students may choose to transfer the Degree to a university to earn additional credentials.

#### **Recommended Proficiencies**

College level reading, writing and oral communication skills recommended

#### **Prerequisite**

RDG094 College Reading *R* 

# General Education Requirements AGEC-A (35-36)

#### **Written Communications (6)**

#### **Oral Communications (3)**

COM263 Intercultural Communication (3) 🗔

For the following two categories, for each category select courses from different disciplines.

#### Arts and Humanities (6-9)

Select one Art and one Humanities AGEC course.

#### Social and Behavioral Sciences (6-9)

ECN202 Principles of Microeconomics (3) Select AGEC courses from different disciplines.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

#### Physical and Biological Sciences (8)

ENV101 Environmental Science (4) TR141 Nutrition and Wellness (4) Or select AGEC Science Lab courses.

#### Mathematics (3-4)

MAT141 College Mathematics, Standard (4) 🖸 or higher

#### **Subject Options**

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

#### **Special Awareness Requirements (0-9)**

Select AGEC courses to fulfill these requirements.

- 1. At least three semester credits of coursework in Intensive Writing and Critical Inquiry
- 2. At least three semester credits of coursework in Cultural Awareness (Ethnic/Race/Gender)
- At least three semester credits of coursework in Global/International Awareness or Historical Awareness

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

## **Core Requirements (30)**

BUS100 Introduction to Business (3)
HRM100 Introduction to Hospitality (3)
REC101 Recreation, Leisure, and the Quality of Life (3) REC108 Recreation Practicum (3)
REC203 Leisure Delivery Systems (3)
REC220 Introduction to Nonprofit Youth and Human Service Agencies (3)
REC230 Program Planning (3)
REC250 Leadership in Recreation (3)

Select two of the following courses (6):

Select two of the following courses (6): ACC201 Financial Accounting (3)

BUS190 Principles of Management and Leadership (3)

HRM102 Management of Guest Services (3)

HRM208 Hospitality Law (3)

#### Other Requirements (3)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

CIS120 Survey of Computer Information Systems (3)



#### Other A.A. Degree Requirements

Some A.A. Degrees require up to 16 credits of a Second Language to demonstrate proficiency. Many four-year degrees require either a second semester or fourth semester level of a second language and strongly encourage students to complete this requirement at the community college prior to transfer.

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

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

Students must earn a grade of "C" or better in all required courses. Students must earn a minimum of 20 credits from CAC.

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

## RECREATION MANAGEMENT CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 19**

This Certificate prepares students for employment in recreation and tourism management and program delivery positions in diverse public, nonprofit, and private organizations such as municipal and county parks and recreation departments, state and national resource agencies, YMCAs, Boys and Girls Clubs of America, and other nonprofit agencies, clinical rehabilitation centers, hospitals, visitor and convention bureaus, senior centers, resorts and spas, destination management companies and other components of the tourism/commercial recreation industry.

#### **Recommended Proficiencies**

College-level Reading, Writing and Oral Communication skills recommended

### **Core Requirements (19)**

HRM100 Introduction to Hospitality (3) **PAC** Any Physical Activity Course (1) PED102 The Management of Sport (3)

REC101 Recreation, Leisure, and the Quality of Life (3)

REC108 Recreation Practicum (3) REC203 Leisure Delivery Systems (3)

REC230 Program Planning (3)

OR

Leadership in Recreation (3) REC250

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094:  $\mathcal{R}$ SUN Course:



#### SPORTS INFORMATION CERTIFICATE

#### Signal Peak Campus

#### **Total Credits: 19**

The Sports Information Certificate is designed to provide current training and information to students interested in the promotion and operation of sporting events. This program will enhance the understanding and application of strategies to effectively manage and promote youth, high school, collegiate, and professional sporting events.

#### **Recommended Proficiencies**

High School diploma or GED; College-level Reading, Writing and Oral Communication skills recommended.

#### **Prerequisite**

RDG094 College Reading (3) R

#### **Core Requirements (19)**

CIS112	Web Page	Design	Fundamentals (3)	

MSC101 Media and Society (3)

MSC102 Writing for the Print Media I (3)

MSC110 Publications (3)

PED101 History of Intercollegiate Athletics (3)

PED102 The Management of Sport (3)

#### PAC course (1):

Select one of the recommended courses:

PAC101A Basic and Beginning Techniques of Golf (1)

PAC101M Basic and Beginning Techniques of

Basketball (1)

#### **Other Requirements**

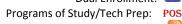
Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

Intensive Writing: /W

AGEC: 冟

Dual Enrollment:



Reading Required: RDG094: R

SUN Course:

#### **SPORTS MANAGEMENT A.A.S.**

#### Signal Peak Campus

#### **Total Credits: 68**

The Sports Management Degree prepares individuals to meet the needs of the sports industry. Students completing this degree will be exposed to sport promotion, health and fitness center management, sporting goods management/sales, and the successful operation of numerous types of sport organizations, ranging from various professional teams/leagues, to many national and international amateur sports organizations, federations, conferences, and associations.

The program's Business core focuses on the basics of accounting, computer information systems, marketing, management, the legal environment of business, human relations, and supervisory techniques. The program's Sports/Fitness core focuses on the basics of the history/philosophical foundations of sport/physical education, strength/athletic training, sports nutrition, lifetime fitness/wellness, sports safety training, and physical activity.

#### **Recommended Proficiencies**

High School diploma or GED; College-level Reading, Writing and Oral Communication skills recommended.

#### **Prerequisite**

RDG094 College Reading (3)  $\mathcal{R}$ 

#### **General Education Requirements (32)**

#### **Written Communications (3)**

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

## Oral Communications (3)

Select a COM course, or an AGEC course.

#### Arts (3)

Select an Art course, or an AGEC course.

#### **Humanities (3)**

PHI105 Introduction to Ethics (3) (Recommended) © © Or select a Humanities course, or an AGEC course.

#### Social and Behavioral Sciences (12)

ECN201 Principles of Macroeconomics (3)

ECN202 Principles of Microeconomics (3)

MSC101 Media and Society (3) 🗟

PEH101 Personal Health (3)

PSY101 Introduction to Psychology (3) 🔊 🗟

Or select Social and Behavioral Science courses, or AGEC courses.



#### Physical and Biological Sciences (8)

NTR141 Nutrition and Wellness (4) **plus** BIO160 Introduction to Human Anatomy and

Physiology (4) 🖸

Or select Biological and Physical Lab Science courses numbered 100 or above, or AGEC Science Lab courses.

#### Mathematics (3-4)

MAT162 Applied Statistics (3) (Recommended)

Or select a college-level Mathematics course

BUS101 Business Mathematics (3)

MAT101 Essential Mathematics (4) or higher

## **Core Requirements (30)**

#### **Business Core (12)**

ACC201 Financial Accounting (3) BUS123 Business Relations (3)

BUS190 Principles of Management and Leadership (3) 🔁

BUS201 Legal Environment of Business (3)

#### **Sports and Fitness Core (18)**

PED100 History and Philosophical Foundations of

Sport and Physical Education (3)

PED102 The Management of Sport (3)

#### Select four of the following courses (12):

PED101 History of Intercollegiate Athletics (3)

PED103 Foundations of Exercise (3)

PED105 Women and Sport in the U.S. (3)

PED108 Introduction to Athletic Training (3)

PED112 Introduction to Strength Training (3)

PEH200 Sports Safety Training (3)

#### Other Requirements (6)

Physical Education Activity: Select 3 credits

Reading Competency: RDG094 College Reading Reading

#### **Computer Competency (3):**

AGB124 Microcomputers in Agriculture

CIS110 Fundamentals of Computer Literacy or higher

#### OR

Transferable Computer Competency course

(Consult the CEG.)

Students must earn a grade of "C" or better in all required courses.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

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

This A.A.S. Degree requires 68 credits.



## **TECHNOLOGY**

# **COMPUTER AIDED DESIGN CERTIFICATE**

Signal Peak Campus

**Total Credits: 25** 

This Certificate offers preparation for entry-level positions in computer aided design and drafting.

#### **Core Requirements (15)**

DFT127 Autocad I (3) DFT128 Autocad II (3)

MAT101 Essential Mathematics (4) or higher

#### Select one of the following (3):

DFT130 Advanced Computer Aided Drafting

Applications (1) (Register three terms to earn

3 credits)

DFT131 Autocad III (3)

#### Select one of the following (3):

COM100 Fundamentals of Human Communication (3)

ENG121 Applied Technical Writing (3)

#### Electives (10)

Select 10 credits from any of the following areas:

CET Civil Engineering Technology CIS **Computer Information Systems** 

DFT Drafting **ELC** Electricity **ELT** Electronics

Heavy Equipment Operator HEO

WLD Welding

MAT121 Intermediate Algebra, Standard (4)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### **ICON LEGEND**

AGEC: 💷

Dual Enrollment:



Intensive Writing: /W Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

#### WELDING CERTIFICATE

Signal Peak Campus

**Total Credits: 33** 

This Welding Certificate provides students with entry-level welding skills enabling them to gain employment as welding technicians.

#### **Core Requirements (18)**

WLD121 Shielded Metal Arc Welding I (3) WLD122 Shielded Metal Arc Welding II (3) WLD221 Gas Tungsten Arc Welding (3) WLD222 Gas Metal Arc Welding (3) WLD227 Welding Design and Fabrication (3) (Register two terms to earn 6 credits)

#### Select one of the following (3):

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

#### Electives (12)

Select 12 credits from any of the following courses:

**DFT127** AutoCAD I (3) AutoCAD II (3) DFT128 **DFT131** AutoCAD III (3)

College Mathematics, Standard (4) 🗟 MAT141

WLD110 Survey of Welding Processes (3) Oxy-Acetylene Welding (3) WLD120

WLD125 Pipe Welding I (3)

Blueprint Reading for Welders (3) WLD128

WLD223 Automatic and Semi-Automatic Welding (3)

WLD225 Shielded Metal Arc Welding III (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



# DEGREES AND CERTIFICATES WITH SPECIAL REQUIREMENTS

#### **AGRICULTURE**

# FARM BUSINESS MANAGEMENT CERTIFICATE

Signal Peak Campus

**Total Credits: 30** 

The Farm Business Management Certificate develops the farm operator's ability to organize resources in order to meet family and business goals. These abilities include the management functions of planning, implementing and controlling the farm system and its component subsystems.

#### **Recommended Proficiencies**

Basic business experience and fundamental computer skills recommended.

#### **Prerequisites**

Own or operate a farm business.

#### **Core Requirements (30)**

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**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.

Students must earn at least one-third of the certificate

#### ICON LEGEND

credits from CAC.

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

#### CORRECTIONS

# ADVANCED CORRECTIONS CERTIFICATE

Superstition Mountain Campus, Florence and SanTan Centers

**Total Credits: 39** 

This Advanced Corrections Certificate is designed to upgrade the skills and knowledge of Correctional Officers currently working in the corrections field.

#### **Prerequisites**

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

## **Core Requirements (36)**

COTA Certification (21)

BUS190 Principles of Management and Leadership (3) (\*May be fulfilled by successful completion of COTA Certificate)

COM101 Interpersonal Communication (3)

COM101 Interpersonal Communication (3) • OR

COM263 Intercultural Communication (3) POS220 U.S. and Arizona Constitutions (3) Introduction to Psychology (3) Introduction to Sociology (3) Introduction to Sociology (3) Positive So

#### Electives (3)

AJS101 Introduction to Administration of Justice (3)

AJS275 Criminal Investigations (3)

CIS120 Survey of Computer Information Systems

(3)

PHI112 World Religions (3) SPA Any Spanish course(s)

SOC200 Racial and Ethnic Minorities (3)

or above

PSY200 Social Psychology (3) 🖸 or above

\*Corrections Officers who have the rank of Sergeant or higher are required to request the Department of Corrections submit, to CAC Admissions, an official copy of their Sergeant Leadership Academy Certificate of Completion to receive credit for BUS190.

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



#### **CORRECTIONS A.A.S.**

#### Superstition Mountain Campus

#### **Total Credits: 64**

This Degree is designed to upgrade the skills and knowledge of Correctional Officers currently working in the field. Completion of the Arizona Correctional Officers Training Academy (COTA) Certificate program is required for admission into the degree program. Upon successful completion of COTA, students are eligible to apply up to 21 credits towards the Corrections A.A.S. Degree, per CAO Memo: COTA Certified Completers dated 09/07/2012.

#### **Prerequisites:**

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

# **General Education Requirements** (19-23)

#### **Written Communications (3)**

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

#### **Oral Communications (3)**

Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.

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

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social Behavioral Sciences (3)

PSY101 Introduction to Psychology (3) SOC100 Introduction to Sociology (3) Social Select a Social Behavioral Science course numbered 100 or above, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a Biological or Physical Science course numbered 100 or above, or an AGEC course.

# AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:

#### Mathematics (3-4)

Select a college-level Mathematics course **OR**MAT121 Intermediate Algebra, Standard (4)
(Recommended) or higher

#### **Core Requirements (42)**

COTA Certification (21)

AJS101 Introduction to Administration of Justice (3)
AJS123 Ethics and the Administration of Justice (3)

AJS209 Substantive Criminal Law (3) AJS240 The Corrections Function (3)

BUS190 Principles of Management and Leadership (3) (\*May be fulfilled by submission of official Sergeant Leadership Academy Certification to CAC Admissions)
CIS120 Survey of Computer Information Systems (3)

POS220 U.S. and Arizona Constitutions (3)

#### **Electives (3)**

Select 3 credits from the following courses:

AJS225 Criminology (3)

AJS275 Criminal Investigations (3)
PHI112 World Religions (3)
SPA Any Spanish course(s)

SOC200 Racial and Ethnic Minorities (3)

or higher

PSY200 Social Psychology (3) or higher

## **Other Requirements (0-4)**

PAC or DAN (1) (Fulfilled by COTA physical training)
Reading Competency: RDG094 College Reading 
R

#### **Computer Competency (3):**

CIS120 Survey of Computer Information Systems (3) (Fulfilled under Core Requirements)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The Corrections A.A.S. Degree requires 64 credits.



#### **DIESEL/HEAVY EQUIPMENT**

# HEAVY EQUIPMENT MECHANIC'S APPRENTICESHIP CERTIFICATE

#### Signal Peak Campus

**Total Credits: 30** 

The Heavy Equipment Mechanic's Apprenticeship training is sponsored by the Arizona Chapter of Associated General Contractors (AGC) for repair and maintenance of heavy equipment to journeyman standards. Students must be sponsored by an AGC contractor and meet the AGC contractor's entry level proficiencies to enroll in this program.

#### **Prerequisites**

Students must be sponsored by an Associated General Contractor (AGC).

#### **Core Requirements (30)**

AGC112	Introduction t	o Mechanical	Technology (.5)

AGC113 Introduction to Mechanical Technology Lab (1)

AGC114 Equipment Preventive Maintenance (.5)

AGC115 Equipment Preventive Maintenance Lab (.5)

AGC116 Mobile Air Conditioning (1)

AGC117 Mobile Air Conditioning Lab (1.5)

AGC126 Electrical and Electronic Systems (1)

AGC127 Electrical and Electronic Systems Lab (1.5)

AGC128 Hydraulic Systems (1)

AGC129 Hydraulic Systems Lab (1.5)

AGC136 Chassis and Drive Systems (1)

AGC137 Chassis and Drive Systems Lab (1.5)

AGC138 Brakes, Steering, Suspension Systems (1)

AGC139 Brakes, Steering, Suspension Systems Lab (1.5)

AGC248 Diesel Engines I (2)

AGC249 Diesel Engines I Lab (3)

AGC258 Diesel Engines II (2)

AGC259 Diesel Engines II Lab (3)

AGC268 Systems Diagnostics and Reconditioning (2)

AGC269 System Diagnostics and Reconditioning Lab (3)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.

#### ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

# JOHN DEERE CONSTRUCTION AND FORESTRY EQUIPMENT TECHNOLOGY A.A.S.

#### Signal Peak Campus

#### **Total Credits: 75**

The John Deere Construction and Forestry Equipment Technology A.A.S. Degree prepares students for employment as diesel and heavy equipment technicians at John Deere Dealerships. Students must be sponsored by a John Deere Dealership; dealerships are located in Arizona, Nevada and California.

### **General Education Requirements (19-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3) OR

ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.

#### Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### **Social and Behavioral Sciences (3)**

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### Physical and Biological Sciences (4)

Select a course numbered 100 or above from biological or physical science disciplines, or an AGEC course.

#### Mathematics (3-4)

Select a college-level Mathematics course
BUS101 Business Mathematics (3) **OR**MAT101 Essential Mathematics (4) or higher



#### **Required Courses (55)**

John Deere Diesel Engines and Fuel Systems (12) CFE101 John Deere Hydraulic and Electrical/Electronics CFE102 Systems (12) CFE201 John Deere Chassis and Drives (10) John Deere Heavy Equipment CFE202 Reconditioning and Operations (10) DIE222 Mobile Refrigeration (3) DIE225 Preventive Maintenance (2) Any Welding course (3) WLD **TEC129** Computers for Technicians (3)

OR

CIS Any Computer Competency Course

Consult the CEG to determine course transferability.

#### **Other Requirements (1-4)**

PAC or DAN course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

TEC129 Computers for Technicians (3) **OR**CIS 110 Fundamentals of Computer Literacy (3) or higher (Fulfilled in Required Courses)

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn a minimum of 20 credits from CAC.

The John Deere Construction and Forestry Equipment Technology A.A.S. Degree requires 78 credits.

# OPERATOR'S APPRENTICESHIP PROGRAM CERTIFICATE (Associated General Contractors)

Signal Peak Campus

**Total Credits: 30** 

Heavy Equipment Operator's Apprenticeship training is sponsored by the Associated General Contractors (AGC) for operation of heavy equipment to journeyman standards. Students must be sponsored by an Associated General Contractor (AGC).

#### **Prerequisites**

Students must be sponsored by an Associated General Contractor (AGC).

#### **Required Courses (30)**

AGC102 Introduction to Construction Math (1)

AGC103 Basic Safety (.5)

AGC104 Soils I (1)

AGC105 Grades I (1)

AGC106 Machine Orientation I (.5)

AGC107 Machine Operation I (1)

AGC121 Equipment Preventive Maintenance (1)

AGC122 Introduction to Earth Moving (1)

AGC123 Machine Orientation II (.5)

AGC124 Machine Operation II (2.5)

AGC131 Safety Part II (1)

AGC132 Rigging and Hoisting (1)

AGC133 Machines Theory I (1)

AGC134 Machine Operation III (2)

AGC141 Soils II (1)

AGC142 Grades II (1)

AGC143 Machines Theory II (1)

AGC144 Machine Operation IV (2)

AGC151 Machines Theory III (.5)

AGC152 Advanced Safety (1)

AGC153 Soils III (1)

AGC154 Machine Operation V (2.5)

AGC161 Finishing and Grading (1.5)

AGC162 Operator Supervision (1)

AGC163 Machine Operation VI (2.5)

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



AGEC: Intensive Writing: IW Progr

Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS





#### **HEALTH CAREERS**

# DIAGNOSTIC MEDICAL SONOGRAPHY A.A.S.

#### Superstition Mountain Campus

**Total Credits: 84** 

The two-year, full-time DMS program trains health care professionals as Diagnostic Medical Sonographers who provide patient services using high frequency sound waves to produce images of internal structures. Under the supervision of a physician, Sonographers gather ultrasound data on all types of patients in order to diagnose a variety of conditions and diseases in the body, assess circulatory flow and changes, assist MDs during procedures; and monitor fetal growth, development and wellbeing.

#### **Prerequisites:**

PHY100 College Physics (4) or higher **OR** RAD150 Radiation Physics (3)

Candidates must complete a prior associate's degree in an Allied Health Profession which includes direct patient care, such as Radiologic Technician, Registered Nurse, Respiratory Therapist or Physical Therapist. The General Education coursework in that degree must include MAT151 College Algebra, Standard and the minimum A.A.S. Degree General Education requirements.

Candidates must possess recent healthcare professional experience American Health Association (AHA) cardiopulmonary resuscitation (CPR) or equivalent embedded in their healthcare specialty degree.

#### **Recommended Proficiencies**

College-level Reading, Writing and Math placement test scores or coursework. Candidates who have completed a prior A.A.S. may count their General Education course credits toward the DMS Degree requirements.

#### **General Education Requirements (20-23)**

#### **Written Communications (3)**

ENG101 English Composition III (3) OR

ENG121 Applied Technical Writing (3)

# AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: SUN Course:

#### **Oral Communications (3)**

Select a COM course, or an AGEC course if you plan to transfer to earn a bachelor's degree.

#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### Social and Behavioral Sciences (3)

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### **Physical and Biological Sciences (8)**

BIO201 Human Anatomy & Physiology I (4) Dollar BIO202 Human Anatomy & Physiology II (4) Dollar BIO202 Human Anatomy & Physiology II (4) Dollar BIO203 Human Anatomy & Physiolo

#### **Mathematics (3-4)**

MAT151 College Algebra, Standard (4) or higher

#### **Core Requirements (63 Credits)**

DMS101 Introduction to Diagnostic Medical Sonography (3)

DMS120 Cross Sectional Imaging (3)

DMS130 Sonography Physics and Instrumentation I (2)

DMS131 Physics and Instrumentation Lab (1)

DMS132 Abdominal Imaging I (3)

DMS133 Abdominal Imaging Lab (1)

DMS135 Small Parts Imaging (1)

DMS140 Sonographic OB/GYN Imaging I (2)

DMS149 Pathology for Medical Imaging (3)

DMS150 Clinical Sonography Practicum I (2)

DMS151 Clinical Sonography Practicum II (3)

DMS152 Clinical Sonography Practicum III (4)

DMS154 Abdominal Imaging II (2)

DMS158 Sonography Case Studies I (1)

DMS159 Sonography Case Studies II (2)

DMS234 Sonography Physics/ Instrumentation II (2)

DMS242 High Risk OB/GYN Imaging (2)

DMS254 Clinical Sonography Practicum IV (4)

DMS255 Clinical Sonography Practicum V (4)

DMS256 Clinical Sonography Practicum VI (4)

DMS259 Sonography Case Studies III (2)

DMS260 OB/GYN Sonography Lab (1)

DMS271 Concepts of Vascular Imaging (2)

DMS272 Vascular Imaging Lab (1)

DMS273 Advanced Sonography Applications (3)

DMS280 Physics and Instrumentation Review (1)

DMS281 Abdominal Imaging Review (1)

DMS282 OB/GYN Review (1)

DMS290 Sonography Capstone Seminar (2)



#### **Other Requirements (4)**

PAC or DAN course (1)

Reading Competency: RDG094 College Reading  $\mathcal{R}$ 

#### **Computer Competency (3):**

(Fulfilled in DMS101 under Core Requirements)

Students must earn a grade of "C" or better in all required courses for this AAS degree. Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 84 credits.



#### **NURSING A.A.S.**

#### Signal Peak Campus

**Total Credits: 71** 

Central Arizona College's Registered Nursing Program prepares students for the medical workforce or to complete further education to specialize in clinical practice, teaching or administration. The CAC Nursing Program is approved by the Arizona State Board of Nursing, 4747 N. 7th Street, Suite 200, Phoenix, AZ 85014 (602-771-7803), www.azbn.gov., and accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, Georgia 30326 (404-975-5000), www.nlnac.org.

Current Nursing students may apply to take the Practical Nurse Licensing Examination (NCLEX-PN) after completing the general education requirements, NUR121, NUR122 and NUR150. Completion of the four-semester Program qualifies the student for the Nursing Associate of Applied Science Degree and for taking the Registered Nurse Licensing Examination (NCLEX-RN).

In addition to the admission requirements of the College, applicants must meet the current requirements established by the Nursing Admissions Committee in conjunction with the Nursing Faculty. These requirements include, but are not limited to:

- 1. Competence in Math, English, and Reading
- 2. Completion of BIO201 and BIO202
- 3. CNA License from the Arizona State Board of Nursing must be included in the application to the CAC Nursing program. (Request CNA License early to allow shipping and processing time.)
- 4. Attendance at a Nursing Information session within the past year
- 5. Eligibility to register for MAT121 or higher MAT
- 6. Eligibility to register for ENG101
- 7. Successful completion of the HESI Entrance Test at CAC (within 3 attempts)
- 8. Cumulative GPA of 2.75 or higher

**ICON LEGEND** 

Intensive Writing: /W

AGEC: 🚺

9. Completed CAC Nursing program application

Dual Enrollment: Programs of Study/Tech Prep: POS Reading Required: RDG094: R SUN Course:

Students must be able to meet the Essential Functions of the Nursing Program as listed in the Nursing Application and Information Packet. Admission to the Nursing Program is selective and based on a point system (specific established criteria). Acceptance into the College does not guarantee acceptance into the Nursing Program.

Further information may be obtained at URL: http://www.centralaz.edu/Home/Academics/Divisions\_a nd\_Programs/Nursing\_Division.htm .

#### **Admission Requirements**

In addition to the admission requirements of the College, applicants must meet the current requirements established by the Nursing Admissions Committee in conjunction with the Nursing Faculty. These requirements include, but are not limited to:

- Competence in Mathematics, English and Reading
- Completion of BIO201 (4) and BIO202 (4)
- C.N.A. license from the Arizona State Board of
- 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**

Arizona Nursing Assistant Certification BIO201 Human Anatomy & Physiology I (4) BIO202 Human Anatomy & Physiology II (4)

## **General Education Requirements (30)**

#### **Written Communications (6)**

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



#### **Arts and Humanities (3)**

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### **Social and Behavioral Sciences (9)**

PSY101 Introduction to Psychology (3) (Recommended) PSY203 Developmental Psychology (3) (Recommended) SOC100 Introduction to Sociology (3) (Recommended) Or select Social & Behavioral Sciences courses numbered 100 or above, or AGEC courses.

#### **Physical and Biological Sciences (8)**

BIO202 Human Anatomy & Physiology II (4)

(Fulfilled under Prerequisites)

BIO205 Microbiology (4)

#### **Mathematics (4)**

MAT121 Intermediate Algebra, Standard (4) **OR** MAT141 College Mathematics, Standard (4) **©** 

#### **Core Requirements (40)**

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

NUR121 Intro to Nursing Transitions (8)

NUR122 Nursing Health Illness Transitions (8)

NUR126 Principles of Pharmacology/Drug Dosages (2)

NUR145 Pharmacology (3)

NUR221 Nursing Developmental Transitions (8)

NUR222 Nursing Organizational Transitions (8)

NTR200 Human Nutrition (3)

#### Other Requirements (1)

PAC or DAN course (1)

Reading Competency: RDG094 College Reading Reading

Students must earn a grade of "C" or better in all courses to receive this AAS degree. Students must earn a minimum of 20 credits from CAC.

The Nursing A.A.S. Degree requires 71 credits.

# PRACTICAL NURSING CERTIFICATE

Signal Peak Campus

**Total Credits: 36** 

The Practical Nursing Certificate is earned upon successful completion of the first year of the Associate of Applied Science Registered Nursing Degree and the Optional NCLEX-PN Completion Course: NUR150.

#### **Recommended Proficiencies**

College-level Mathematics, English and Reading  $\mathcal{R}$  placement test scores or coursework

### **Prerequisites**

NUR121 Introduction to Nursing Transitions (8) \*
NUR126 Principles of Pharmacology and Drug
Dosages (2) \*\*

Students must successfully complete the first year of the Registered Nursing Associate of Applied Science Degree AND Program director consent required.

#### **Required Courses (36)**

ENG101 English Composition III (3) © Composition IV (4) © Composition IV

#### **Other Requirements**

Students must earn a cumulative grade point average (CGPA) of at least a 2.75 on a 4.0 scale. Students must earn at least one-third of the certificate credits from CAC.



AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: SUN Course:



#### **RADIOLOGIC TECHNOLOGY A.A.S.**

#### Superstition Mountain Campus

#### **Total Credits: 79**

Radiologic Technology is a health care profession involving the use of ionizing radiation to generate diagnostic images in the diagnosis and treatment of disease. The Associate of Applied Science Degree in Radiologic Technology is a two-year program (six sequential semesters including summers) that prepares students for entry-level positions as radiographers.

The program starts once per year in the Spring Semester. Students must complete 24 credits of general education requirements and 55 credits of major core courses.

The curriculum is designed in accordance with the Radiography Curriculum established by the American Society of Radiologic Technologists. Students are required by Arizona State Statute to complete 1,800 practicum hours within the two years. The Radiologic Technology course of study is a demanding experience and involves a full-time commitment of at least 40 hours per week plus homework. Students must earn a grade of "C" or better in all required courses.

Graduates of the program are eligible to:

- Receive a Radiologic Technology Associate of Applied Science Degree;
- 2. Sit for the American Registry of Radiologic Technologists examination (ARRT);
- 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.

CAC highly recommends candidates complete BIO201 and BIO202. Achieving a high level of success in the courses taken before applying to the program will improve a student's chance for admission to the radiography program.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: SUN Course:

#### **Admission requirements:**

- High School Diploma or equivalency (GED)
- Record of Immunizations
- Pre-admission testing to prove college-level English, reading and math proficiency
- Pass screening tests that will include: drug testing, criminal background check and fingerprinting
- Possess the ability to perform basic physical tasks as required
- Submission of the Radiologic Technology Program Application Form
- Two letters of recommendation

#### **Prerequisites**

Radiologic Technology Cohort student. HCC116 Medical Terminology (3) or equivalent course.

#### **General Education Requirements (23)**

Candidates who have completed a prior associate's degree or earned General Education course credits with a grade of "C" or better from regionally accredited institutions may count them toward the General Education Requirements below.

#### **Written Communications (3)**

ENG101 English Composition III (3) (SUN ENG 1101) **OR** ENG121 Applied Technical Writing (3)

#### **Oral Communications (3)**

Select a COM course or an AGEC course if you plan to transfer to earn a bachelor's degree.

#### Arts and Humanities (3)

Select an Art, Humanities, Literature, Music, Philosophy or Theatre course numbered 100 or above, or an AGEC course.

#### **Social and Behavioral Sciences (3)**

Select an Anthropology, Economics, Geography, History, Political Science, Psychology or Sociology course numbered 100 or above, or an AGEC course.

#### Physical and Biological Sciences (8)

BIO201 Human Anatomy & Physiology I (4) © 3 BIO202 Human Anatomy & Physiology II (4) © 5

#### Mathematics (3)

MAT121 Intermediate Algebra, Standard (4) or higher



#### **Required Courses (55)**

- RAD100 Fundamentals of Radiologic Science and Health Care (1) RAD110 Radiographic Positioning I (4) RAD120 Principles of Radiographic Exposure I (3) RAD130 Patient Care in Radiologic Science (2) RAD140 Practicum I (240-280 hours) (3) RAD150 Radiation Physics I (3) RAD160 Radiographic Positioning II (4)
- RAD170 Principles of Radiographic Exposure II (3) RAD180 Practicum II (240-280 hours) (3)
- RAD200 Practicum III (600-650 hours) (7)
- RAD210 Radiation Physics II (3) RAD230 Radiobiology and Radiation Protection (3)
- RAD240 Practicum IV (360-390 hours) (4) RAD250 Basic Pharmacology and Drug Administration (1)
- RAD260 Radiographic Pathology (2) RAD270 Advanced Imaging (2) RAD280 Registry Review (3)
- RAD290 Practicum V (360-390 hours) (4)

#### Other Requirements (4)

PAC or DAN course (1)

Reading Competency: RDG094 College Reading *R* 

#### **Computer Competency (3):**

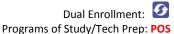
(Fulfilled in RAD Core Requirements)

Students must earn a grade of "C" or better in all courses to receive this degree. Students must earn a minimum of 20 credits from CAC.

The Radiologic Technology A.A.S. Degree requires 79 credits.

**ICON LEGEND** 

AGEC: 🔄 Intensive Writing: /W Dual Enrollment:



Reading Required: RDG094: R

SUN Course:



# Course Descriptions





### **Course Delivery**

In addition to classes offered at our campuses and sites, Central Arizona College also offers classes in a variety of flexible modalities and formats for our students' convenience. Formats include on-site, face-to-face, hybrid, online, interactive television, open entry/closed exit and accelerated. While assignments and methods vary, all classes, regardless of modality or format, hold students to the same rigorous, high academic standards.

The course schedule indicates the delivery format of a class. Students should understand the methods and expectations inherent in the format they choose prior to beginning their class, and will be held responsible for that understanding. Information about online and hybrid classes can be found on the Central Arizona College website.

### **Prerequisites and Corequisites**

A *prerequisite* is a requirement the student must meet prior to enrollment in the proposed course. A *corequisite* is a requirement the student must meet concurrently with the proposed course.

Prerequisites and corequisites may be met by completing the courses listed with a grade of "C" or better, completing a competency exam, or through an equivalent assessment score.

"Instructor consent" may be secured directly from the course instructor. Instructor consent permits a student to enroll in a course without the prerequisite or corequisite, however it does not guarantee a waiver of these prerequisites and corequisites; for any other course.

Dropping a required corequisite will result in the student being withdrawn from the course requiring the corequisite.

# Additional Options: Times for Credit and Grading

Courses that may be repeated for credit are so noted in the course description. These courses may not be repeated in the same semester.

Students may select the "Satisfactory/Unsatisfactory" grading option for courses noted in the course description. However, students may not choose the "Satisfactory/Unsatisfactory" grading option for courses to complete a certificate or degree.

# SPECIAL COURSES 088/098 Selected Topic, Developmental

Various Credits

Developmental instruction in a specific discipline such as English, mathematics, reading, social sciences and others areas is offered to provide a foundation for college-level course work.

### 197/297 Career Advancement

Up to 4 Credits

Courses in the 197 or 297 series offer a combination of on-thejob and related college training with the flexibility to meet students' specialized vocational needs. Courses may be offered in any discipline with appropriate approvals and may be repeated for credit.

### 198/298 Selected Topics

Various Credits

Courses in the 198 or 298 series offer special and current topics on a short-term basis. Selected topics can be in the form of a class or special offering in any discipline with appropriate approvals. These classes may not transfer and are degree applicable only with special approval.

### **APPROVED COURSES**

The following list of Central Arizona College academic courses includes courses which are offered every semester as well as courses offered only on a cyclical program basis. Please see the Class Schedule for a listing of currently offered courses. Also, consult an academic advisor to view program sequencing guides to efficiently and effectively complete your academic goals.

# SUN## Shared Unique Number System

The Shared Unique Number (SUN) code for select general education and major preparation courses offers Arizona course transfer information. The SUN designation/icon indicates transferability within the Arizona Transfer System that includes the three public universities and select public and tribal community colleges. For specific course transferability status based on the term taken with a grade of "C" or better, consult the Course Equivalency Guide (CEG) on the AZTransfer website: http://www.aztransfer.com/home. Also, consult your CAC advisor and the bachelor's degree program institution's advisor for specific applicability of the transferable course to your specific academic goals or baccalaureate degree program.

**ICON LEGEND** 

AGEC: Intensive Writing: IW

riting: /W

Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS





# Arizona General Education Curriculum (AGEC)

The Arizona General Education Curriculum (AGEC) cicon 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 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. CAC accepts AGEC approved courses from Arizona colleges/universities and applies them toward CAC AGEC requirements.

The only exception is 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 embedded "special requirements" is up to the discretion of the receiving institution.

The certified CAC **AGEC Certificate** (35 credits) is transferable from one Arizona public community college to another Arizona public or tribal community college as well as from an Arizona public community college to an Arizona public university. In addition, the CAC AGEC transfers as a block of 35 credits toward baccalaureate degrees among CAC articulation agreement institutions. See Articulation Agreement section in this Catalog for details.

#### **AGEC Grandfather Clause**

CAC accepts transferred general education courses toward AGEC requirements, provided the courses were taken prior to Fall 1999 and the current course equivalent at CAC fulfills one or more AGEC requirements. Students must provide evidence of fulfilling the Intensive Writing AGEC requirement.

### **CAC AGEC-Web**

See AzTransfer **AGEC-Web** for Central Arizona College's AGEC Course List and the AGEC categories required at CAC: http://aztransmac2.asu.edu/cgi-

bin/WebObjects/agec.woa/1/wo/PzSkDrydEKg4qVxnyjhHW M/4.0.45.2.1.1

### Tech Prep/ Programs of Study POS

Tech Prep courses are now called Programs of Study courses. Many POS courses apply to A.A.S. Degree requirements.

#### **Cross Listed Courses**

Courses indicated as cross listed with another course are courses that are identical in content. Students will only receive credit for one of the two courses. Consult an academic advisor to determine the best course to achieve your academic goal.

#### **Dual Enrollment**

The Dual Enrollment icon indicates an academic course that high school students may be able to take to begin work on a college credential. Not all the courses are available at every high school.

**ICON LEGEND** 

AGEC: The Intensive Writing: IW

Dual Enrollment: 🥨

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



# ACCOUNTING (ACC)

### **ACC100 Fundamentals of Accounting**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Fall, Spring and Summer

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

#### **ACC121 Income Tax Fundamentals**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Theory, rules and procedures used in preparing federal income tax returns for individuals, corporations and partnerships. *Prerequisite:* ACC100 or ACC201 .

### **ACC201 Financial Accounting**

3 Credits (3 Lectures) ACC 2201 R

**Typically Offered:** Fall, Spring and Summer

Theory and practice of accounting applicable to the accumulation, reporting and uses of financial information. *Prerequisite: RDG094*.

### **ACC202 Managerial Accounting**

3 Credits (3 Lectures) ACC 2202

**Typically Offered:** Fall, Spring and Summer

Selection and analysis of accounting information for internal organization use by management. *Prerequisite: ACC201* .

### **ACC222 Payroll Accounting**

3 Credits (3 Lectures)

**Typically** Spring

Functions and practical operation of payroll accounting, with examination of current payroll tax laws, methods of computing wages and salaries, timekeeping methods and microcomputer software for payroll systems. *Prerequisites: ACC100 OR ACC201*, CIS120 OR CBA133A OR CBA113A.

### **ACC226 Accounting with QuickBooks Pro**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Practical application of accounting utilizing QuickBooks Pro. Topics covered will include the general ledger, accounts receivable, accounts payable, job costing, payroll and inventory. *Prerequisite: ACC100 OR ACC201*.

# ACC227 Accounting with Peachtree Complete

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

Practical application of accounting concepts utilizing all features of Peachtree Complete. *Prerequisite: ACC100 OR ACC201* 

# **ADMINISTRATION OF JUSTICE**

(AJS)

# AJS101 Introduction to Administration of Justice

3 Credits (3 Lectures) AJS1101 POS R

**Typically Offered:** Fall, Spring and Summer

History and philosophy of the Criminal Justice System. Organization and jurisdiction of local, state and federal law enforcement, judicial and correctional systems. Career opportunities and qualifying requirements, terminology and constitutional precedence. *Prerequisite: RDG094*.

# AJS110 Public Safety Dispatch Education and Training

3 Credits (3 Lectures)

**Typically Offered:** Consult CAC Class Schedule.

An introduction to the theories, methods and techniques of public safety dispatching for police, fire and EMS agencies to include actual scenario-based instruction and practice.

#### **AJS122 Traffic Control**

3 Credits (3 Lectures)

**Typically Offered:** Consult CAC Class Schedule.

Analysis of traffic control, fundamentals of traffic accident investigation and motor vehicle law, including Arizona laws.

**ICON LEGEND** 

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: 
Programs of Study/Tech Prep: Pos
SUN Course:



### AJS123 Ethics and the Administration of **Justice**

3 Credits (3 Lectures) R

**Typically** Fall and Spring Offered:

Explore ethical issues in the justice system. Focus on ethics and the law, the police, the courts and corrections. Review ethical theory related to the administration of justice.

Prerequisite: RDG094.

#### **AJS124 Defense Tactics**

3 Credits (2.75 Lectures, 1 Lab)

**Typically** Consult CAC Class Schedule. Offered:

Physical control of suspects, including handcuffing, search security, baton, come-alongs and defense tactics. Prerequisites: Certification of Good Health and CARLOTA cohort student.

#### **AJS130 Firearms**

3 Credits (2 Lectures, 3 Labs)

**Typically** Consult CAC Class Schedule. Offered:

Firearm safety, marksmanship, combat shooting, and legal responsibilities. Prerequisite: CARLOTA cohort student.

### **AJS140 Communications in Law Enforcement**

3.5 Credits (3 Lectures, 2 Labs)

**Typically** Consult CAC Class Schedule. Offered:

Use of modern technology in gathering and processing information, written reports and techniques of police radio use.

#### **AJS209 Substantive Criminal Law**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Philosophy of legal sanctions and historical development from common law to modern American criminal law, classifications of crimes, elements of and parties to crimes, general definitions of crimes and common defense. Prerequisite: AJS101 or CARLOTA cohort student.

#### **AJS210 Constitutional Law**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Focus on selected aspects of civil liberties and civil rights in the United States. Emphasis is on the Constitution and the United States Supreme Court cases that delineate the legal doctrines relevant to defining the Constitution's guarantees of liberty. Prerequisite: AJS101 or POS101.

### **AJS212 Juvenile Justice Procedures**

3 Credits (3 Lectures)

**Typically** Fall Offered:

History and development of juvenile justice theories, procedures and institutions. *Prerequisite: SOC100* or AJS101 0.

### **AJS222 Criminalistics**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Introduction to the scientific aspects of criminal investigation and the crime laboratory's role in the criminal justice system. Emphasis on the collection, preservation and transportation of evidence and the techniques of examining physical evidence to include modern criminalistic research developments.

Prerequisite: AJS101 .

### **AJS224 Police Administration**

3 Credits (3 Lectures)

**Typically** Fall Offered:

Principles of administration, organization and management; responsibilities and interrelationships of administrative and line-and-staff services; and analysis of functional divisions of modern police and correctional operations. Prerequisite: AJS101 🗐.

### AJS225 Criminology

3 Credits (3 Lectures) 🔁 IW

**Typically** Fall, Spring and Summer Offered:

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 .

**ICON LEGEND** 

AGEC: 📵 Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS



#### **AJS230 The Police Function**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Theories of procedures and methods of operation of public police emphasizing discretionary powers, with a survey of career opportunities and current trends in law enforcement. *Prerequisite: AJS101* or *CARLOTA cohort student.* 

### **AJS240 The Corrections Function**

3 Credits (3 Lectures) POS

**Typically Offered:** Spring

History and development of correctional theories and institutions. *Prerequisite: AJS101* .

#### **AJS260 Procedural Criminal Law**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Introduction to procedural criminal law; focusing on court holdings, procedural requirements, and effect on the daily operations of law enforcement. *Prerequisite:* AJS101 .

### **AJS270 Community Relations**

3 Credits (3 Lectures) 📵

**Typically Offered:** Spring

Recognition and understanding of community problems; methods of coping with crisis situations, victimology, ethnic and minority cultures; and cooperating with personnel in community action programs and local police operations.

\*Prerequisite: AJS101\*\* or CARLOTA cohort student.

#### **AJS275 Criminal Investigations**

3 Credits (3 Lectures) POS

**Typically Offered:**Fall and Spring

Theory of criminal investigation, crime scene procedures, case preparation, interviewing and basic investigative techniques. *Prerequisite: AJS101* or *CARLOTA cohort student.* 

### AJS295 Internship

3 Credits (Internship)

**Typically Offered:** Spring

Internship in the Criminal Justice field to provide employment experience. May be taken two times for credit; may only use once for elective credit. Prerequisite: AJS101 .

### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:

# AGRICULTURE BUSINESS (AGB)

# AGB121 Resource and Environmental Economics

3 Credits (3 Lectures)

Typically Spring

An introductory analysis of the agriculture economy dealing with the principles of economics and marketing of agriculture products.

### **AGB123 Agriculture Accounting**

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

Agriculture accounting principles and practices.

### **AGB124 Microcomputers in Agriculture**

3 Credits (2 Lectures, 3 Labs)  $\mathcal{R}$ 

**Typically Offered:** Fall and Spring

Introduction to the operation and capabilities of microcomputers in agriculture applications. Simple programming, data analysis, graphical display, spreadsheets and word processing are included. *Prerequisite: RDG094*.

# **AGB127 Farm Business Management IA**

5 Credits (2 Lectures, 9 Labs)

**Typically Offered:**Fall and Spring

Introduction to farm analysis and decision-making, including financial and physical records.

#### **AGB128 Farm Business Management IB**

5 Credits (2 Lectures, 9 Labs)

**Typically Offered:** Fall and Spring

Generally accepted accounting procedures ensuring accurate and timely farm business management information applied to the first fiscal cycle. *Prerequisite: AGB127*.

### **AGB130 Agricultural Leadership**

1 Credit (1 Lecture) 🚜

**Typically Offered:**Fall and Spring

Identification of agricultural leadership styles and roles; development of leadership techniques and skills required in working with organizations and youth groups, including communicating, guiding, evaluating and ethical considerations. May be taken two times for credit. Prerequisite: RDG094. Note: Fall semester course develops the November FFA Field Day; Spring semester course develops the February Field Day.



# AGB213 Introduction to Agricultural Commodity and Food Marketing

3 Credits (3 Lectures) 🚜

**Typically Offered:** Fall, Spring and Summer

An investigation of the organizational, institutional and economic principles that form the agricultural and food marketing systems in the United States. Applications of microeconomics, market performance and international trade analysis are included. *Prerequisite: RDG094*.

### **AGB225 Agriculture Business Analysis**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Agricultural business analysis using accounting to determine profit and loss, financing the credit needs of an agriculture business, creating budgets and prioritization of enterprises.

### **AGB228 Farm Business Management IIA**

5 Credits (2 Lectures, 9 Labs)

**Typically Offered:** Fall and Spring

Refinement of accounting and analysis skills with use of first and second year records to provide material for comparative analysis, budgeting and tax planning.

### **AGB230 Farm Business Management IIIA**

5 Credits (2 Lectures, 9 Labs)

**Typically Offered:** Fall and Spring

Instruction and assistance required to properly evaluate and reorganize the farm business, focusing on farm accounting and analysis of aspects identified in the organizational plan.

### **AGB231 Farm Business Management IIIB**

5 Credits (2 Lectures, 9 Labs)

**Typically Offered:** Fall and Spring

Farm business management necessary to complete the third year of farm analysis, emphasizing comparative analysis and business reorganization. *Prerequisite: AGB230*.

# AGB233 Farm Business Management Payroll

3 Credits (1 Lecture, 6 Labs)

**Typically Offered:**Fall and Spring

Procedures to enable participants to understand and use payroll computer software in farm business. *May be taken two times for credit. Note: Payroll accounting requirements span a full financial year.* 

# AGB234 Agricultural Leadership Development

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:**Fall and Spring

Characteristics of effective leaders, including leadership styles and strategies for the management and organization of youth groups in agriculture. Practice in leadership development techniques. *Prerequisite: RDG094*.

### AGB235 Advanced Farm Business Management

3 Credits (1 Lecture, 6 Labs)

**Typically Offered:**Fall and Spring

A seminar designed to provide educational support to assist in the selection of farm business management software updates. Emphasis is placed on update procedures and use of software enhancements. May be taken two times for credit. Prerequisite: Farm Business Management Certificate or equivalent.

# AGRICULTURE SCIENCE (AGS)

### **AGS101 World of Plants**

4 Credits (3 Lectures, 3 Labs) 🔁 POS 🎢

**Typically Offered:** Fall and Spring

The structure, function and use of plants in the living world and scientific experiences relating to the plant kingdom and the plant environment. *Prerequisite: RDG094*.

# AGS104 Agricultural Environmental Science

4 Credits (3 Lectures, 3 Labs) 🗟 🧷

**Typically Offered:** Fall, Spring and Summer

Science-based approaches to understanding the environmental concepts of ecosystems, population dynamics and agricultural sustainability. *Prerequisite: RDG094*.

### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos SUN Course:



### **AGS106 Entomology**

4 Credits (3 Lectures, 3 Labs) 🗟 🗷

**Typically Offered:** Fall and Spring

Identification, classification, control and management of insects and other land arthropods affecting humans and their environment. *Prerequisite: RDG094*.

### **AGS110 Agricultural Mechanics I**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Develop fundamental knowledge and skills related to production and urban agricultural industry, including operation and maintenance of mechanical hand tools, electrical wiring, plumbing and irrigation, arc, gas metal arc welding and oxyfuel welding. Field trips required. Necessary safety equipment will be provided by the student.

# AGS122 Natural Resources and Conservation

3 Credits (3 Lectures) **1W** 

**Typically Offered:** Fall and Spring

The conservation and multiple use of natural resources, including recreation, water, forestry, range, soils, wildlife, fossil and alternative fuels. *Prerequisite: ENG101* . *Corequisite: ENG102* .

### **AGS140 Agricultural Mechanics II**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Study of production and urban agricultural industry, including Global Positioning Systems, urban and production agricultural equipment, concrete construction, surveying, three-view drawings and bill of materials. Field trips required. Necessary safety equipment will be provided by the student. Prerequisite: AGS110 or instructor consent.

# AGS195A Careers in Environmental Science

1 Credit (.5 Lecture, 2 Labs) R

**Typically Offered:** Fall, Spring and Summer

An introduction to the various careers and industries associated with the environmental science field. Students build industry network relationships. *Field trip required. Corequisite: RDG094.* 

### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:

### **AGS196 Agriculture Internship**

1 Credit (1 Internship) 🚜

**Typically Offered:** Fall, Spring and Summer

Students work in agriculture internship placements tailored to the students' academic program, interests and skills. *May be taken more than four times for credit. Prerequisite: RDG094 and instructor consent.* 

### **AGS204 Environmental Sustainability**

3 Credits (3 Lectures) R

**Typically Offered:**Fall and Spring

Understanding the Earth's environment and the important challenges facing humanity, including climate change, pollution, and loss of biodiversity and water shortages. *Students must attend at least one local governmental environmental science forum. Prerequisite: RDG094.* 

#### **AGS221 Soil Science**

4 Credits (3 Lectures, 3 Labs) 🗟 🗷

**Typically Offered:** Fall and Spring

Fundamental principles of soil science, including the origin, nature and classification of soils; emphasizing the chemical, physical and biological properties in relation to growth; and nutrition of plants and non-plant uses of soils. *Prerequisite: RDG094*.

### **AGS235 Principles of Horticulture**

3 Credits (2 Lectures, 3 Labs) R

**Typically Offered:** Fall and Spring

Principles and skills in the science, operations and management of field, orchard and ornamental horticultural plant propagation using seed, cutting, budding and grafting in propagating plants for greenhouses and outdoor nurseries.

Prerequisites: AGS240, RDG094.

# **AGS240 Plant Biology**

4 Credits (3 Lectures, 3 Labs) 🗟 🥂

**Typically Offered:** Spring

A study of the origin, evolution, anatomy, function and ecology of land plants. Genetics, cellular structure, reproduction and the anatomy of monocot and dicot stems, roots, leaves, flowers and fruits are described. Includes aspects of plant physiology, photosynthesis, respiration and plant soil-water relationships. *Prerequisite: RDG094*.



### **AGS296 Agriculture Internship**

3 Credit (3 Internships)  $\mathcal{R}$ 

Typically Offered:

Fall, Spring and Summer

Students work in agriculture internship placements tailored to the students' academic program, interests and skills. May be taken two times for credit. Prerequisite: RDG094 and instructor consent. Note: Students may serve as an intern for a local agricultural company more than one semester during their CAC enrollment.

# ANIMAL SCIENCE (ANS)

### **ANS101 Animal Industry**

3 Credits (2 Lectures, 3 Labs) R

**Typically** Fall

Fundamental principles of animal, dairy, equine and poultry science focusing on production, marketing and distribution. *Prerequisite: RDG094*.

### **ANS102 Horsemanship I**

3 Credits (1 Lecture, 6 Labs)

Typically Offered:

Fall and Spring

Fundamental knowledge and skill development in horse anatomy and function. Conformation and riding is emphasized in this course. Individual help is given in areas needed. *The student must supply a horse and tack for this course*.

#### **ANS110 Horse Event Production**

3 Credits (2 Lectures, 3 Labs)

Typically Offered:

Fall and Spring

Horse event production for future equine professionals including organizing shows, events or clinics related to the equine industry.

### **ANS111 Horseshoeing I**

3 Credits (2 Lectures, 3 Labs)

Typically Offered:

Fall and Spring

Fundamentals for the beginning horseshoer, including horse anatomy and physiology relative to the proper shoeing of horses.

#### **ICON LEGEND**

AGEC: 📵

Dual Enrollment:

Intensive Writing: /W Programs of Stud

Reading Required: RDG094: -

Programs of Study/Tech Prep: POS
SUN Course:

### **ANS121 Equine Facility Management I**

1 Credit (1 Lecture)

Typically Offered:

Fall and Spring

This course is designed to educate students in safe and effective equine facilities management. Students boarding a horse in a CAC facility must sign up for the Equine Facility Management course.

### **ANS122 Equine Facilities Management II**

1 Credit (1 Lecture)

Typically Offered:

Fall and Spring

Students will plan, design and perform a cost analysis of a horse facility, paying attention to safety and ease of use. Students boarding a horse at Central Arizona College must sign up for this course.

### **ANS131 Training the Roping Horse I**

3 Credits (1 Lecture, 6 Labs)

Typically Offered:

Fall and Spring

Fundamentals of starting a horse in roping events including the many stages of roping, from starting the horse in the pen and finishing the horse out of a roping box. The emphasis is on correct horsemanship principals as well as physical and mental preparation of the horse and rider. The student must supply the horse and tack for this course. May be taken two times for credit.

# ANS172 Introduction to Western Horsemanship

3 Credits (2 Lectures, 3 Labs)

Typically Offered:

Fall

An introduction to the basic theories of western horsemanship with an emphasis on correct seat, leg and hand positions. Course includes proper equine handling techniques. Students will ride in a schooling show environment using western tack. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **ANS195 Careers in Veterinary Science**

1 Credit (1 Lecture)

Typically Offered:

Fall

An introduction to the various careers and industries associated with the veterinary science field. Students build industry network relationships. *Group field trip required*. *Recommended: RDG094*.



### **ANS200 Introduction to Equine Science**

3 Credits (3 Lectures) R

**Typically Offered:** Fall and Spring

Introduction to equine sciences including basic structure and function of equine anatomy, disease prevention and treatment, common breeds and nutritional requirements of horses. *Prerequisite: RDG094*.

### **ANS202 Horsemanship II**

3 Credits (1 Lecture, 6 Labs)

**Typically Offered:**Fall and Spring

Advanced Horsemanship emphasizing correct horsemanship practices, stabling, training, healthcare and parasite control, horse anatomy and function, conformation and riding (cues, aids, gaits and maneuvers). *The student must supply a horse and tack for this class. Prerequisite: ANS102*.

### **ANS211 Advanced Horseshoeing**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Advanced skills in shoeing horses to eliminate and/or correct lameness to the extent that the animal remains useful and pain free. *Prerequisite: ANS111*.

#### **ANS213 Animal Genetics**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Principles of domestic animal genetics, including molecular, classical and population genetics. *Prerequisite: BIO100 or higher*.

### ANS215 Anatomy and Physiology of Domestic Animals

4 Credits (3 Lectures, 3 Labs)

Typically Spring Offered:

Functional anatomy and systemic physiology of domestic animals with emphasis on physiological systems of importance to animal production. *Prerequisite: BIO100 or higher*.

### **ANS216 Equine Anatomy and Physiology**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Introduction to the structure and function of the equine. Includes cell structure, and anatomy and physiology of major systems including skeletal, muscular, circulatory and digestive systems. *Prerequisite: ANS200*.

### **ANS220 Artificial Insemination**

3 Credits (2 Lectures, 3 Labs)

Typically Spring

Anatomy and physiology of reproduction, heat detection, semen handling, herd management and the techniques of artificial insemination.

### **ANS223 Training for Timed Events**

3 Credits (1 Lecture, 6 Labs)

**Typically** Fall and Spring

Fundamental concepts and basic horsemanship skills applied to training a timed event horse, including conformation and bloodlines, types and uses of equipment and training methods. Physical and mental conditioning of both horse and rider along with fundamentals needed to help the horse perform to its highest potential in a competition setting. *May be taken three times for credit.* 

### **ANS226 Feeds and Feeding**

3 Credits (3 Lectures)

**Typically** Fall **Offered:** 

Identification and preparation of feeds, digestion and utilization of various feed products, and computation of standard rations for livestock.

# **ANS231 Training the Roping Horse II**

3 Credits (1 Lecture, 6 Labs)

**Typically Offered:** Fall and Spring

Advanced training of the roping horse, both in the pen and from the roping box. Emphasis on correct horsemanship principles, as well as, physical and mental preparation of the horse and rider. The student must supply the horse and tack for this course. May be taken two times for credit. Prerequisite: ANS131 or instructor consent.

ICON LEGEND

AGEC: Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS



# ANTHROPOLOGY (ASB)

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

3 Credits (3 Lectures) 🗟 🗷

**Typically Offered:**Fall and Spring

Evidence and processes of human evolution and of culture change. Includes primates, fossil hominids and their tools, race, variation, heredity, environment and human biology, prehistoric culture and society. *Field work activities may be required. Prerequisite: RDG094.* 

### **ASB102 Cultural Anthropology**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall and Spring

Principles and concepts of sociocultural anthropology and anthropological linguistics with illustrations from a variety of cultures around the world. *Field work activities may be required. Prerequisite: RDG094*.

#### **ASB201 Indians of the Southwest**

3 Credits (3 Lectures) 🖸 🇷

**Typically Offered:** Fall and Spring

Cultural geography and social institutions of contemporary Indian cultures of the American Southwest and their antecedents. Includes examining similarities and differences, gender roles, and the historic and contemporary relations of Southwestern Indian cultures and federal and state governments of Spain, Mexico and the U.S. *Field work activities may be required. Prerequisite: RDG094*.

# ARCHAEOLOGY (ARH)

### **ARH200 Principles of Archaeology**

3 Credits (3 Lectures) 🗟 🎗

**Typically Offered:**Every other spring; consult CAC Class Schedule.

History of archaeological research; survey of concepts, methods, and goals of archaeology as a subdiscipline of anthropology. Analysis and synthesis of archaeological data. Theories in archaeology, including theories of cultural evolution. *Prerequisite: RDG094*.

### ART (ART)

### **ART100 Art Appreciation**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall and Spring

Introduction to the history, vocabulary, materials and processes of art with an emphasis on painting, sculpture and architecture. *Prerequisite: RDG094*.

### **ART101 Two-Dimensional Design**

3 Credits (2 Lectures, 3 Labs) 🗟 🥂

**Typically Offered:** Fall, Spring and Summer

A study of perception, emphasizing the elements and principles of design as a basis of all creative work in the visual arts with emphasis on two-dimensional media. *Prerequisite: RDG094*.

### **ART102 Three-Dimensional Design**

3 Credits (2 Lectures, 3 Labs) ART1115 R

**Typically Offered:** Fall and Spring

A study of perception, emphasizing the elements and principles of design as a basis of all creative work in the visual arts, with emphasis on three-dimensional media. *Prerequisite: RDG094*.

### **ART103 Beginning Jewelry and Metalwork**

3 Credits (3 Lectures) 🖸 🗷

**Typically Offered:** Fall, Spring and Summer

Basic jewelry design and metalwork techniques for the beginner. *Prerequisite: RDG094*.

ICON LEGEND

AGEC: Dual Enrollment: Untensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: 

Reading Readin



### **ART104 Advanced Jewelry and Metalwork**

3 Credits (3 Lectures)

**Typically** Offered:

Fall, Spring and Summer

Advanced jewelry design and metalwork techniques. May be taken more than four times for credit. Prerequisite: ART103.

### **ART105 Ceramics I**

3 Credits (2 Lectures, 3 Labs) 🗟 🗷

**Typically** Offered:

Fall, Spring and Summer

An overview of hand building, wheel throwing, glazing, materials and concepts of ceramics as a foundation for further work in ceramic arts. Satisfactory/Unsatisfactory grading option available. Prerequisite: RDG094.

### **ART106 Ceramics II**

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

Advanced ceramic techniques including in-depth study of construction technique and/or surface treatment. May be taken up to four times for credit. Prerequisite: ART105.

### ART107 Drawing I

3 Credits (2 Lectures, 3 Labs) ART 1111

**Typically** Offered:

Fall, Spring and Summer

Introductory study of linear perspective, shading theory and composition using basic drawing media.

#### **ART108 Intermediate Drawing**

3 Credits (2 Lectures, 3 Labs)

**Typically** 

Fall, Spring and Summer Offered:

Drawing with emphasis upon the creative use of different techniques as a means of expression. May be taken up to four times for credit. Prerequisite: ART107. Recommended: *ART101*.

### **ART109 Color Theory**

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall

The study of color theory, color perception, psychology of color and their applications to visual design and composition.

#### **ICON LEGEND**

AGEC: 🔕

Dual Enrollment: 2

Intensive Writing: IW

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

### ART201 Painting I

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

An introduction to painting, techniques and subject matter with emphasis on skill building. Prerequisite: ART107 . Recommended: ART101.

### **ART202 Painting II**

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

Exploration of color, composition, techniques and subject matter in painting media. Prerequisite: ART201. Recommended: ART101.

### **ART203 Life Drawing**

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

An introduction to drawing the human figure emphasizing form, structure and anatomy. May be taken up to four times for credit. Prerequisite: ART107 ...

### **ART204 Watercolor Painting**

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

An introduction to the basic techniques of transparent watercolor with application of design and drawing principles in composition. May be taken up to four times for credit. Prerequisite: ART107 . Recommended: ART101.

### ART205 Intermediate Painting

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

Advanced projects in painting with emphasis on composition and personal stylistic development. May be taken up to four times for credit. Prerequisite: ART202.

# **ART206 Portrait Drawing**

3 Credits (2 Lectures, 3 Labs)  $\mathcal{R}$ 

**Typically** Offered:

Spring

Drawing the human figure with emphasis on the structure and anatomy of the face. May be taken up to four times for credit. *Prerequisites: ART107* , *RDG094*.



**ART207 Art History I** 

3 Credits (3 Lectures) ■ ART 1101 🗟 🎢

**Typically Offered:**Fall and Spring

A survey of the history of art from the Prehistoric Era through 1300 C.E. *Prerequisite: RDG094*.

**ART208 Art History II** 

3 Credits (3 Lectures) ART 1102 R

**Typically Offered:**Fall and Spring

A survey of the history of art from 1300 CE to the present. *Prerequisite: RDG094*.

**ART209 Visual Art, Music and Learning** 

3 Credits (3 Lectures) R

**Typically Offered:** Fall, Spring and Summer

An introduction to the effects of the arts on learning, student learning styles, visual culture and visual arts, and music theory and culture. *Prerequisite: RDG094. Cross Listed: MHL209.* 

**ART210 Ceramics Workshop** 

2 Credits (2 Lectures)

**Typically Offered:** Summer

An introductory course in the technology, processes, techniques and aesthetics of ceramic art. Satisfactory/ Unsatisfactory grading option is available. May be taken up to four times for credit. Prerequisite: ART105.

**ART215 Printmaking** 

3 Credits (2 Lectures, 3 Labs)

Typically Fall and Spring

An introduction to methods of producing fine art prints. May be taken up to four times for credit. Recommended: ART101, ART107.

ICON LEGEND

AGEC: Intensive Writing: IW

Dual Enrollment: Programs of Study/Tech Prep: Pos

Reading Required: RDG094: R

ASTRONOMY (AST)

**AST101 Survey of Astronomy** 

4 Credits (3 Lectures, 3 Labs) 🗟 🗷

**Typically Offered:**Fall and Spring

An introduction to the history of astronomy, use of astronomical instruments, celestial motion, space flight, planetary systems, structure and evolution of stars, galaxies and cosmology. *Labs will include nighttime observing sessions*. *Prerequisites: RDG094, MAT092*.

AUTOMOTIVE/DIESEL (AUT)

AUT121 Auto Body Repairing and Refinishing I

4 Credits (2 Lectures, 6 Labs)

**Typically Offered:**Fall

An introduction to body repair techniques including surface preparation and painting procedures.

AUT122 Auto Body Repairing and Refinishing II

4 Credits (2 Lectures, 6 Labs)

**Typically Offered:**Fall and Spring

Emphasis on detailed body repair procedures and advanced painting techniques. Principles of wire feed welding, unibody construction and repair. *Prerequisite: AUT121*.

BIOLOGY (BIO)

**BIO090 Survey of Science for Success** 

1 Credit (1 Lecture) 🚜

Typically Fall

An overview of various science disciplines, including biology, chemistry, environmental science, physical science, earth science and astronomy. Designed to help students see the various ways science is used in everyday life and to encourage students to pursue further courses in science. Satisfactory/ Unsatisfactory grading option is available. Corequisite: RDG094



### **BIO100 Biology Concepts**

4 Credits (3 Lectures, 3 Labs) 🗟 🗷

**Typically Offered:** Fall, Spring and Summer

Basic principles and concepts of biology. Exploration of methods of scientific inquiry and behavior of matter and energy in biological systems. Fieldtrips may be required. *Prerequisite: RDG094*.

### **BIO109 Natural History of the Southwest**

4 Credits (3 Lectures, 3 Labs) 🗟 🗷

**Typically Offered:** Fall and Spring

A study of the common plants and animals of the southwest, including identification, distribution, adaptations, behavior and ecology; including regional geography/climate. Introduction to basic field and laboratory techniques used in natural history studies with an emphasis on the Sonoran Desert. Field trips required at student's expense. *Prerequisite: RDG094*.

### **BIO156 Human Biology for Allied Health**

4 Credits (3 Lectures, 3 Labs) 🔕 🚜

**Typically Offered:** Fall, Spring and Summer

An introductory course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, genetics and microbiology. *Prerequisite: RDG094*.

# **BIO160 Introduction to Human Anatomy** and Physiology

4 Credits (3 Lectures, 3 Labs) 🗟 🧷

**Typically Offered:** Fall, Spring and Summer

An introduction to and study of the structure and function of the human body. Structural organization, homeostasis, control mechanisms and the major organ systems of the body will be emphasized. *Prerequisite: RDG094*.

# **BIO181 General Biology** I

4 Credits (3 Lectures, 3 Labs) <u>BIO</u> 1181 🗟 🛂 🥂

**Typically Offered:** Fall, Spring and Summer

Biological principles of structure and function at the molecular and cellular levels, and processes of scientific inquiry. CHM130 or one year of high school chemistry is recommended. Field trips may be required at student expense *Prerequisite:RDG094*.

# AGEC: Dual Enrollment:

Intensive Writing: //W Programs of Study/Tech Prep: POS
Reading Required: RDG094: 
SUN Course:

### **BIO182 General Biology II**

4 Credits (3 Lectures, 3 Labs) BIO 1182

**Typically Offered:** Fall and Spring

Basic evolution and biological diversity, ecology, plant form and function, and animal form and function are explored through processes of scientific inquiry. Field trips may be required at student expense. *Prerequisite: BIO181* .

### **BIO201 Human Anatomy - Physiology I**

4 Credits (3 Lectures, 3 Labs) BIO 2201 R

**Typically Offered:** Fall, Spring and Summer

Study of structure and function of the human body. Topics include a general introduction and basic orientation of the human body, basic chemistry for biology, cells, tissues, integumentary system, skeletal system, muscular system, nervous system and the special senses. *Prerequisites: RDG094 and (BIO156 or BIO181 or one year of high school biology with a grade of "C" or better).* 

### **BIO202 Human Anatomy - Physiology II**

4 Credits (3 Lectures, 3 Labs) BIO 2202 R

**Typically Offered:** Fall, Spring and Summer

Continuation of structure and function of the human body. Topics include endocrine, blood, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, acid-base and fluid/electrolyte balance, pregnancy and human development and human genetics. *Prerequisites: BIO201*, *RDG094*.

# **BIO205 Microbiology**

4 Credits (3 Lectures, 3 Labs) BIO 2205 R

**Typically Offered:** Fall, Spring and Summer

Structure and function of micro-organisms and the role they play in the environment and human disease, with emphasis on the medical importance of microbes. Laboratory work includes the handling and identification of micro-organisms. Prerequisites: RDG094 and (BIO156 or BIO181 or one year of high school biology with a grade of "C" or better; CHM130 or higher with laboratory or one year of high school chemistry with a grade of "C" or better).



### **BIO206 Biotechnology Instrumentation I**

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Principles and methodologies of recombinant DNA technology, including preparation of solutions and growth media in a laboratory setting and genetic analyses. *Prerequisite: BIO181 Recommended: Completion of BIO181 with a grade of "C" or better.* 

### **BIO207 Biotechnology Instrumentation II**

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Principles and methodologies of protein expression, isolation, identification and purification, including immunological and cell culture techniques. *Prerequisite: BIO206. Recommended: Completion of BIO206 with a grade of "C" or better.* 

#### **BIO240 General Genetics**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Intensive introduction to the field of genetics including historical perspective, Mendelian insights and patterns of inheritance, exceptions to expected Mendelian ratios, quantitative genetics, non-Mendelian inheritance, pedigree analysis, molecular levels of gene expression and genetic control of metabolic pathways. This course also includes analytic dissection of molecular mechanisms behind DNA replication, transcription, translation and gene regulation in both prokaryotes and eukaryotes, population genetics, genetics of behavior and genetics of evolution and speciation.

\*Prerequisite: BIO181\*\*

\*\*with a grade of "C" or better.\*

# BIO299 Introduction to Co-Op: Biotechnology Internship

1 Credit (1 Internship - 45 hours)

**Typically Offered:** Fall, Spring and Summer

Students who wish to gain more experience in the field of biotechnology should be encouraged to do so by receiving credit for their work, especially in the case of long-term internship placement. Students may complete an internship each semester including summers for a total of six semesters. May be taken six times for credit. Prerequisite: BIO206. Recommended: Completion of BIO206 with a grade of "C" or better.

#### **ICON LEGEND**

AGEC: Dual Enrollment:

Intensive Writing: // Programs of Study/Tech Prep: POS
Reading Required: RDG094: 
SUN Course:

# BUSINESS

(BUS)

### **BUS100 Introduction to Business**

3 Credits (3 Lectures) POS R

**Typically Offered:** Fall, Spring and Summer

Business administration trends, technology, communication, ethics, economics, business organization and ownership including entrepreneurship, management and production, marketing, finances, laws and regulations and human resources management. *Prerequisite: RDG094*.

#### **BUS101 Business Mathematics**

3 Credits (3 Lectures) POS R

**Typically Offered:** Fall and Spring

A study of mathematical computations as applied in various business transactions including discounts, interest, payroll, bank reconciliation and basic business statistics. *Prerequisites: MAT082 or higher; RDG094*.

### **BUS120 Personal Money Management**

3 Credits (3 Lectures) POS R

**Typically** Fall

A study of consumer decision-making in a technological society where individuals have limited time and income, including planning and budgeting for food, shelter, transportation, healthcare, insurance, savings, investments, debt and taxes. *Prerequisite: RDG094*.

### **BUS122 Small Business Management**

3 Credits (3 Lectures) 🚜

**Typically Offered:**Fall and Spring

Factors in planning, owning and managing a small business with use of case materials to develop entrepreneurship and managerial/marketing skills. *Prerequisite: RDG094*.

#### **BUS123 Business Relations**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Fall, Spring and Summer

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



### **BUS180 Introduction to Marketing**

3 Credits (3 Lectures) POS  $\mathcal{R}$ 

**Typically Offered:** Fall and Spring

An introduction to marketing, including product, principles, practices and total marketing process planning and analysis. *Prerequisite: RDG094*.

# **BUS190 Principles of Management and Leadership**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall and Spring

A comparative examination of classic and contemporary theories of management and leadership to include the social, ethical, legal and team-building implications of workplace issues. *Prerequisite: RDG094*.

### **BUS201 Legal Environment of Business**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:**Fall and Spring

An examination of the legal framework governing rules of conduct among businesses and the legal implications of establishing business policy. *Prerequisite: RDG094*.

#### **BUS207 Business Communications**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Written and oral communication in organizations with emphasis on writing business letters, memos and reports; utilizing electronic and social media effectively in a business environment; speaking and listening skills; communication theory, critical analysis of appropriate writing; and communication in various business situations. *Prerequisite ENG101* .

#### **BUS208 Business Statistics**

3 Credits (3 Lectures) 厄 BUS 2201 🥂

**Typically Offered:**Fall and Spring

A study of business applications using descriptive and inferential statistics, measurement of relationships and statistical process control management techniques.

\*Prerequisites: RDG094; MAT151\*\* (CIS120\*\* or instructor consent).

# **BUS250 Planning the Entrepreneurial Venture**

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

Research, develop and write detailed start-up business plans to create a successful business. Note: this course is a combination of BUS250A, BUS250B, BUS250C, and BUS250D.

### **BUS250A Entrepreneurship - Introduction**

.75 Credit (.75 Lecture)

**Typically Offered:** Consult CAC Class Schedule.

Investigate business ideas, examine traits of successful entrepreneurs, assess business opportunities and feasibility, and evaluate legal structures and management infrastructure.

# **BUS250B Entrepreneurship - Market Planning**

.75 Credit (.75 Lecture)

Typically Offered: Consult CAC Class Schedule.

Conduct research on a chosen product/service in relation to the industry, competition and other market considerations.

# **BUS250C Entrepreneurship - Financial Planning**

.75 Credit (.75 Lecture)

Typically Offered: Consult CAC Class Schedule.

Project the financial situation of a business concept including needed start-up funds, pricing strategies and sources of financing using break-even analysis, basic cash accounting systems and financial ratios.

# BUS250D Entrepreneurship – The Business Plan

.75 Credi s (.75 Lecture)

**Typically Offered:** Consult CAC Class Schedule.

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

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: //W
Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS



### **BUS260 Applied Business Seminar**

3 Credits (3 Lectures)

Typically Spring

A capstone course for business students completing degree requirements. Students develop career goals, interact and apply their skills as a team to research business problems and critique actual business situations within the community. Open to students who have successfully completed a minimum of 36 college credit hours, offered via ITV, face to face evening course during the Spring Semester only. *Prerequisites:* CIS120 and successful completion of 36 college credit hours.

# CHEMISTRY (CHM)

### **CHM130 Fundamental Chemistry**

4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 1130 R

**Typically Offered:** Fall, Spring and Summer

The basic aspects of chemistry, including matter, energy, measurement, atoms, molecules, ions, chemical bonding, chemical arithmetic and nuclear reactions. Includes one credit of in-person labs. Student will receive credit toward their degree for only CHM 130 or CHM 151, but not both. Prerequisites: MAT092, RDG094.

### **CHM138 Chemistry for Allied Health**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Fall, Spring and Summer

Introduction to general, organic and biological chemistry for health. Includes measurements, atomic structure, bonding, nomenclature, states of matter, solutions, reactions, hydrocarbons, functional groups, carbohydrates, lipids, proteins, enzymes and metabolic pathways. *Prerequisites: BUS101 or MAT092 OR MAT101 or higher; RDG094.* 

# CHM138LL Chemistry for Allied Health Lab

1 Credit (2 Labs, 1 Recitation - 45 hours total)  $\mathcal{R}$ 

**Typically Offered:** Fall and Spring

Introduction to laboratory skills and activities related to general, organic and biological chemistry for allied health. *Prerequisites: RDG094 and (BUS101 or MAT092 or MAT101 or higher). Corequisite: CHM138.* 

### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos

Reading Required: RDG094: R

SUN Course:

### **CHM151 General Chemistry I**

4 Credits (3 Lectures, 2 Labs, 1 Recitation) OCHM 1151 3 R

**Typically Offered:**Fall and Spring

Chemistry topics including matter, energy, measurement, atoms, ions, molecules, chemical formulas and equations, chemical arithmetic, thermochemistry, states of matter, chemical bonding and solutions are covered. *Includes one credit of in-person labs. Student will receive credit toward their degree for only CHM 130 or CHM 151, but not both.*Prerequisites: RDG094; MAT121 or MAT122; CHM130 or CHM138 or one year of high school chemistry with a grade of "C" or better.

### **CHM152 General Chemistry II**

4 Credits (3 Lectures, 2 Labs, 1 Recitation) OCHM 1152 🕟

**Typically Offered:** Fall and Spring

Topics such as chemical kinetics, spontaneity of chemical change, chemical equilibrium, precipitation reactions, acid and base equilibria, complex ions, oxidation-reduction reactions and nuclear reactions are covered. *Includes one credit of inperson labs. Prerequisites: CHM151*.

### **CHM235 General Organic Chemistry I**

4 Credits (3 Lectures, 2 Labs, 1 Recitation) CHM 2235

**Typically** Fall

A comprehensive study of organic chemistry with emphasis on reactivity and synthesis. Topics include the areas of structure and bonding, molecular properties, alkanes, cycloalkanes, stereochemistry, mechanisms for organic reactions, alkenes, alkynes, alkyl halides, conjugated dienes and alcohols. Inperson lab experience includes laboratory techniques and practice with emphasis on separations, purification, synthesis, halide reactivity and spectroscopic identification of organic structures. *Prerequisite: CHM152*.

### **CHM236 General Organic Chemistry II**

4 Credits (3 Lectures, 2 Labs, 1 Recitation) OCHM 2236

**Typically Offered:** Spring

A continuation of CHM235, CHM236 explores the general principles of organic chemistry with advanced continued emphasis on reactivity and synthesis. Topics covered are ethers and epoxies, aldehydes and ketones, carboxylic acids and their derivatives, carbohydrates, lipids, amines, amino acids, polymers and aromatic compounds. In-person lab experience includes additional techniques in organic chemistry; preparation, separation and identification of organic compounds, including polymers, benzocaine, soaps and amines. *Prerequisite: CHM235*.



### **CHINESE** (CHI)

### **CHI101 Elementary Chinese**

5 Credits (4 Lectures, 1 Recitation)

**Typically** Fall Offered:

Modern spoken and written Chinese (Mandarin) for non-native speakers. Introduction to proper pronunciation, grammar, beginning conversation and the development of reading and writing skills. Survey of cultural aspects of the Mandarin Chinese language.

### **CHI102 Elementary Chinese II**

5 Credits (4 Lectures, 1 Recitation)

**Typically** Spring Offered:

A continuation of CHI101 emphasizing modern spoken and written Mandarin Chinese for non-native speakers. Continued development of proper pronunciation, grammar, conversation and reading and writing skills. Survey of cultural norms, beliefs and traditions from areas where Mandarin Chinese is spoken. Prerequisite: CHI101.

# **CIVIL TECHNOLOGY** (CET)

### **CET101 Introduction to Surveying for Heavy Equipment Operators**

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Fall, Spring and Summer

Theory and application of plane surveying, including horizontal and vertical measurements, differential leveling, topographic mapping and ground safety.

### **CET125 Introduction to Earthmoving Methods and Operations**

3 Credits (3 Lectures)

**Typically** Offered:

Fall and Spring

Introduction to the process of earthmoving, including capabilities, limitations, uses and maintenance of heavy equipment employed in heavy construction and mining. Use mathematical formulas and calculations as well as computer software to determine owner costs and equipment requirements.

### **ICON LEGEND**

AGEC: 💽

Dual Enrollment:

Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

### **CET221 Basic Surveying and Grade** Staking

4 Credits (2 Lectures, 6 Labs)

**Typically** Fall and Spring Offered:

Theory and application of plane surveying, including horizontal and vertical measurements, differential leveling, topographic mapping and construction staking. Grade staking skills including percent, ratio, stake reading, hubs and lath, grade transfers, offsets, laser use and ground safety.

### COMMUNICATIONS (COM)

### **COM100 Fundamentals of Human Communication**

**Typically** Offered:

Fall, Spring and Summer

Concepts of the human communication process. Basic theory and practical skills in small group, interpersonal and public contexts. Prerequisites: ENG100, RDG094.

### **COM101 Interpersonal Communication**

3 Credits (3 Lectures) 🗟 🎢

**Typically** Offered:

Fall and Spring

Theoretical and practical examination of communication skills in interpersonal settings. Emphasis on the factors and skills necessary for the development of interpersonal communication competence. Prerequisite: RDG094.

### **COM202 Introduction to Group** Communication

3 Credits (3 Lectures) 🗟 🇷

**Typically** Offered:

Fall and Spring

Principles and practices of effective communication in the small group setting, including problem solving and decision making processes, skill development for participation, leadership and teamwork. Prerequisite: RDG094.

### **COM206 Public Speaking**

3 Credits (3 Lectures) 🗟 🗷

**Typically** Offered:

Fall and Spring

Principles and practice of public speaking, with special attention given to the selection, organization, and presentation of material based upon audience analysis as well as acquisition of confidence and speaking poise. *Prerequisites: ENG101* , RDG094.



#### **COM263 Intercultural Communication**

3 Credits (3 Lectures) 🗟 🗷

**Typically Offered:** Fall and Spring

Basic concepts, principles, and skills for improving communication between persons from different minority, racial, ethnic and cultural backgrounds. *Prerequisite: RDG094*.

# COMPUTER BUSINESS APPLICATIONS (CBA)

# CBA102A Workshop for MS Word – Introduction

.5 Credit (.5 Lecture)

Typically Workshop offered as needed.

Offered: Consult CAC Class Schedule.

Introduction to MS Office Word using basic skills needed to create, format and edit business documents. *Prerequisites: Basic Windows and file management knowledge.* 

### **CBA110A Computers for Beginners**

1 Credit (1 Lecture)

**Typically** Workshop offered as needed. **Offered:** Consult CAC Class Schedule.

Introduction to microcomputers, Microsoft Windows operating system, Microsoft programs and accessories and Internet Explorer.

#### **CBA110C MS Windows - Basic**

1 Credit (3 Labs)

**Typically Offered:** Open Entry/Closed Exit

Introduction to Microsoft Windows operating system, programs, and file management.

### **CBA111A Internet Explorer**

1 Credit (3 Labs)

**Typically Offered:** Open Entry/Closed Exit

An introduction to the Internet using Internet Explorer.

Prerequisites: Basic Windows and file management knowledge.

#### **CBA112A MS Word - Basic**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Introduction to Microsoft Word covering the basics of creating business documents. *Recommended: Basic Windows and file management knowledge*.

#### **CBA112B MS Word – Intermediate**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Create multi-paged documents and web pages with enhance styles, charts and lists in MS Word. *Prerequisites: CBA112A or instructor consent. Recommended: Basic Windows and file management knowledge*.

### **CBA112C MS Word - Advanced**

1 Credit (3 Labs)

**Typically Offered:**Open Entry/Closed Exit

Build advanced business documents that include macros, navigation, hyperlinks and forms in MS Word. *Prerequisites: CBA112B or instructor consent. Recommended: Knowledge of computer basics and file management.* 

### **CBA113A MS Excel - Basic**

1 Credit (3 Labs) POS

**Typically Offered:**Open Entry/Closed Exit

Introduction to MS Excel covering basic spreadsheets and charts. *Recommended: Basic Windows and file management knowledge*.

#### **CBA113B MS Excel – Intermediate**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Use MS Office Excel financial functions, database tools and enhanced, specialty charts to process and display data. *Prerequisites: CBA113A or instructor consent.* 

### **CBA113C MS Excel – Advanced**

1 Credit (3 Labs)

**Typically Offered:** Open Entry/Closed Exit

Use Data analysis, PivotTables and Macros in MS Excel to solve business problems. *Recommended: File management and Operating system knowledge. Prerequisite: CBA113B or instructor consent.* 

ICON LEGEND

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos



#### **CBA114A MS Access – Basic**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Introduction to MS Access and database basics. *Prerequisites: Basic Windows and file management knowledge.* 

### **CBA114B MS Access – Intermediate**

1 Credit (3 Labs)

Typically Open Entry/Closed Exit

Analyze database designs; enhance queries, forms and reports; and create subforms and subreports in MS Access.

Prerequisite: CBA114A.

#### **CBA114C MS Access – Advanced**

1 Credit (3 Labs)

Typically Open Entry/Closed Exit

Create advanced queries, reports, macros, and modules and manage a database and its objects in MS Access.

Prerequisite: CBA114B.

#### **CBA116A MS PowerPoint – Basic**

1 Credit (3 Labs) POS

Typically Open Entry/Closed Exit

Introduction to creating, editing and presenting basic presentations in PowerPoint. *Prerequisites: Basic Window and file management knowledge*.

### **CBA116B MS PowerPoint – Advanced**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Professional delivery of presentations, advanced graphics, tables, charts and templates. *Prerequisite: CBA116A*.

#### **CBA117A MS Publisher – Basic**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Create simple publications using MS Publisher.

Prerequisites: Basic Windows and file management knowledge.

#### **CBA117B MS Publisher – Intermediate**

1 Credit (3 Labs) POS

**Typically Offered:** Open Entry/Closed Exit

Create customized publications, business forms, tables and web pages using MS Publisher. *Prerequisite: CBA117A*.

### **CBA118 MS Outlook**

1 Credit (1 Lecture) POS

**Typically Offered:**Fall, Spring, Summer and Open Entry/Closed Exit

Using Microsoft Outlook to send, receive and organize email, create and organize contacts, and schedule appointments and tasks. *Prerequisites: Basic Windows and file management knowledge*.

### **CBA122A MS Word - Module 1**

2 Credits (1 Lecture, 3 Labs)

Typically Open Entry/Closed Exit

Basic features of Microsoft Word necessary to create business and personal documents. *Prerequisites: Basic Windows and file management knowledge.* 

#### **CBA122B MS Word – Module 2**

2 Credits (1 Lecture, 3 Labs)

Typically Open Entry/Closed Exit

Advanced features of Microsoft Word for collaboration, productivity, desktop and web publishing and creating forms and macros. *Prerequisite: CBA122A*.

# **CBA133A Spreadsheet Applications in Excel**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Create, format, and print both structured and "what-if" spreadsheets using formulas and functions, charting and analysis. Skills learned will cover the Core Level skills for Microsoft Certified Application Specialist (MCAS): Microsoft Office Excel 2007. *Prerequisites: Basic Windows and file management knowledge; BUS101 OR MAT092*.

# **CBA133B Advanced Spreadsheet Applications in Excel**

3 Credits (2 Lectures, 3 Labs)

Typically Spring

Use of advanced features of MS Excel to import and export data, use templates, generate reports, use macros, audit a worksheet and use analysis tools. *Prerequisite: CBA133A*.

**ICON LEGEND** 

AGEC: Dual Enrollment: 

Intensive Writing: IW Programs of Study/Tech Prop: POS

Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



# **CBA134A Database Management in Access**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

Design and create relational databases. Query, report and produce forms on the data and publish to the Web. Skills learned will cover the Core Level skills for Microsoft Certified Application Specialist (MCAS): Microsoft Office Access 2007. *Prerequisites: Basic Windows and file management knowledge.* 

# **CBA134B Advanced Database Management in Access**

3 Credits (2.75 Lectures, 1 Lab)

**Typically** Spring

Use of advanced features of software to customize a database, do advanced queries and reports, automate tasks and prepare supporting documentation. *Prerequisite: CBA134A*.

### **CBA210 Web Development Tools**

3 Credits (2 Lectures, 3 Labs)

Typically Spring

Theory, design and Web construction covering: information architecture, Web project management, scenario development, performance evaluations, third-generation Websites and browser incompatibility. Create and manage Websites using current tools such as Dreamweaver, Flash, Dynamic HTML and various multimedia and standardized CSS. Satisfactory/ Unsatisfactory grading option is available. Prerequisite: CIS120.

### **CBA211 JavaScript Programming**

3 Credits (2 Lectures, 3 Labs)

Typically Fall

Design client-side, platform-independent solutions using the JavaScript language; covering JavaScript programs, JavaScript object model, control program flow, validate forms, animate images, target frames and cookies. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120, CBA210.

#### **CBA212 Adobe Flash Animation**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

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

#### **ICON LEGEND**

AGEC: Intensive Writing: IW Programs
Reading Required: RDG094: R

Dual Enrollment: 
Programs of Study/Tech Prep: POS
SUN Course:

# COMPUTER INFORMATION SYSTEMS (CIS)

# CIS110 Fundamentals of Computer Literacy

3 Credits (2 Lectures, 3 Labs) POS

**Typically Offered:** Fall, Spring and Summer

Introduction to microcomputer technology, including terminology, software applications, operating systems, tools, basic set up and maintenance. Also includes Internet searches, and evaluation of websites' validity and reliability of information. Use Microsoft (MS) Word, MS Excel, MS Access and MS PowerPoint to analyze data, solve problems, and present solutions. *Not designed for CIS degree or CIS Certificate seekers. Prerequisite RDG091*.

#### **CIS111 Introduction to the Internet**

2 Credits (2 Lectures)

Typically Fall and Summer

An introduction to the structure, tools and terminology of the Internet relating to web browsers, email, search engines, communications, security and e-commerce.

### **CIS112 Web Page Design Fundamentals**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

Design and build web pages using HTML/XHTML and cascading style sheets.

# **CIS120 Survey of Computer Information Systems**

3 Credits (2 Lectures, 3 Labs) DCIS1120 R

**Typically Offered:** Fall, Spring and Summer

Survey of computer information systems, fundamental computer concepts, programming techniques, networking and emerging technologies. Hands-on experience with Microsoft Office application software with an emphasis on database and spreadsheets for problem solving. *Prerequisite: RDG094*.

# CIS121 Microcomputer Operating System Fundamentals

3 Credits (2 Lectures, 3 Labs) R

**Typically Offered:** Fall and Spring

Installations, administrations, upgrades, configuration and diagnostics of most recent microcomputer operating systems. Registry and Command-line techniques to optimize and customize a microcomputer operating system. *May lead to Microsoft Certification. Prerequisite: RDG094.* 



### **CIS123 Introduction to Programming**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Introduction to structured programming techniques and various logic tools including Flowcharting, pseudocode and other tools that represent algorithms. Problem analysis is based on the input/process/output cycle using appropriate case studies. Prerequisite: CIS120 .

#### **CIS129 Database Fundamentals**

3 Credits (2 Lectures, 3 Labs)

Typically Workshop offered as needed. Offered: Consult CAC Class Schedule.

Fundamentals of relational database design, implementation and management, including referential integrity, concurrency, data validity, entity-relationships, Structured Query Language and database normalization. Prerequisite: CIS120 0.

### **CIS130 Networking Essentials**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall Offered:

Introduction to networking principles. Topics include: sevenlayered Open Systems Interconnection (OSI) Model of networking, physical and logical network topologies, networking protocols, network services, network fault tolerance and hardware/software devices used in a network. May lead to Network+ Certification. Satisfactory/ Unsatisfactory grading option is available. Prerequisite: CIS121.

### CIS135 Principles of Telephony and **Telecommunications**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

The history of telecommunications and telephony technologies, including the underlying electronics, transmission media, voice, wireless, data communication solution functions and features. This course also covers wide area connectivity. Internet-enabled communications, telephony network management, policies and contracts. *Prerequisite: CIS120* .

#### **CIS150 Windows Server**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

A study of server network operating systems including Active Directory, security policy, group policies, Internet Information Server (IIS), configure Domain Name Services (DNS), file and print services and building trust relationship between servers. Uses the most current version of the software. May lead to Microsoft Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120, CIS121.

#### **CIS152 Network Infrastructure**

3 Credits (2 Lectures, 3 Labs)

**Typically** Spring Offered:

Windows 2008 networking, naming services, connectivity and security services, managing IP routing, remote access, IP security, network address translation and virtual private networking. May lead to Microsoft Certification. Satisfactory/ Unsatisfactory grading option is available. Prerequisite: CIS150.

### **CIS153 Network Security**

3 Credits (2 Lectures, 3 Labs)

**Typically** Spring Offered:

Identify security risks and plan and design Windows 2008 security solutions by securing network resources, services, communications, remote access users and designing secure access to the Internet. May lead to Security+ Certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS152.

### **CIS157 Computer Forensics and Investigation**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Introduction to the acquisition, authentication, reconstruction, examination and analysis of data stored on electronic media. Topics include: ethics, rules of evidence, hardware and software tools, various operating systems, forensic lab setup and the investigational process. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CIS120, CIS121.

#### **CIS181 C#.NET**

4 Credits (3 Lectures, 3 Labs)

**Typically** Fall Offered:

Object-oriented programming language to create visual applications for Windows, MS Office, the web, controls and more. Created to work within the .NET framework. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS123.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment:

Intensive Writing: IW Programs of Study/Tech Prep: POS Reading Required: RDG094: R



### **CIS213 Linux Server**

3 Credits (2 Lectures, 3 Labs)

Typically Fall

The migration of other networks into Microsoft networks and the basics of networking using Linux operating systems. Focus on connecting different network operating systems and migration of users, data and security policies from one network to another. May lead to Linux Certification. Satisfactory/ Unsatisfactory grading option is available. Prerequisite: CIS150.

### **CIS214 Application Development in Excel**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

Application development in Microsoft Excel focusing on the programming behind developing detailed spreadsheet applications with games. Content includes Visual Basic for Applications (VBA) fundamentals, an enhanced review of Macros, XML and Excel objects. Satisfactory/Unsatisfactory grading option available. Prerequisites: CIS123 OR (CIS120 and CBA133A). Recommended: CBA133A recommended for programming students.

#### **CIS215 CISCO Routers**

3 Credits (2 Lectures, 3 Labs)

Typically Spring

CISCO routers installation, setup and configuration. Various routing protocols such as BGP, EBGP, OSPF, and IGP will be used to configure and troubleshoot routers. *May lead to CISCO Certified System Administrator Certification. Prerequisite: CIS150.* 

### **CIS216 Java Programming**

4 Credits (3 Lectures, 3 Labs)

Typically Spring

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 is available. Prerequisite: CIS123.

### **CIS217 Application Development in Access**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Spring

Applications development in Microsoft Access focusing on the programming behind developing database applications, including Visual Basic for Applications (VBA) fundamentals, Macros, Structured Query Language (SQL) and data source connectivity using ADO (ActiveX Data Objects). The course also covers an enhanced review of tables, queries, forms and reports. Satisfactory/Unsatisfactory grading option is available. Prerequisites: (CIS120 AND CIS123) OR (CIS120 AND CBA134A). Recommended: CBA134A recommended for programming students.

### CIS218 C++ Programming

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:** Spring

Comprehensive coverage of C++ programming and data structure topics through a problem-solving approach. May lead to IBM Developer Certification. *Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS123.* 

### **CIS219 Exchange Server**

3 Credits (2 Lectures, 3 Labs)

Typically Fall Offered:

Exchange messaging and collaboration platform that provides e-mail, calendaring, instant messaging, chat and conferencing. May lead to Microsoft Certification. Uses the most current version of the software. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS152.

# **CIS220 Security for Wireless Networks**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

Identify security risks, plan and design wireless security solutions based on security models (transitional, enterprise, personal) and security policies - acceptable use policy, password management policy, public access network use policy and virtual private network (VPN) policy. Discuss authentication, encryption, passive discovery, active attacks, monitoring and maintenance. Supports preparation for Certification Wireless Service Providers (CWSP) certification. Satisfactory/Unsatisfactory grading option is available. Prerequisite: CIS153.

### **ICON LEGEND**

Intensive Writing: IW

AGEC: 😥

Dual Enrollment:

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



### **CIS233 Web Application Development Using PHP**

3 Credits (2 Lectures, 3 Labs)

**Typically** Spring Offered:

A cutting edge Web development dedicated to covering the latest in emerging Internet and Web technologies. Design and maintain interactive and dynamic Web applications with the server-based scripting language PHP/MySQL. Prerequisites: CIS123, CIS150.

### **CIS235 Oracle Forms and Reports**

3 Credits (2 Lectures, 3 Labs)

**Typically** Workshop offered as needed. Offered: Consult CAC Class Schedule.

The tools and utilities used for information gathering and management, including forms, reports, database mining, data warehousing, database performance monitoring and more. Prerequisite: CIS129.

### **CIS237 Oracle Administration**

3 Credits (2 Lectures, 3 Labs)

Workshop offered as needed. **Typically** Offered: Consult CAC Class Schedule.

Internal structures and interactions of an Oracle database with emphasis on managing database capabilities in an effective, efficient manner, including SQL, database tuning, security, backup and recovery. Uses the most current version of the software. Prerequisite: CIS129.

### **COMMUNITY PUBLIC HEALTH** (CPH)

### **CPH100 Introduction to Public Health**

3 Credits (3 Lectures) R

**Typically** Fall, Spring and Summer Offered:

Introduction to the varied disciplines of public health and applications of public health including analytical methods, biomedical basis, social and behavioral factors, environmental issues, medical care and the future of public health. Prerequisites: RDG094 and High School Diploma or equivalent.

### **CPH178 Personal Health and Community** Wellness

3 Credits (3 Lectures)

**Typically** Consult CAC Class Schedule Offered:

Analyze basic personal and community health problems as well as long-term benefits and strategies for maintaining a high level of wellness for living in today's world. Use current scientific information to promote individual and community health. Prerequisites: CPH100.

### **CPH296 Public Health Internship**

2 Credits (2 Internships - 90 hours)

**Typically** Fall and Spring Offered:

Evaluate real life situations in the community public health sector and the diverse roles and responsibilities of various public health officials and employees. Students will observe public health professionals applying ethics, public policy principles and best practices in daily operations and special case scenarios. Satisfactory/Unsatisfactory grading option is available. Prerequisites: CPH100 and CPH178. Recommendations: Good communication skills and an interest in Public Health.

**ICON LEGEND** 

AGEC: 🔕 Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS



### **COUNSELING/PERSONAL DEVELOPMENT** (CPD)

### **CPD101 Orientation to Student Development**

1 Credit (1 Lecture)

**Typically** Summer Offered:

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

### **CPD110 Orientation to College**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

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)  $\mathcal{R}$ 

**Typically** Consult CAC Class Schedule. Offered:

Designed to assist students in career exploration through an awareness of self and educational planning. Includes topics such as current occupational trends, personal/vocational skills and interests and career planning. Satisfactory/Unsatisfactory grading option is available. Corequisite: RDG094.

### **CPD125 Portfolio of Prior Learning**

2 Credits (2 Lectures)

**Typically** Consult CAC Class Schedule. Offered:

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) R

**Typically** Consult CAC Class Schedule. Offered:

Research strategies and how to incorporate them into the writing process. Students will learn about the types of information resources, the strategies for effectively using them and how to evaluate information for credibility. The course will also focus on the legal and ethical use of information, including guidelines for citing resources. Prerequisites: RDG094 and basic computer skills.

### **CPD170 Transfer Preparation**

2 Credits (2 Lectures)

**Typically** Consult CAC Class Schedule. Offered:

Students will obtain knowledge and develop a plan to prepare for a successful transition to a university. The course includes selecting a degree/major, introduction to transfer resources, development of a personal transfer plan and general transition planning.

### **CPD220 Student Success Capstone**

3 Credits (3 Lectures)

**Typically** Consult CAC Class Schedule. Offered:

This course serves as the capstone for CPD110 whereby the coordinated academic, personal and professional development efforts contained in the community college experience are made evident by means of the content within an individual student e-Portfolio. Students, with guidance, create an exemplary e-portfolio demonstrating their skills, knowledge and abilities upon graduation with a credential. Prerequisite: CPD110.

### **CULINARY ARTS** (CUL)

### **CUL105 Food Safety Foundations**

1 Credit (1 Lecture) POS 🄏

**Typically** Fall, Spring and Summer Offered:

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.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R SUN Course:



### **CUL108 Culinary Boot Camp**

1 Credit (.75 Lecture, 1 Lab)

**Typically Offered:** Fall and Spring

Designed for the home cook or culinary apprentice, Culinary Boot Camp features the basics of cooking, including kitchen terms, knife skills and cooking techniques such as sauté, roast, broil and braise. Learn how to read and follow a recipe, sample and identify an array of spices, herbs, grains, vegetables and meats and plan and cook delicious meals. *May be taken three times for credit*.

### **CUL110 Asian Cuisine**

1 Credit (1 Lecture)

**Typically Offered:**Fall and Spring

Discover the unique flavors, ingredients and culinary traditions of Asian cuisine through this hands-on class. Appreciate the differences between Chinese, Japanese, Thai and Vietnamese cooking ingredients and techniques. Learn to make your favorite Asian appetizers, soups, entrees and desserts.

#### **CUL112 Italian Cuisine**

1 Credit (1 Lecture)

**Typically Offered:**Fall and Spring

Discover the unique flavors, ingredients and culinary traditions of Italian cuisine through this hands-on class. Learn to make your favorite Italian appetizers, soups, entrees, pasta, bread, salads and desserts.

# **CUL114 Mexican and Latin American Cuisine**

1 Credit (1 Lecture)

**Typically Offered:**Fall and Spring

Discover the unique flavors, ingredients and culinary traditions of Mexico and other Latin American countries through this hands-on class. Learn to make some of your favorite appetizers, soups, entrees, salads, breads and desserts.

### **CUL121 Culinary Concepts**

1 Credit (1 Lecture)

**Typically Offered:**Fall and Spring

Development of knife skills and the principles and techniques of various cooking methods applied to a range of cuisines, from basic cooking to ethnic and specialty foods. Specialty topics will vary: presentation will be a combination of discussion, demonstration, and hands-on food preparation. *May be taken four times for credit*.

### **ICON LEGEND**

AGEC: Intensive Writing: IW Program
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS
SUN Course:

### **CUL125 Sustainable Food Practices**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Overview of the issues currently impacting the U.S. and Global food supply. Discussions on such topics as: local, seasonal, factory farms, artisan and native foods; environmental impact of farming; sustainability on a personal and industry level.

# CUL130 Culinary Principles and Applications I

3 Credits (1 Lecture, 6 Labs) POS R

Typically Offered: Fall and Spring

Introduction to small and large quantity cooking, including principles, techniques and preparation with an emphasis on basic skills, food products, equipment and sanitation practices. Requires 16 hours of supervised experience catering events outside of class. Prerequisites: MAT082 or higher, RDG094.

### **CUL142 Applied Food Science**

4 Credits (3 Lectures, 3 Labs) R

**Typically Offered:** Consult CAC Class Schedule.

The science of foods will be presented in lecture. Laboratory portion of the class applies the scientific method to enhance understanding of the principles of food preparation and production. *Corequisite: RDG094*.

### **CUL160 Baking and Pastry I**

3 Credits (1 Lecture, 6 Labs) POS R

**Typically Offered:** Fall and Spring

Basic principles and techniques required for the commercial preparation of bakery products, including yeast-leavened breads, pies, tarts, quick breads, cookies and cakes. *Requires 16 hours of supervised experience catering events outside of class. Prerequisites: MAT082 or higher, RDG094.* 

### **CUL161 Cake Decorating**

1 Credit (.75 Lecture, 1 Lab)

**Typically Offered:** Fall and Spring

Introduction to the art of cake decorating and how to design and create beautiful cakes using buttercream frosting. Instruction through demonstration and hands-on practice includes baking, leveling and preparing cakes for frosting; proper use of the pastry bag; designing flowers, leaves and borders utilizing a variety of pastry tips; and tinting butter cream frosting. *May be taken three times for credit*.



### **CUL162 Cakes, Fillings, and Frostings**

1 Credit (.75 Lecture, 1 Lab)

**Typically** Fall and Spring Offered:

Learn the fundamentals of preparing a great cake as a foundation for beautiful cake decorating. Prepare a variety of cakes; pair the cake with an appropriate filling, such as ganache, flavored syrup, fruit or custard. Prepare a variety of frostings, including royal icing and buttercream. Construct a special cake utilizing the various components learned in class. May be taken three times for credit.

### **CUL167 Introduction to Food Styling**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule. Offered:

Introduction to food styling trends and techniques including the history of food styling, current trends in the food industry and how to implement techniques to make food more visually appealing. Students create presentations and submit them as a digital photograph for critique.

### **CUL168 Introduction to Food Photography**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule. Offered:

Introduction to the basic principles of food photography and food styling techniques used in food marketing and advertising for businesses such as caterers, cake decorators, on-line sales, and restaurants. Students create presentations and submit them as a digital photograph for critique.

### **CUL170 Dining and Beverage Operations**

2 Credits (2 Lectures) POS R

**Typically** Fall and Spring Offered:

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.

# **ICON LEGEND**

AGEC: 🔂 Intensive Writing: IW

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

Dual Enrollment:

SUN Course:

### **CUL185 Catering Operations**

2 Credits (2 Lectures)  $\mathcal{R}$ 

**Typically** Fall and Spring Offered:

The theory and practice of planning and executing catering functions with emphasis on sales, marketing, menu development, pricing and controls, equipment, banquet and buffet service and different catering styles. Prerequisites: RDG094 and MAT082. Recommended: Complete CUL130 or CUL160 prior to taking CUL185. There is a strong emphasis on culinary math skills.

### **CUL205 HACCP Principles**

1 Credit (1 Lecture)

**Typically** Fall and Spring Offered:

Practical application steps for the implementation of an HACCP food safety and sanitation program. May be taken once for degree or certificate and up to four times for recertification. Prerequisite: CUL105.

### **CUL230 Culinary Principles and Applications II**

3 Credits (1 Lecture, 6 Labs)

**Typically** Fall and Spring Offered:

Build on principles learned in Culinary Principles and Applications I and advance skills in preparing a variety of stocks, sauces, soups, fresh vegetables, herbs, meat, poultry and fish. Techniques and speed are refined and improved. Requires 16 hours of supervised experience catering events outside of class. Prerequisite: CUL130.

### **CUL260 Baking and Pastry II**

3 Credits (1 Lecture, 6 Labs)

**Typically** Fall and Spring Offered:

Build on principles and techniques introduced in Baking and Pastry I and learn advanced skills to produce a variety of bakery, pastry, savory and dessert items. Requires 16 hours of supervised experience catering events outside of class. Prerequisite: CUL160 OR HRM250.

### **CUL261 Advanced Cake Decorating**

1 Credit (.75 Lecture, 1 Lab)

**Typically** Fall and Spring Offered:

Decoration of cakes focusing on the preparation and use of fondant, royal icing and gum paste flowers. Create a variety of flowers and bows that can be used for special occasion and wedding cakes. May be taken three times for credit.

Prerequisite: CUL161 or instructor consent.



### **CUL262 Wedding Cakes**

1 Credit (.75 Lecture, 1 Lab)

**Typically** Fall and Spring Offered:

Assemble a simple wedding cake using a basic cake, filling, buttercream frosting, fondant and gum paste flowers. Design a special occasion cake considering factors such as flavor, texture, color, number of portions, advance preparation, transportation and pricing. May be taken three times for credit. Prerequisites: (CUL160, CUL161, CUL162 and CUL261) or instructor consent.

### **CUL263 Everything Chocolate**

1 Credit (1 Lecture)

**Typically** Fall and Spring Offered:

Comprehensive hands-on chocolate course emphasizing the techniques necessary to make unique molded chocolate pieces and gourmet chocolate confections. Introduction to chocolate decorating techniques including tempering, coloring, cutting and using transfer sheets and working with modeling chocolate. Students will prepare products using different types of chocolate.

### **CUL264 Confectionary Show Pieces**

1 Credit (.75 Lecture, 1 Lab)

**Typically** Fall and Spring Offered:

Create confectionary showpieces to demonstrate culinary artistry and advanced skills. Learn advanced techniques to prepare popular, edible confectionery decorations/showpieces, such as chocolate, marzipan, nougatine and simple sugar work. May be taken three times for credit. Prerequisites: (CUL160 and CUL263) or instructor consent. Recommended: CUL260.

### **CUL265 Artisan and Specialty Breads**

1 Credit (.75 Lecture, 1 Lab)

**Typically** Fall and Spring Offered:

Basic production procedures for producing lean yeast doughs, working with pre-ferments and shaping techniques for forming artisan and specialty breads. May be taken two times for credit. Prerequisites: CUL160 or instructor consent.

### **CUL266 Advanced Pastry**

1 Credit (.75 Lecture, 1 Lab)

**Typically** Fall and Spring Offered:

Advanced pastry baking skills focusing on enriched yeast dough and laminated dough. Learn to mix, laminate and form a variety of products using puff pastry and sweet dough, such as croissants, Danish and brioche. May be taken two times for credit. Prerequisites: (CUL160 and CUL260) or instructor consent.

### **CUL268 Nutrition and Special Needs Baking**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Introduction to the concepts of basic human nutrition, including the nutrients and their function, sources and requirements, digestion, absorption and metabolism. Apply this knowledge to baking and pastry production, manipulating and substituting ingredients to meet the goals of dietary restrictions such as lactose and glucose intolerance, food allergies, decreased sugar and fats for diabetic, cardiac and weight loss diets, and preparing delicious products for vegans. Explain the nutritional function of a food or ingredient as well as its functional role in the structure, taste, texture and visual appeal of baked goods. Prerequisite: CUL160.

### **CUL290 Commercial Cooking Practicum**

2 Credits (2 Practica – 90 Hours)

**Typically** Fall, Spring and Summer Offered:

Apply skills and knowledge acquired in culinary arts course work to commercial quantity food planning, production and service for a variety of menu items; operation and maintenance of commercial cooking equipment; and safety and sanitation. Prerequisites: (CUL105 OR NTR105); CUL130; CUL160.

### **CUL292 Study Abroad: Italian Cuisine and** Culture

4 Credits (3 Lectures, 3 Labs)

**Typically** Summer Offered:

Study Italian cuisine and culture in three distinct regions of Italy with the Marco Polo Foundation for Mediterranean Culture and Tourism. Participate in hands-on cooking classes featuring the local produce, meats, cheeses and seafood of each region. Site visits and tours guided by experts in the Italian tourism industry enhance the cultural and culinary experience. Prerequisite: Instructor consent.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: IW Reading Required: RDG094: R Dual Enrollment:

Programs of Study/Tech Prep: POS



### DANCE (DAN)

### **DAN130 Introduction to Ballroom, Latin** and Swing Dance

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

Introduction to counts, patterns and positions of Ballroom, Latin and Swing dances, with dance floor etiquette and appropriate music selection included. May be taken more than four times for credit.

### **DAN194 Introduction to Country and Swing Dance**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

Introduction to counts, patterns and positions of Country and Swing dances, with dance floor etiquette and appropriate music selection included. May be taken more than four times for credit.

### **DAN195 Jazz Dance**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

Introduction to positions, gestures, patterns, moves and performance of Jazz dance. May be taken more than four times for credit.

### DIAGNOSTIC MEDICAL SONOGRAPHY (DMS)

### **DMS101 Introduction to Diagnostic Medical Sonography**

3 Credits (3 Lectures)

**Typically** Spring Offered:

The basic sonographic job functions, scope of practice, positioning, principles of instrumentation and terminology used in Diagnostic Medical Sonography. Opportunities to meet with Sonographers on campus in a real ultrasound clinical setting enhance the learning experience. Prerequisite: Must be a current health care professional working in a clinical setting.

### **DMS120 Cross Sectional Imaging**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Diagnostic imaging correlation using coronal, axial, or transverse cross sectional planes to demonstrate human anatomy of the: head, neck and spine; chest; extremities; abdominal and pelvic cavities for Medical Imaging Professionals. Prerequisite: DMS or Radiologic Tech cohort student.

### **DMS130 Sonography Physics and** Instrumentation I

2 Credits (2 Lectures)

**Typically** Fall Offered:

Introduction to the physical principles of ultrasound, including analysis of routine terminology and functions used in the creation of diagnostic ultrasound images and ARDMS testing requirements; utilization of ultrasound equipment and transducers for the production of sound waves and their interaction with tissue; workplace safety; quality assurance and quality control; patient wellbeing; bioeffects and risks. Prerequisite: DMS cohort student.

### **DMS131 Physics and Instrumentation Lab**

1 Credit (3 Labs)

**Typically** Spring Offered:

Introduction to the physical principles of ultrasound in a lab setting, including analysis of image acquisition used to create diagnostic ultrasound images recommended by ARDMS. Utilization of ultrasound equipment and transducers for the production of sound waves and their interaction with tissue; workplace safety; quality assurance and quality control; patient history; technical worksheets; bioeffects and potential risks. Prerequisite: DMS cohort student.

# **DMS132 Abdominal Imaging I**

3 Credits (3 Lectures)

**Typically** Fall Offered:

Introduction to Diagnostic Medical Sonography and Abdominal scanning including physiology, pathology, terminology, anatomy and techniques. Prerequisite: DMS cohort student.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: IW Reading Required: RDG094: R Dual Enrollment:

Programs of Study/Tech Prep: POS



### **DMS133 Abdominal Imaging Lab**

1 Credit (3 Labs)

**Typically** Fall

Laboratory course designed to augment the didactic information presented in Abdominal Imaging (DMS132). Lab provides the environment for the student to gain basic competencies when scanning the entire abdominal contents including proper scanning technique, imaging terminology, anatomy, physiology and completion of technical worksheets. *Prerequisite: DMS cohort student.* 

### **DMS135 Small Parts Imaging**

1 Credit (1 Lecture)

Typically Offered: Spring

Introduction to advanced applications of sonographic small parts imaging. Topics include normal and abnormal presentations of the thyroid, breast, prostate, extremities, pediatric applications, interventional and emergency procedures, contrast agents and emerging modalities. *Prerequisite: DMS cohort student.* 

### **DMS140 Sonographic OB/GYN Imaging**

2 Credits (2 Lectures)

**Typically Offered:** Spring

Introduction to Diagnostic Sonography in obstetrics and gynecology (OB/GYN), including normal, abnormal, pathology of the non-gravid and gravid female pelvis. *Prerequisite: DMS cohort student.* 

### **DMS149 Pathology for Medical Imaging**

3 Credits (3 Lectures)

**Typically** Spring

Causes of disease and the impact on the body, including cultural implications in the prevention and treatment of disease. Role of diagnostic imaging in diagnosis, therapy and treatment of body systems. *Prerequisite: DMS cohort student*.

#### **DMS150 Clinical Sonography Practicum I**

2 Credits (2 Practica - 180 Hours)

Typically Fall

The initial rotation in a series of six, this novice DMS supervised practicum introduces students to policies and procedures in a clinical setting, including hospitals, MD offices and clinics and orientates students to imaging, department scanning protocols and abdominal scanning. *Prerequisites: DMS cohort student; current CPR*.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW

Dual Enrollment: **2**Programs of Study/Tech Prep: **POS** 

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Reading Required: RDG094: 
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### **DMS151 Clinical Sonography Practicum II**

3 Credits (3 Practica - 270 Hours)

**Typically** Spring

Second clinical rotation in a series of six. This beginner level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting. Students gain scanning competencies in the abdomen, pelvis and small parts under a high level of direct supervision within clinical sites, including hospitals, MD offices and clinics. *Prerequisite: DMS cohort student.* 

### **DMS152 Clinical Sonography Practicum III**

4 Credits (4 Practica - 360 Hours)

Typically Summer

The third clinical rotation in a series of six, this Advanced Beginner level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting. Students continue to gain scanning competencies in the abdomen, pelvis, Obstetrics and small parts under direct supervision in clinical sites which include hospitals, MD offices and clinics. *Prerequisite: DMS cohort student*.

### **DMS154 Abdominal Imaging II**

2 Credits (2 Lectures)

**Typically Offered:** Spring

Reinforcement of beginning DMS and introduction to advanced applications of sonographic scanning in the abdominopelvic cavity. Topics include normal and abnormal presentations, pediatric applications, interventional and emergency procedures, use of contrast agents and emerging modalities. *Prerequisite: DMS cohort student*.

### **DMS158 Sonography Case Studies I**

1 Credit (1 Lecture)

**Typically** Spring

The first in a three seminar series that introduces students to critical thinking through Diagnostic Medical Sonography case studies. Cases include anatomy, pathology, physics, imaging and terminology used in Diagnostic Sonography as well as discussions on imaging protocols and scanning guidelines. The lecture will be taught as a hybrid using a Blackboard format; field trips or guest lecturers may be included. *Prerequisite: DMS cohort student.* 

### **DMS159 Sonography Case Studies II**

2 Credits (2 Lectures)

**Typically Summer** 

Case Studies II focuses on increasing students' sonographic critical thinking skills using more complex patient pathology. *Prerequisite: DMS cohort student.* 



# DMS234 Sonography Physics and Instrumentation II

2 Credits (2 Lectures)

Typically Fall

Advanced application of sonographic physical principles and instrumentation; artifacts, bioeffects, quality control, hemodynamics and Doppler; new trends; equipment features and benefits; quality control, safety; and preparation for ARDMS examination. *Prerequisite: DMS cohort student*.

### DMS242 High Risk OB/GYN Imaging

2 Credits (2 Lectures)

Typically Fall

Advanced applications of OB/GYN imaging of the gravid and non-gravid patient; safety and bioeffects; new trends; high risk OB/GYN patients; interventional procedures; laboratory values and correlative imaging; preparation for ARDMS examination. *Prerequisite: DMS cohort student.* 

### **DMS254 Clinical Sonography Practicum IV**

4 Credits (4 Practica - 360 Hours)

Typically Fall

The fourth clinical rotation in a series of six, this intermediate level practicum continues to reinforce policies, procedures and protocols in a Diagnostic Sonography clinical setting, including hospitals, MD offices and clinics. Under limited supervision, students continue to gain scanning competencies in the abdomen, pelvis, obstetrics and small parts and vascular imaging studies in the clinical setting. *Prerequisite: DMS cohort student*.

### **DMS255 Clinical Sonography Practicum V**

4 Credits (4 Practica - 360 Hours)

**Typically Offered:** Spring

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*.

### ICON LEGEND

AGEC: 🔂

Dual Enrollment:

Intensive Writing: // Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

### **DMS256 Clinical Sonography Practicum VI**

4 Credits (4 Practica - 360 Hours)

**Typically Summer** 

The sixth and final rotation, this advanced level practicum reinforces policies, procedures and protocols in a Diagnostic Sonography clinical setting, including hospitals, MD offices and clinics. Under minimal supervision, students gain competencies in abdomen, pelvis, obstetrics, small parts, vascular imaging, interventional and other studies and perform at the level of an entry level sonographer. *Prerequisite: DMS cohort student.* 

### **DMS259 Sonography Case Studies III**

2 Credits (2 Lectures)

Typically Offered: Spring

Case Studies III focuses on students presenting cases of the complexity and caliber expected of an entry level sonographer. *Prerequisite: DMS cohort student.* 

### **DMS260 OB/GYN Sonography Lab**

1 Credit (3 Labs)

**Typically** Fall

Applications of OB/GYN imaging of the female patient in a lab setting; safety and bioeffects; transabdominal and endovaginal scanning; technical worksheets; and preparation for ARDMS examination. *Prerequisite: DMS cohort student*.

### **DMS271 Concepts of Vascular Imaging**

2 Credits (2 Lectures)

**Typically Offered:** Spring

Vascular applications of sonography in the cerebrovascular, abdominal, OB/GYN, arterial and venous systems of the body including hemodynamis, Doppler, Color Flow, Duplex and triplex imaging protocols. *Prerequisite: DMS cohort student*.

### **DMS272 Vascular Imaging Lab**

1 Credit (3 Labs)

Typically Spring

Vascular applications of sonography in the cerebrovascular, abdominal, arterial and venous systems of the body in a lab setting. *Prerequisite: DMS cohort student*.

### **DMS273 Advanced Sonography Applications**

3 Credits (3 Lectures)

**Typically** Fall

Advanced applications and emerging trends of Sonography worldwide including interventional, surgical, portable, vascular, pediatric, musculoskeletal, breast, prostate/male pelvis, and ethical issues. *Prerequisite: DMS cohort student*.



### **DMS280 Physics & Instrumentation Review**

1 Credit (1 Lecture)

**Typically** Spring

Review of physical principles of ultrasound and instrumentation, including bioeffects, safety, artifacts, imaging and analysis of routine to create diagnostic ultrasound images in alignment with ARDMS examination content specifications. *Prerequisite: DMS cohort student or DMS Program Director consent.* 

### **DMS281 Abdominal Imaging Review**

1 Credit (1 Lecture)

Typically Summer

Applications of abdominopelvic and small parts imaging review to include normal, abnormal, pathology, patient care, bioeffects, pediatrics, interventional and emergency procedures in alignment with ARDMS examination content outlines. *Prerequisite: DMS cohort student or DMS Program Director consent.* 

#### **DMS282 OB/GYN Review**

1 Credit (1 Lecture)

Typically Summer

Review of sonography in obstetrics and gynecology (OB/GYN), including normal, and abnormal pathology of the non-gravid and gravid female pelvis per ARMS examination content specifications. *Prerequisite: DMS cohort student or DMS Program Director consent.* 

### **DMS289 Vascular Technology RVT Review**

1 Credit (1 Lecture)

**Typically Offered:** Consult CAC Class Schedule.

Registry review course for those planning to take the Registered Vascular Technologist certification examinations given by the American Registry of Diagnostic Medical Sonographers. Satisfactory/Unsatisfactory grading option is available. Prerequisite: DMS cohort student or DMS Program Director consent.

### **DMS290 Sonography Capstone Seminar**

2 Credits (2 Lectures)

**Typically** Spring

Capstone seminar prepares the student for workplace skills, research, employment, ARDMS examinations and ICD 10 coding and billing knowledge expected of entry level sonographers. *Prerequisite: DMS cohort student*.

### **ICON LEGEND**

AGEC: Intensive Writing: /W

Dual Enrollment: 🥨

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

# DIESEL/HEAVY EQUIPMENT (DIE)

# DIE110 Introduction to Diesel Engines and Fuel Systems

3 Credits (3 Lectures) R

**Typically Offered:**Fall and Spring

An introduction to diesel engines focusing on the theory of operation of the four main subsystems: basic engine, lubrication, cooling and fuel systems. *Prerequisite: Current and valid driver license. Corequisite: RDG094*.

# **DIE111 Introduction to Electricity and Electronics**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Theory, operation and components of electrical and electronic circuits. *Prerequisite: Current and valid driver license.* 

### **DIE112 Introduction to Mobile Hydraulics**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Theory of operation of hydraulic and hydrostatic systems used in heavy equipment and truck applications, emphasizing the use of electrical and hydraulic schematics and service manuals. *Prerequisite: Current and valid driver license.* 

#### **DIE113 Introduction to Power Trains**

3 Credits (3 Lectures  $\mathcal{R}$ 

**Typically Offered:**Fall and Spring

An introduction to power train systems used in heavy equipment focusing on the theory of operation and application of manual, power shift and hydrostatic transmissions. *Prerequisite: Current and valid driver license. Corequisite: RDG094.* 

# **DIE114 Introduction to Power Train Repair** and Diagnostics

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

An introduction to diagnosis and repair of heavy equipment manual, power shift and hydrostatic transmission systems. *Prerequisites: DIE113 and current and valid driver license.* 



### **DIE115 Introduction to Diesel Engine Repair and Diagnostics**

4 Credits (3 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

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) R

**Typically** Fall and Spring Offered:

Diesel technology knowledge and skills to prepare students for other heavy equipment technician courses, including fundamental concepts, standard safety procedures, tool use, identification and maintenance of equipment, precision measurement and electrical theory. Prerequisites: RDG094 and current and valid driver license.

### **DIE117 Workplace Success Principles, Practices and Strategies**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

An exploration of employer expectations, economic factors related to the success of a business and ethical workplace behavior for an employee that leads to productivity, success of the business and long term employment. Prerequisite: Current and valid driver license.

### **DIE118 Computer Systems for Equipment Technicians**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Basic fundamentals and applications of Caterpillar, Cummins, and Detroit technical mobile computer systems, including onboard computers, sensors, actuators and software. Use of Internet resources and manufacturer software emphasizing the correct use of technical information to develop troubleshooting skills. Prerequisites: DIE110, DIE111, DIE113 or instructor consent.

### **DIE132 Diesel Engines**

12 Credits (10 Lectures, 6 Labs)

**Typically** Fall and Spring Offered:

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) R

**Typically** Fall and Spring Offered:

Theory of operation, diagnostic procedures, service and repair techniques, related to chassis and drive trains used in heavy equipment and truck applications, emphasizing safety use of technical service literature, diagnostic software and reconditioning procedures. Prerequisite: Current and valid driver license. Corequisite: RDG094.

### **DIE196 Diesel Equipment Technology and HEO Internship I**

3 Credits (Internship)

**Typically** Fall, Spring and Summer Offered:

Career advancement study that allow students to obtain college credit for hands-on work experience. Prerequisite: Enrolled in DIE, CFE, or HEO program.

### **DIE210 Advanced Diesel Engines and Fuel Systems**

5 Credits (4 Lectures, 3 Labs)

**Typically** Fall, Spring and Summer Offered:

An in-depth study of modern diesel engines used in off and onhighway application, emphasizing computer controlled fuel systems and new emission standards. Prerequisite: DIE115.

### **DIE211 Advanced Electrical/Electronic Systems**

3 Credits (1 Lecture, 6 Labs)

**Typically** Fall and Spring Offered:

An application of electrical/electronic principles and theories emphasizing electrical system anomaly diagnostics and repair/replacement of components. Prerequisite: DIE111.

**ICON LEGEND** 

AGEC: 🔃 Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS



### **DIE212 Advanced Mobile Hydraulics**

3 Credits (1 Lectures, 6 Labs)

**Typically Offered:** Fall, Spring and Summer

Application of the theoretical concepts, diagnostic procedures, service and repair techniques related to hydraulic and hydrostatic systems used in heavy equipment and truck applications, emphasizing the use of hydraulic schematics, test equipment and service manuals to diagnose and repair. *Prerequisites: DIE211 or instructor consent.* 

# **DIE214 Advanced Power Train Repair and Diagnostics**

5 Credits (4 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Modern power train systems used in on and off-highway equipment, emphasizing diagnostic and repair procedures applied to computer controlled power shift and hydrostatic transmission systems. *Prerequisites: DIE113, DIE114.* 

### **DIE222 Mobile Refrigeration**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Principles of operation for the various types of mobile air conditioning systems utilized in diagnosing, testing and reconditioning these systems. *Prerequisite: Current and valid driver license.* 

#### **DIE225 Preventive Maintenance**

2 Credits (1 Lecture, 3 Labs)

**Typically Offered:** Fall and Spring

The development of skills necessary to identify, prevent and repair mechanical problems as related to the maintenance of heavy earth-moving equipment. *Prerequisite: Current and valid driver license.* 

# DIE234 Diesel and Heavy Equipment Electricity/Electronics and Hydraulics

12 Credits (10 Lectures, 6 Labs)

**Typically Offered:** Spring

The theory of operation, diagnostic procedures, service and repair techniques related to electrical and hydraulics systems used in heavy equipment and truck applications, emphasizing the use of electrical and hydraulic schematics, test equipment, and service manuals. *Prerequisite: Current and valid driver license*.

# **DIE235 Heavy Equipment Reconditioning and Operations**

8 Credits (4 Lectures, 12 Labs)

**Typically** Fall

The operation, maintenance and servicing of heavy equipment, emphasizing the use of technical service literature and an array of special tools. *Prerequisite: Current and valid driver license*.

# DIE296 Diesel Equipment Technology and HEO Internship II

3 Credits (Internship)

**Typically Offered:**Fall and Spring

Career advancement study that allows students to obtain college credit for advanced level hands-on work experience. *Prerequisite: DIE196*.

# DRAFTING (DFT)

### **DFT127 Autocad I**

3 Credits (2 Lectures, 3 Labs) POS

**Typically Offered:** Fall and Spring

Introductory course in Computer-Aided Drafting and Design (CADD) computer technology for creation and documentation of 2D drawings. Includes operation and capabilities of computers in CADD, drafting fundamentals, dimensioning, annotating, management of CADD files, printing and plotting.

### **DFT128 Autocad II**

3 Credits (2 Lectures, 3 Labs) POS

**Typically Offered:** Fall, Spring and Summer

Advanced Autocad two-dimensional applications and techniques. *Prerequisite: DFT127 or instructor consent.* 

# **DFT130 Advanced Computer Aided Drafting Applications**

1 Credit (1 Lecture)

**Typically Offered:**Fall and Spring

Advanced work in an area of individual interest within the scope of computer-aided drafting. May be taken three times for credit to fulfill a requirement choice for the CADD Certificate, one credit per enrollment. *Prerequisite: DFT127*.

**ICON LEGEND** 

Intensive Writing: IW

AGEC: 📵

Dual Enrollment: 🥝

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



#### **DFT131 Autocad III**

3 Credits (2 Lectures, 3 Labs)

Typically Offered:

Fall, Spring and Summer

Basic Commands and Techniques including: wireframe, Surface and Solid Modeling using AutoCAD required to create, shade, render and print 3-Dimensional (3D) drawings. *Prerequisite: DFT127*.

# EARLY CHILDHOOD EDUCATION (ECE)

# **ECE101 Introduction to the Child Care Profession**

3 Credits (3 Lectures)

Typically Offered:

Fall, Spring, Summer and Open Entry/Closed Exit

An introduction to the Child Care Profession, focusing on child development and appropriate learning environments for children from birth through age five. Content includes child care licensing and developmentally appropriate curriculum in early childhood settings.

### **ECE116 Guiding and Observing Children**

3 Credits (3 Lectures)

Typically Fig.

Fall, Spring, Summer and Open Entry/Closed Exit

Positive guidance and discipline techniques to encourage self-discipline and enhance a positive self-image. Techniques to effectively observe and record child characteristics and behavior, with emphasis on appropriate use of observations.

# **ECE117 Guidance for Family Childcare**

3 Credits (3 Lectures)

Typically Offered:

Offered:

Fall, Spring and Summer

Positive guidance and discipline techniques for family childcare providers that encourage self-discipline and enhance a positive self-image of children ages 0 to 12. *This course has a bilingual component as an option and supplement.* 

# **ECE119 Making Learning Visible Through Documentation**

1 Credit (1 Lecture)

Typically Offered:

Fall, Spring and Summer

Documentation in Early Childhood Environments, including strategies to reflect on children's thinking, hypothesis development and the multiple relationships essential to learning environments.

### **ECE120B Providing a Healthy Environment**

1 Credit (1 Lecture)

Typically Offered:

Fall, Spring, Summer and Open Entry/Open Exit

Procedures and practices designed to protect the health of young children in early childhood programs, with emphasis on the development of lifelong healthy habits and attitudes.

# **ECE120D Ensuring a Safe Environment for Children**

1 Credit (1 Lecture)

Typically Offered:

Fall, Spring and Summer

Practices and procedures to use when providing for the safety of children in early childhood programs.

### **ECE121 Health for Family Childcare**

1 Credit (1 Lecture) POS

Typically Offered:

Fall, Spring and Summer

Procedures and practices designed to protect the health of children in family childcare settings with emphasis on the development of lifelong health habits and attitudes. *This course has a bilingual component as an option and supplement.* 

# **ECE122 Safety for Family Childcare**

1 Credit (1 Lecture) POS

Typically Offered:

Fall, Spring and Summer

Practices and procedures to use when providing for the safety of children in family childcare programs. *This course has a bilingual component as an option and supplement.* 

# **ECE123 Nutrition for Family Childcare**

1 Credit (1 Lecture) POS

Typically Offered:

Fall, Spring and Summer

Introduction to nutrition with emphasis on methods of planning and implementing nutrition education and experiences in family childcare programs. *This course has a bilingual component as an option and supplement.* 

ICON LEGEND

AGEC: 🔕

Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS



# ECE124 Active Learning in Math and Science

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Techniques for helping children to develop cognitive thinking skills, including mathematical concepts, and to develop an awareness and appreciation of the natural environment. Explore math and science problem solving processes used by young children.

#### **ECE125A Nutrition**

1 Credit (1 Lecture)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Introduction to nutrition, emphasizing methods of planning and implementing nutrition education and experiences in early childhood settings.

# ECE128A Environments for Infants and Toddlers

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Practical theories and principles for the arrangement of a safe, healthy environment for infants and toddlers, emphasizing indoor/outdoor environments, material selection and usage based on observation and participation in an infant/toddler care setting.

# ECE129B Observation Skills in the Infant and Toddler Program

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Techniques and skills to effectively observe and record characteristics and developmental stages of infants and toddlers, including record keeping procedures, an overview of a variety of caregiving settings and an observation in an infant/toddler program.

# **ECE129C Recordkeeping Skills: Infant and Toddler Programs**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Recordkeeping procedures for the daily operations of an infant/toddler program, including an overview of caregiving settings and observations.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos

Reading Required: RDG094: R

# ECE130A Learning Environment for School-Agers

1 Credit (1 Lecture)

Typically Offered: Fall, Spring and Summer

The school-age child's total learning environment, incorporating indoor, outdoor and community aspects, stressing the importance of well-organized learning centers, age-appropriate equipment and materials with consideration to the spaces where school-age programs are located.

# **ECE176 Early Childhood Development and Theories**

3 Credits (3 Lectures) R

Typically Offered: Fall, Spring and Summer

Theories, trends and research in human development from prenatal to age five with emphasis on the principles, characteristics and behaviors of physical, social, emotional and intellectual growth of children. *Prerequisite: RDG094*.

### **ECE177 Ages and Stages of Children 0-12**

3 Credits (3 Lectures) POS

**Typically Offered:** Fall, Spring and Summer

Ages and stages of children ages 0 to 12, emphasizing the principles of physical, social, emotional and intellectual growth. *This course has a bilingual component as an option and supplement.* 

# ECE183 Curriculum and Learning Materials for Infants

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Practical theories and principles for designing infant curriculum with emphasis on responsive relationships, developmental stages, applied observation and providing developmentally appropriate, safe learning materials for infant exploration.

# ECE184 Curriculum and Learning Materials for Toddlers

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Practical theories and principles for designing toddler curriculum emphasizing responsive relationships, developmental stages, applied observation and providing developmentally appropriate, safe learning materials for toddler exploration.



### **ECE212 Creative Expressions for Young Children**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Practical methods for developing a creative environment for young children that encourages creativity and skill building for selecting materials, designing environments and planning activities.

### ECE220 Managing Food, Health and Safety in Childcare Programs

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Plan, develop, implement and evaluate health, safety and food services for early childhood programs.

## ECE221 ECE Program Financial Management

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Plan, develop and implement an accounting and financial system for an early childhood program.

### **ECE222 Managing and Evaluating ECE Programs**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Management and evaluation skills necessary to effectively operate a quality early childhood program.

### **ECE223 Planning and Promoting an ECE Program**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Design, plan and market an early childhood program to parents and the community, based upon a specific program philosophy.

### **ECE224 Supervision in Early Childhood Programs**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Personnel management in an early childhood program, including staffing, supervision and evaluation.

### ECE225A Encouraging Self-Discipline in School-Age Children

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Positive guidance and discipline techniques that encourage children and youth to develop self-discipline and take responsibility for their actions.

### **ECE226A Cognitive Development of Infants and Toddlers**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Theories, trends and principles of cognitive growth and development of infants and toddlers, and examination of the development stages and norms through observation and participation in an infant/toddler care program.

### **ECE226C Language Development of Infants and Toddlers**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Theories, trends and principles of cognitive growth and language development of infants and toddlers and examination of developmental stages and norms through observation and participation in an infant/toddler program.

### **ECE227B Guidance and Discipline of Infants and Toddlers**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Social and emotional development of infants and toddlers, including positive guidance and discipline techniques through observation and participation in an infant/toddler program.

**ICON LEGEND** 

Intensive Writing: IW

AGEC: 📵

Dual Enrollment: 🤨

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:



### **ECE227C Enhancing Social Competency of Infants and Toddlers**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Social and emotional development of infants/toddlers, including appropriate experiences and environments to enhance development of social competency within a group through observation and participation in an infant/toddler program.

### ECE228B Physical Development in Infancy/Toddlerhood

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Physical development of infants/toddlers, including observations and participation in infant/toddler activities, and customizing a program to meet specific children's needs.

#### **ECE229 Professional Portfolio Preparation**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Preparation and compilation of a professional portfolio to be used for assessment (CDA credential), employment and educational opportunities. This course is intended to be the last course taken toward certificate completion. *Prerequisite: Instructor consent.* 

### ECE248 Early Childhood Program Philosophies

1 Credit (1 Lecture)

Typically Offered: Fall, Spring and Summer

Examination of a variety of Early Childhood Program philosophies culminating in the development of a personal program philosophy.

#### **ECE250 Professionalism**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

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)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

Understanding, assessing and enhancing language and literacy development for the young child.

### **ECE255 Communications for Family Childcare**

3 Credits (3 Lectures)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Methods of developing effective communication with parents in the family childcare program. Building an awareness of diverse family values and implementing a diverse curriculum. Skills to help parents and providers work together to understand the child's needs. *This course has a bilingual component as an option and supplement.* 

#### **ECE256 Math for School-Agers**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Theories, research and concrete experiences related to mathematical reasoning and skills of the school-age child.

#### **ECE257 The Business of Family Childcare**

3 Credits (3 Lectures)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

The multifaceted business aspects of providing family childcare. Fundamentals of a recordkeeping system and the principles of achieving a balance in work and family life while operating a family childcare business. *This course has a bilingual component as an option and supplement.* 

### ECE271 Creating Early Childhood Environments

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

Methods to establish age-appropriate learning environments, incorporating indoor, outdoor and community aspects. Design and implement schedules, lesson plans and transitions to meet the needs of young children in a variety of early childhood settings. *Prerequisite: ECE176*.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment: 🥝

Intensive Writing: IW Programs of Reading Required: RDG094: R

Programs of Study/Tech Prep: POS SUN Course:



#### **ECE272 Family Child Care Environments**

3 Credits (3 Lectures)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

Create age-appropriate learning environments which incorporate indoor, outdoor and community aspects for family child care. Design and implement schedules, lesson plans and transitions to meet the needs of all children in a family child care setting. This course has a bilingual component as an option and supplement.

#### **ECE276 Child Development**

3 Credits (3 Lectures) 🗟 🥂

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

Theories, trends and research in human development from prenatal through adolescence with emphasis on the principles, general characteristics and behaviors of physical, social, emotional and intellectual growth of children and adolescents. Prerequisite: RDG094.

#### **ECE278 Effective Curriculum Design for Teachers of Young Children**

3 Credits (3 Lectures)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

Methods of collecting and organizing resources to provide a play based early childhood curriculum. Planning and implementing a developmentally appropriate curriculum using observation and assessment tools. Prerequisite: ECE176.

#### **ECE279 Curriculum for Family Childcare**

3 Credits (3 Lectures)

Typically Fall, Spring, Summer and Open Entry/Open Exit Offered:

Plan and implement a developmentally appropriate curriculum for all children in family child care, including methods to collect and organize curriculum resources. This course has a bilingual component as an option and supplement.

#### **ECE280 Inclusion of Children with Special** Needs

3 Credits (3 Lectures)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

The concepts of quality inclusion of children with special needs, including laws governing services to children with disabilities, individualized plans, typical and atypical child development, developmentally appropriate activities for children, and working collaboratively with families, service providers and multi-disciplinary teams. *Prerequisite: ECE176*.

#### **ECE283 Valuing Families and Diversity**

3 Credits (3 Lectures)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

Methods of developing effective communication skills which involve parents in the early childhood program, including building an awareness of diverse family values and implementing a diverse curriculum. Develop skills to help parents and staff work together to understand the child's needs.

#### **ECONOMICS** (ECN)

#### **ECN200 Contemporary Economic Issues**

3 Credits (3 Lectures) 🔃 🥂

**Typically** Fall, Spring and Summer Offered:

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) ECN 2201 22

**Typically** Fall, Spring and Summer Offered:

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) ECN 2202 2

**Typically** Fall, Spring and Summer Offered:

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.



AGEC: 🔂

Intensive Writing: IW Reading Required: RDG094: R Dual Enrollment:

Programs of Study/Tech Prep: POS SUN Course:



## EDUCATION (EDU)

#### **EDU101 Tutor Certification I**

2 Credits (1 Lecture, 3 Labs)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Preparation for students to become certified tutors while addressing the fundamental responsibilities of tutoring, the tutoring cycle, learning theories and orientations, critical thinking and tutoring ethics. *Prerequisite: Minimum 3.0 CGPA. Corequisite: 25 hours of face-to-face or online tutoring.* 

#### **EDU102 Tutor Certification II**

2 Credits (1 Lecture, 3 Labs)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

Preparation for students to become professional tutors in the application of educational and assisted technologies, including the discoveries of neuroscience related to human learning in one-to-one and group tutoring sessions. Satisfactory/ Unsatisfactory grading option available. Prerequisites: EDU101 and minimum 3.0 CGPA. Corequisite: 25 hours of face-to-face or online tutoring.

### **EDU103 Substitute Teacher Survival Strategies**

2 Credits (2 Lectures)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Academic and behavioral strategies and other pertinent information needed to be a successful substitute teacher in today's K-12 schools. *Satisfactory/Unsatisfactory grading option available*.

#### **EDU221 Introduction to Education**

3 Credits (3 Lectures) 🗟 🛂 🥂

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

A survey of the profession of teaching, with emphasis on current trends and diversity, historical and legal perspectives, and societal influences. *Course includes observation and participation in preK-12 school environments. Prerequisite: RDG094*.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: SUN Course:

#### **EDU222 Introduction to Special Education**

3 Credits (3 Lectures) 🗟 🎗

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Overview of Special Education theory and practice in the United States today, including the characteristics of students with specific disabilities and the effects on the individuals and their families. *Prerequisite: RDG094*.

#### **EDU225 Relationships in the Classroom**

3 Credits (3 Lectures) 🛂 🥂

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

An introduction to pre-K-12 classroom settings and the relationships between teachers and their students. Focus is on class management and developing positive and appropriate individual relationships with students. *Prerequisite: RDG094*.

#### **EDU228 Behavior Management**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Individual student and group management in K-12 classrooms using proactive strategies. *Prerequisite: RDG094*.

#### **EDU230 Cultural Values in Education**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Examination of the effects of culture on the formation of the child's self-concept and learning styles; and the role of prejudice, stereotyping and cultural incompatibilities in education. *Prerequisite: RDG094*.

#### **EDU233 Global Issues in Education**

3 Credits (3 Lectures) R

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

A study of education from an international perspective, including the culturally-based formation of the child's self-concept and learning style. A educational system comparison with another country or countries and an analysis of prejudice, stereotyping and cultural incompatibilities in specific educational systems. *Prerequisite: RDG094*.

### **EDU240 Provisional Structured English Immersion**

3 Credits (3 Lectures) R

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

Provisional endorsement course in Introduction to Structured English Immersion for teachers and administrators who are working in the K-12 school setting, or for students in the AAEE program. *Prerequisite: RDG094*.



#### **EDU250 Structured English Immersion II**

3 Credits (3 Lectures) 🚜

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Structured English Immersion for teachers and administrators working in the K-12 school system: "the completion 45 hours." *Prerequisites: (EDU240 or equivalent) or (RDG094 and 15-hour Arizona Department of Education Approved Structured English Immersion Workshop).* 

### **EDU270 Education through Drama in the Elementary Classroom**

3 Credits (3 Lectures)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Hands-on opportunity to learn and teach drama based classroom activities that support learning in the elementary classroom. Develop an understanding of the research supporting the use of drama in the classroom. *Cross Listed: THE270.* 

## ELECTRICITY (ELC)

### **ELC122 Direct Current and Alternating Current Circuit Analysis**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Basic electricity theory as applied to circuits containing capacitance, inductance and resistance with either direct current or sinusoidal voltages applied.

#### **ELC126 Residential Wiring**

3 Credits (2 Lectures, 3 Labs)

Typically Offered: Fall, Spring and Summer

Residential wiring according to the National Electrical Code, with emphasis on proper use of materials and techniques for safe electrical installation or extensions in single- and multifamily dwellings. *Prerequisite: MAT092 or MAT111 with a grade of "C" or higher or placement into MAT121.* 

### **ELC128 Introduction to Programmable Logic Controllers**

3 Credits (2 Lectures, 3 Labs)

Typically Offered: Fall, Spring and Summer

Principles and applications of programmable logic controls (PLCs) including numbering systems, control strategies and ladder logic. *Prerequisite: ELC122. Corequisite: ELT223.* 

#### **ELC200** Radio Frequency RF/High Vacuum HV

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

High vacuum and plasma systems to manufacture semiconductor devices, process foods, surface hardening, compact disk production and film deposition. *Prerequisite: Sophomore and instructor consent.* 

#### **ELC201 Solar Photo Voltaic I**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Basic principles of photovoltaic (PV) or solar energy, including PV fundamentals, components, system sizing, troubleshooting strategies and safety hazards. 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)

**Typically Offered:** Fall, Spring and Summer

Advanced principles of Solar Photo Voltaic (PV), including site surveys, SolarPV component size, analysis and creation of a customized system. 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 MAT121).* 

#### **ELC220 Active Circuits**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Basic semiconductor devices (transistors, diodes and Op-Amps) and circuit simulation software. *Prerequisite: ELC124*.

#### **ELC221 Control Devices**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Electrical controls, instruments and devices for industrial equipment such as motor starting and speed control, voltage regulation and automatic controls for AC and DC machines. *Prerequisite: ELC220.* 

**ICON LEGEND** 

Intensive Writing: IW

AGEC: 🔕

Dual Enrollment: 🥨

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:



#### **ELC222 Active Circuits and Systems**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Theory and design of active circuits and systems used in electronic and electro-mechanical equipment, integration of active circuits into subsystems and complete electromechanical systems, analog-to-digital and digital-to-analog systems with reference to data acquisition and control. *Prerequisite: ELC220*.

#### **ELC223 Integrated Circuit Devices**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Introduction to timers, counters, linear and digital circuits, operational amplifier circuits and systems, voltage regulators, digital number code systems, integrated circuit logic devices, multi-vibrators memory systems, analog-to-digital and digital-to-analog devices. *Prerequisites: ELT128 and ELC220*.

### **ELC228 Advanced Programmable Logic Controllers**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Advanced principles and applications of programmable logic controls (PLCs), including advanced programming using math function blocks, bit manipulation blocks and subroutines. Course includes an introduction to networking of PLCs and HMI devices. *Prerequisite: ELC128*.

#### **ELC251 Instrumentation**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Alternative energy fields equipment usage, measurements and calculations.

## ELECTRONICS (ELT)

#### **ELT128 FPGA Fundamentals**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Theory and application of inverters, AND, OR, NAND and NOR gates, flip-flops, counters, timers and registers using Field Programmable Gate Arrays (FPGAs).

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:

### **ELT130 Computer Upgrades and Operating Systems I**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Apply previous A+ and Networking experience to actually upgrade computers and configure operating systems by doing hands-on projects in a lab-situated class. *May be taken two times for credit.* 

#### **ELT223 Microcontroller Fundamentals**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Microcontroller theory and operation, assembly and high level programming and interfacing. *Prerequisite: ELT128. Recommended: Interest in programming.* 

#### **ELT260 Advanced FPGA Concepts**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Advanced topics in Field Programmable Gate Array (FPGA) to include memory circuits, VHDL and coding methods for synchronous circuits, design of synchronous circuits and state machines and FPGA architectures. *Prerequisite: ELT128*.

#### **ELT265 MicroBlaze1**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

MicroBlaze programming applications including hardware design components, Embedded Development Kit (EDK), and creating, programming and troubleshooting the MicroBlaze processor. *Prerequisite:* ELT260.

#### **ELT270 MicroBlaze2**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Advanced MicroBlaze programming applications which include creating a multicore MicroBlaze system and interfacing peripherals. *Prerequisite: ELT265*.

#### **ELT275 Embedded Fundamentals**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Application of interfacing a microcontroller to FPGA and the programming languages C, VHDL and LabVIEW. *Prerequisite: ELT270*.



### EMERGENCY MEDICAL SERVICES (EMS)

#### **EMS100 CPR for Professionals**

.5 Credit (.5 Lecture) POS

**Typically Offered:** Fall, Spring and Summer

CPR skills needed to assist victims of all ages, including ventilation with a barrier device, a bag-mask device and oxygen. Use of an automated external defibrillator (AED). Relief of foreign-body airway obstruction (FBAO). Intended for participants who provide health care to patients in a wide variety of settings, including in-hospital and out-of-hospital. Designed for certified or non-certified, licensed or non-licensed healthcare professionals. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Recommended: Students should recertify in CPR every two years to maintain certification/license as an EMT, Paramedic, Nurse or MD.

#### **EMS101 First Care**

.5 Credit (.5 Lecture)

**Typically Offered:** Fall, Spring and Summer

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. Successful students fulfill OSHA, specific business or industry job requirements. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

#### **EMS123 First Responder**

3 Credits (3 Lectures) POS

**Typically Offered:** Fall, Spring and Summer

A comprehensive course to train a lay person to provide first response care for patients suffering sudden illness or injury. Designed for members of law enforcement agencies, industry and the private sector.

#### **EMS125 Emergency Medical Technician**

8 Credits (7 Lectures, 2 Labs, .5 Practicum) POS

**Typically Offered:** Fall, Spring and Summer

This course follows the current National Standard Curriculum and Arizona State Department of Health Services-EMS Division State statutes. The curriculum emphasizes an assessment-based format with the focus on airway control, and rescuer and patient safety. Infection control is addressed at every level of care. Skills include patient-assisted medications and use of the AED. This training program is a State-approved program with a medical director and is updated to State standards as required by the ADHS. *Prerequisites: (EMS100 or equivalent), RDG091, (Vaccination record: TB, MMR, Tetanus), (CPR HCP card and age 18 or older) or current CPR Health Care Provider card.* 

#### EMS190 Pediatric Education for Pre-Hospital Providers

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

An interactive, scenario-based course designed for certified Emergency Medical Technicians (EMTs) who practice in the field. Trains providers to perform a rapid assessment of sick and injured children in a variety of circumstances and in accordance with recommendations by the American Academy of Pediatrics (AAOP). Prerequisite: Advanced Life Support Provider (ALS)-IEMT, Paramedic, Nurse, or MD.

#### **EMS191 Neonatal Resuscitation Program**

1 Credit (1 Lecture)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Closed Exit

Didactic and psychomotor skill education and training in techniques of newborn resuscitation. Discussion in causes, prevention and management of mild to severe neonatal asphyxia are carefully explained. Prior to course completion, students must present the instructor with a Neonatal Resuscitation course completion certificate from the American Academy of Pediatrics. Students pay testing fee online/directly to American Academy of Pediatrics. URL: www.aap.org/nrp. May be taken two times for credit. Prerequisite: EMS125 or equivalent.

#### **EMS200 Basic EMT Refresher**

2 Credits (2 Lectures)

**Typically Offered:** Fall, Spring and Summer

The EMT Refresher course incorporates the standards as adopted by the State of Arizona, DHS-BEMS Division and the U.S. Department of Transportation's National Highway Traffic Safety Administration 1994 and 1996 revisions. Prepares students for State recertification and NREMT re-registration. May be taken two times for credit. Prerequisites: Current basic EMT and CPR certifications.

**ICON LEGEND** 

AGEC: 🔃

Dual Enrollment: U

riting: IW Programs of Study/Tech Prep: POS

Intensive Writing: // Programs of Study/Tech Prep: Programs of Study/Tech Prep: SUN Course:

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#### **EMS201 Basic EMT Renewal Challenge**

.5 Credit (.5 Lecture)

**Typically** Fall, Spring and Summer Offered:

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 is available. Course may be repeated for recertification. Prerequisites: Basic EMT and CPR certifications.

#### **EMS208 Intermediate Emergency Medical Technician**

11 Credits (7 Lectures, 12 Labs – 285 Hours)

**Typically** Fall, Spring and Summer Offered:

Designed to meet the U.S. Department of Transportation AZ Department of Health Services Office of Emergency Medical Services requirements for EMT-Intermediate. Provides advanced knowledge and skills related to hypoperfusion states, respiratory arrest or insufficiency, seizure states, cardiovascular emergencies, unconscious states of undetermined etiology, head injury with altered levels of consciousness and chest trauma. Current EMT certification for one year required. Comprehensive written, oral and practical evaluation on basic EMT skills. Prerequisites: Valid EMT certification; HCP CPR; DHS requirements.

#### **EMS235 Emergency Cardiac Care**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Designed to acquaint all levels of emergency care providers with basic electrocardiographic (ECG) rhythm analysis and interpretation and related care in a clinical and pre-hospital setting. Prerequisite: EMS125 or Division Chair consent.

#### **EMS236 Pharmacology in an Emergency** Setting

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Designed for the Emergency Medical Technician dealing with the administration of emergency medications in the field as outlined in current paramedic legislation. In depth coverage of medications enumerated in the algorithms of patient care as defined by the American Heart Association (AHA), Advanced Cardiac Life Support (ACLS). Coverage of medications that interact or interfere with the AHA ACLS algorithms. Prerequisite: EMS125.

#### **EMS240 Advanced Cardiac Life Support**

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

Didactic and psychomotor skills training and validation in techniques of Advanced Cardiac Life Support (ACLS) according to the Current Standards and Guidelines of the American Heart Association (AHA). Includes endotracheal intubation, ECG arrhythmia recognition, synchronized, unsynchronized and automated defibrillation, cardiovascular pharmacology and electronic pacemaker. Designed for all health-care related professionals, clinical and pre-hospital. Course may be repeated for recertification. Prerequisite: Current American Red Cross or American Heart Association (AHA) Basic Life Support Healthcare Provider validation, or National Safety Council Green Cross Professional Rescuer, or Division Chair consent.

#### **EMS241 Advanced Cardiac Life Support** (ACLS) Refresher

.5 Credit (.5 Lecture)

**Typically** Fall, Spring and Summer Offered:

Designed for all levels of emergency medical technicians, nurses, physicians and physicians' assistants to assure maintenance of didactic and psychomotor skill training in techniques of Advanced Cardiac Life Support (ACLS) according to the 2005 Standards and Guidelines of the American Heart Association. Course includes endotracheal intubation, ECG arrhythmia recognition, synchronized and unsynchronized and automated defibrillation, cardiovascular pharmacology and electronic pacemaker. Prerequisites: Current CPR provider level and ACLS provider level.

**ICON LEGEND** 

AGEC: 🔕 Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS



#### **EMS242 Advanced Life Support Refresher** Course

3.5 Credits (3.5 Lectures)

**Typically** Fall, Spring and Summer Offered:

Advanced life support, including initial, focused and continuing processes of assessment; identification and treatment of hypoperfusion states; field interventions; and drug analysis within the scope of the intermediate and advanced EMT and paramedic. Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the US Department of Transportation (US DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS) for recertification. Prerequisite: Paramedic or IEMT Certification.

#### **EMS245 Pre-Hospital Trauma Management/PHTLS**

1 Credit (1 Lecture)

**Typically** Offered:

Fall, Spring and Summer

Designed to instruct pre-hospital care personnel in the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances basic emergency medical technology (EMT) skills by focusing on emergency care interventions including victim assessment, initial treatment, resuscitative techniques, victim stabilization, transportation of the victim to an emergency care facility and documentation. Prerequisite: EMS125 or Basic EMT.

#### **EMS255 Instructional Strategies for EMT Instructors**

2 Credits (2 Lectures)

**Typically** Fall, Spring and Summer Offered:

Participative course to prepare all levels of EMT and/or nurses as instructors in EMT programs; includes writing objectives, preparing class and course schedules, reviewing AZDHS Rules and Regulations. Prerequisite: AZ-DHS EMT, IEMT, CEP Certification or RN with two years of experience in ER nursing.

#### **EMS272A Advanced Emergency Medical** Technology/Paramedic, Module I

17.5 Credits (17.5 Lectures – 262.5 Hours)

**Typically** Fall, Spring and Summer Offered:

The first advanced course in the series for Emergency Medical Technicians explores the acute critical differences in physiology, pathophysiology and clinical symptoms as they pertain to pre-hospital emergency care. Course emphasizes developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Prerequisites: Certified EMT with one year of experience; FSC129; and entrance assessment.

#### **EMS272B Advanced Emergency Medical** Technology/Paramedic, Module II

8.5 Credits (8 Lectures, 2 Labs – 150 Hours)

**Typically** Fall, Spring and Summer Offered:

The second advanced course in the series for Emergency Medical Technicians explores acute critical differences in physiology, pathophysiology and clinical symptoms as they pertain to pre-hospital emergency care. Course emphasizes developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Topics include: drawing and recording blood, intubation, parenteral medications, dosage and side effects, injury prevention, standards of care and effective communication techniques. Prerequisite: EMS272A. Corequisite: EMS272D.

#### **EMS272C Advanced Emergency Medical** Technology/Paramedic, Module III

8.5 Credits (8 Lectures, 2 Labs – 150 Hours)

**Typically** Fall, Spring and Summer Offered:

Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology and clinical symptoms, as they pertain to pre-hospital emergency care. Course emphasizes developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Prerequisite: EMS272B. Corequisite: EMS272E.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS SUN Course:



#### **EMS272D Advanced Emergency Medical** Technology/Paramedic, Practicum I

6 Credits (6 Practica - 270 Hours clinical/vehicular)

**Typically** Fall, Spring and Summer Offered:

This emergency medical technician practicum provides handson application of EMS skills and knowledge in a supervised, pre-hospital emergency setting, with an emphasis on demonstrating diagnostic and advanced emergency treatment skills to care for acutely ill and seriously injured patients. Students further develop diagnostic and advanced emergency treatment skills, professional communications with patients, their families, hospital and fire personnel and improve speed and accuracy of delivery of lifesaving patient analysis and intervention care procedures. Prerequisite: EMS272A. Corequisite: EMS272B.

#### **EMS272E Advanced Emergency Medical** Technology/Paramedic, Practicum II

6 Credits (6 Practica - 270 Hours)

**Typically** Fall, Spring and Summer Offered:

This emergency medical technician practicum provides handson application of EMS skills and knowledge within a supervised, pre-hospital emergency setting, including patients with diverse physiology, pathophysiology and clinical symptoms. Course emphasizes demonstrating diagnostic and advanced emergency treatment skills to care for acutely ill and seriously injured patients. Prerequisite: EMS272B. Corequisite: EMS272C.

#### **EMS275 Critical Care for Paramedics** (CCEMTP)

5.25 Credits (5 Lectures, 1 Lab)

**Typically** Fall, Spring and Summer Offered:

Critical Care Emergency Medical Transport Program (CCEMTP) is designed to prepare paramedics and nurses to function as members of a critical care transport team. Students will gain an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment and develop skills to maintain the stability of hospital equipment and procedures during transport. Prerequisites: (Paramedic or Nurse), CPR, (BTLS or PHTLS), (PALS or PEP) and ACLS.

#### **ENGINEERING** (EGR)

#### **EGR090 STEM Learning Success**

1 Credit (1 Lecture)

**Typically** Fall Offered:

How to learn through effective time and stress management, and the application of study skills to basic presentations from various STEM (Science-Technology-Engineering-Mathematics) career fields and Learning Theory.

#### EGR092 Survey of Engineering and **Science Professions**

1 Credit (1 Lecture)

**Typically** Fall Offered:

A survey of the major science and engineering disciplines and the features of each profession, including basic project work, industry presentations and career development.

#### **EGR102 Introduction to Engineering**

3 Credits (2 Lectures, 3 Labs) EGR 1102 POS

**Typically** Fall and Spring Offered:

Comprehensive engineering problem solving, incorporating the design process; its scientific basis, hands-on teamwork, effective communication, ethical implications and the profession itself. Prerequisite: MAT182 OR MAT187.

#### **EGR105 Beginning MATLAB Programming**

2 Credits (2 Lectures)

**Typically** Fall and Spring Offered:

Use MATLAB to solve real-world science and engineering problems. Topics include an introduction to programming, strings, arrays, data structures, control flow, file management, data analysis, basic numerical analysis and graphing. Prerequisite: MAT151 .

#### **EGR110 Intermediate MATLAB Programming**

2 Credits (2 Lectures)

**Typically** Fall and Spring Offered:

A continuation of EGR105 covering the design of problemsolving algorithms and their application to scientific and engineering solutions. Prerequisites: EGR105 and MAT187.

**ICON LEGEND** 

AGEC: 🔕 Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS





### **EGR116 Introduction to Python Programming**

2 Credits (2 Lectures)

**Typically Offered:** Fall and Spring

Basic Python programming language covering string manipulation, user input, calculations, graphing, variables, loops, conditional logic, variables, lists, text files, objects, methods, classes, Graphical User Interface (GUI) development and animation. *Prerequisite: MAT151*.

#### **EGR121 STEM Simulation Programming**

2 Credits (2 Lectures)

**Typically Offered:** Fall and Spring

Use Visual Python to create simulations of physical systems. Topics include simulation programming, graphing and introductory numerical analysis; data acquisition, organization, analysis and visualization. *Prerequisites: (MAT182 or MAT187) and (PHY111 or PHY121 )*.

#### **EGR201 Statics**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Introduction to engineering statics, including force systems, resultants, equilibrium of particles and rigid bodies. Course includes an introduction to centroids and centers of mass, area moments of inertia, distributed loading and friction.

Prerequisites: EGR105, PHY121 . Corequisite: MAT262 .

#### **EGR202 Dynamics**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Introduction to the kinematics of particles, systems of particles and rigid bodies; moving reference frames; dynamics of particles, systems of particles and rigid bodies; equilibrium, energy, linear momentum and angular momentum.

\*Prerequisite: EGR201.

### ENGLISH (ENG)

#### **ENG090 English Composition I**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

An introduction to the writing process, emphasizing idea development, organization, and revision in sentences, paragraphs and short essays, as well as development of grammatical and mechanical skills.

### **ENG090A English Composition I for English Language Learners**

3 Credits (3 Lectures)

**Typically Offered:**Consult CAC Class Schedule.

An introduction to the writing process emphasizing idea development, organization and revision for English Language Learner (ELL) students. Proper use of standard American English grammar and mechanics in sentences and paragraphs is emphasized. *Students may only take one: ENG090 or ENG090A*.

#### **ENG095 Writing Center**

1 Credit (3 Labs)

Typically Offered: Fall, Spring and Summer

Individualized materials and tutoring to aid students in improving writing skills. Satisfactory/Unsatisfactory grading only. May be taken more than four times for credit.

#### **ENG100 English Composition II**

3 Credits (3 Lectures)

Typically Offered: Fall, Spring and Summer

An introduction to academic writing with an emphasis on generating ideas, expressing those ideas in essay form and using one's writings to organize content, identify punctuation, grammar and spelling errors and to create effective strategies for their correction. *Prerequisite: ENG090 or appropriate writing placement test score.* 

#### ENG100A English Composition II for English Language Learners

3 Credits (3 Lectures)

**Typically** 

Offered: Consult CAC Class Schedule.

An introduction to academic writing for English Language Learner (ELL) students. Course emphasizes generating ideas, expressing those ideas in essay form and using written work to identify and correct punctuation, grammar and spelling errors in standard American English. *Prerequisite: ENG090 or ENG090A*.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment:

Intensive Writing: IW Pro Reading Required: RDG094: R

Programs of Study/Tech Prep: POS SUN Course:



#### **ENG101 English Composition III**

**Typically Offered:** Fall, Spring and Summer

Study of analytical skills integral to the writing of complex arguments through the development of an original thesis, supportive ideas and advanced research. Emphasis on writing as a process of reflective cognition and revision. *Prerequisites: ENG100 and RDG094*.

#### **ENG102 English Composition IV**

3 Credits (3 Lectures) ENG 1102

**Typically Offered:** Fall, Spring and Summer

Emphasis on critical thinking, close reading, analysis and advanced research skills through the development, writing and revision of complex arguments. *Prerequisite: ENG101* .

#### **ENG121 Applied Technical Writing**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Business, professional and technical writing styles including syntax and document design necessary in the production of letters, reports, resumes and other forms of business communication. *Prerequisites: ENG090 and RDG091*.

#### **ENG200 Introduction to Creative Writing**

3 Credits (3 Lectures) 🚜

**Typically Offered:**Fall and Spring

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) 🔁 IW

**Typically Offered:** Spring

Designed to help transfer students further develop their critical reading, writing and research abilities. Emphasis is placed on the methods of discourse students will need to know in their own disciplines and areas of interest. *Prerequisite: ENG102* .

#### **ICON LEGEND**

AGEC: Intensive Writing: /W

Dual Enrollment:

Programs of Study/Tech Prep: POS

Reading Required: RDG094: \*\*R

SUN Course:

### **ENG205** Introduction to the Study of Language

3 Credits (3 Lectures) 🗟 🥂

**Typically** Fall

Learn how language works by focusing on grammatical, social and biological aspects of language. Learn about speech sounds and sound patterns (phonetics and phonology), how words are formed (morphology), and how sentences are organized (syntax). Also, learn how language is acquired (psycholinguistics), how words and phrases are understood (pragmatics and semantics), how language changes (historical linguistics), and how language impacts our society (sociolinguistics). *Prerequisite: RDG094*.

### **ENG250 English for Chinese Graduate Students and Educators**

1 Credit (1 Lecture)

Typically Fall

Improvement of oral and written English proficiency via Distance Learning/Blackboard to graduate students and faculty in China. *May be taken more than four times for credit.* 

# ENGLISH AS A SECOND LANGUAGE (ESL)

See ENG and RDG for additional English Language Learner course options.

#### **ESL089 ESL Multi-level Studies**

3 Credits (3 Lectures)

Typically Offered: Fall, Spring and Summer

English language listening, speaking, reading and writing skill development, levels of Beginning Literacy - ELAA V. Learners are assessed upon entry to determine English skill levels and placed in the appropriate learning level. The course content varies according to skills that align to the six levels and standards of the Arizona Department of Education Adult Education Standards for English Language Acquisition for Adults (ELAA). Learners progress at their own pace and may repeat the course to continue in the next level as they progress toward completion of all six ELAA levels. Course may be taken multiple times for credit as long as students demonstrate an appropriate level of improvement based on assessment scores. If a student does not improve and maintain that level of improvement after six sessions, he/she will not be permitted to continue to register for ESL classes. Prerequisite: Pretest to determine existing skill level.



# ENTERTAINMENT INDUSTRY TECHNOLOGY (EIT)

#### EIT100 History of Rock n' Roll

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall and Spring

A survey of the history and development of rock music noting how cultural, social, political and economic conditions have affected its evolution. *Prerequisite: RDG094*.

#### **EIT101 Introduction to Entertainment**

3 Credits (3 Lectures) R

**Typically Offered:** Fall and Spring

An introduction to the live entertainment event industry, including survey of industry, job descriptions and employment opportunities, technical requirements and basic operation of various live performance and other venues. *Prerequisite: RDG094*.

#### **EIT120 Entertainment Law**

3 Credits (3 Lectures)

**Typically** Spring

An introduction to legal aspects of the entertainment industry, including performance rights, songwriting and personal appearance contracts, copyright law and trademarks. *Prerequisite: EIT101*.

#### **EIT130 Live Audio Production I**

3 Credits (2 Lectures, 3 Labs)

Typically Offered: Spring

An introduction to concepts and technical skills required for live event sound reinforcement. Topics include the operation of basic sound systems, including consoles, amplifiers, speakers, processors and microphones. *Prerequisite: EIT101*.

#### **EIT140 Introduction to Lighting**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Spring

Introduction to the technical aspects of concert and theatrical lighting, including basic design, color theory, instrument types, power distribution, control, safety, and the proper hanging, connection, focus and control of instruments and accessories such as gobos, color scrollers, mirrored fixtures and moving lights. *Prerequisite: EIT101*.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos
SUN Course:

#### **EIT151 Digital Audio Workstation**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Use of Pro Tools mixing and automation software in conjunction with editing and recording, including computer operation, troubleshooting and file management.

#### **EIT153 Recording Engineering I**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Spring

Introduction to basic topics in the operation of a 24-track audio recording studio, including audio theory, recording console signal flow, microphone placement, multi-track recording and mixing techniques. At the completion of the course, students will record and mix simple recording sessions. *Prerequisite: EIT151*.

#### **EIT170 Performance Skills**

1 Credit (3 Labs)

**Typically Offered:**Fall and Spring

Private coaching and practice for pop genre soloist or ensemble that concentrates on proper tone production, technique, style, stage presence and communication skills, incorporating live sound reinforcement and lighting design in the development of a live audience performance. *May be taken four or more times for credit.* 

#### EIT171 Songwriting I

2 Credits (1 Lecture, 3 Labs)

**Typically** Fall

Introduction to the basics of songwriting; including lyrics, rhythmic, melodic and harmonic development, form and emotional content. *Prerequisite: MTC100*.

#### **EIT203 Entertainment Capstone Project**

2 Credits (6 Labs)

Typically Spring

A capstone experience for the entertainment professional, including planning, preparing and developing a specific entertainment project by selecting materials, setting up and monitoring a budget, and overseeing a complete compact disk, project portfolio, or a full concert performance. May be taken four times for credit, once per each of the four EIT tracks. Prerequisite: Completion of first three semesters of EIT tracks with a grade of "C" or better in each course.



#### **EIT221 Entertainment Marketing and Promotion**

3 Credits (3 Lectures)

**Typically** Fall Offered:

Entertainment business marketing and promotion elements, specifically the creation of publicity materials, designing the process for developing media relations, a press kit and creating a publicity campaign. Prerequisite: EIT120.

#### **EIT222 Artist Management**

3 Credits (3 Lectures)

**Typically** Fall Offered:

The responsibilities and relationships with performers and managers, as well as third party business associates in the music industry will be explored. Topics include managing independent and contracted artists and the manager's role in touring, personal appearances, concert performances/recording, arranging bookings, maintaining contracts, setting up and monitoring budgets. Students will learn to locate, initiate and then manage performers. Prerequisite: EIT120.

#### **EIT223 Events/Venue Management**

3 Credits (3 Lectures)

**Typically** Spring Offered:

Hands on and theoretical knowledge needed to work in the events and management arena. The course provides practical training in the organization and management of special music events and venue management. Prerequisite: EIT120.

#### **EIT231 Live Audio Production II**

3 Credits (2 Lectures, 3 Labs)

**Typically** Spring Offered:

A continuation in concepts and technical skills required for live event audio reinforcement. Topics include advanced sound system setup and operation, in-depth operation of program and monitor consoles, system equalization, flown speaker arrays and musical production considerations. Prerequisite: EIT130.

#### **EIT232 Equipment Maintenance**

3 Credits (2 Lectures, 3 Labs)

**Typically** Spring Offered:

Introduction to basic concepts and techniques for maintaining and repairing sound and lighting equipment. Topics include basic maintenance, preventative maintenance, troubleshooting, soldering, wiring standards, calibration and testing of a wide variety of sound, lighting and performance-related equipment.

#### **ICON LEGEND**

AGEC: 🔕

Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS SUN Course:

#### **EIT241 Concert Lighting**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall Offered:

An in-depth study of concert lighting to include full lighting design and lighting instrument hanging and focus for numerous concert arrangements, specifically choir concert, band/orchestra and dance lighting. Topics include using computer lighting effects, color scrollers, mirrored fixtures and moving lights. Fieldtrips required to off-campus area theatres to examine and evaluate an array of lighting venues. Prerequisite: EIT140. Corequisite: EIT242.

#### **EIT242 Rigging**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall Offered:

Introduction to the technical aspects of rigging for theater and concerts, including single and double purchase counterweight systems, block and tackle, cable and chain rigging, powered hoist systems and portable scenic and lighting trusses. Prerequisite: EIT140. Corequisite: EIT241.

#### **EIT254 Recording Engineering II**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall. Offered:

A continuation in concepts and technical skills required in recording engineering in a 48-track audio recording studio. Topics include advanced audio theory, signal-processing equipment, advanced musical recording session procedures, production and engineering. At the completion of the course, students should be able to record and mix advanced multi-track recording sessions. Prerequisite: EIT153.

#### **EIT255 Recording Engineering III**

3 Credits (2 Lectures, 3 Labs)

**Typically** Spring Offered:

A continuation in the study of recording studio procedures learned in EIT254. Topics include mixing techniques, time code synchronization of various machines, album sequencing and editing, and commercial production. Upon completion, students should be able to conduct any type of recording session and understand the working procedures in a professional recording studio. Prerequisite: EIT254.

#### **EIT261 Acting for the Camera**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Develop an actor's approach to the special demands of acting in front of a camera. Emphasis is placed on the development of specific performance skills used for television and film acting. A capstone portfolio includes a variety of audition shorts. Prerequisite: THE101 or instructor consent. Cross Listed: THE261.



#### EIT272 Songwriting II

2 Credits (1 Lecture, 3 Labs)

**Typically** Spring Offered:

Advanced songwriting techniques as a continuation of Songwriting I. including poetic and lyrical rhythm and meter. counterpoint, harmonic development, form and total song development to maximize emotional content. *Prerequisite*: EIT171.

#### **EIT296 Entertainment Internship**

3 Credits (Internship – 135 Hours)

**Typically** Fall Offered:

Students work in entertainment industry internships designed to fit the students' selected track, interests and skills. The student may take only one internship for each of the four tracks of the Entertainment Industry Technology program. May be taken four times for credit, once per each of the four EIT tracks. Prerequisite: Complete all year one EIT courses in appropriate EIT track with a grade of "C" or better in each course.

#### **ENVIRONMENTAL SCIENCE** (ENV)

#### **ENV101 Environmental Science**

4 Credits (3 Lectures, 3 Labs) 🗟 R

**Typically** Fall, Spring and Summer Offered:

The systematic, scientific study of the environment and the effects of human activities on the environment. Field trips may be required at student's expense. Prerequisite: RDG094.

#### FIRE SCIENCE TECHNOLOGY (FSC)

#### **FSC106 Introduction to Emergency Services**

3 Credits (3 Lectures) POS

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

An overview of fire protection and emergency services delivery at the local and national levels, including: career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; fire service laws and regulations; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and an introduction to The National Incident Management Systems (NIMS).

#### **FSC108** Fundamentals of Fire Prevention

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Organization and function of a fire prevention bureau including familiarization with state and local laws and ordinances, codes and principles of fire prevention, the inspector's job and public relations. Fundamentals of fire prevention, including techniques, procedures, regulations and enforcement. Course includes discussion of hazards in ordinary and special occupancies, field trips, and lectures from industry.

#### **FSC111 Emergency Driver Operator**

2 Credits (1 Lecture, 3 Labs)

**Typically** Fall, Spring and Summer Offered:

Emergency vehicle operator training including; the problems facing operators, the personal qualities of emergency vehicle operator candidates, legal responsibilities of operators, and physical forces involved in driving an emergency vehicle. Students must be employed/a member of public safety. Prerequisites: FSC117, FSC118 and Program Director consent.

#### **FSC117 Fire Apparatus and Equipment**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Principles of care, maintenance and operation of fire apparatus and pumps. Course includes pump construction and accessories, pumping techniques, power development and transmission. Driving, troubleshooting and producing effective fire streams are emphasized.

**ICON LEGEND** 

AGEC: 📵

Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS

SUN Course:



#### **FSC118 Fire Hydraulics**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Review of basic mathematics, hydraulic laws and formulas as applied to the fire service. Application of formulas and calculations to hydraulic problems, water supply variables and discharge requirements for pumps. *Recommended: FSC117*.

#### **FSC119 Fire Service Ethics**

3 Credits (3 Lectures)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

Explore the ethical and moral obligations of fire service professionals who deal with the quality of internal and external customer service.

### FSC126 Urban Technical Rescue: Rope Rescue I

2 Credits (2 Lectures)

**Typically Offered:** Fall, Spring and Summer

The basic uses of rope rescue equipment according to the standards of the State of Arizona for Rope 1. Students must be employed/a member of public safety. Students sponsored by agencies are required to provide their own equipment. Prerequisite: Program Director consent.

### **FSC129 Hazardous Materials First Responder Operations**

3 Credits (3 Lectures) POS

**Typically Offered:** Fall, Spring and Summer

Basic methods of recognition and identification based upon the chemical and physical properties of hazardous materials; basic safety procedures when utilizing specific types of protective clothing and equipment; basic tactical information relating to scene management. Course includes confined space operations in accordance with the National Fire Protection Agency Association (NFPAA).

#### **FSC130 Fitness for Firefighters/CPAT**

1.5 Credits (1.5 Lectures)

Typically Offered: Consult CAC Class Schedule.

Skills and abilities required for entry level position in the fire service including physical ability and stamina. Students have the opportunity to take the International Association of Fire Fighters (IAFF) Candidate Physical Ability Test (CPAT) at the end of the course. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: ROG094

### FSC134 Fitness & Conditioning for Firefighters

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

Overview of all aspects of fitness for current and prospective firefighters, including physical fitness and workout techniques as they apply to performing specific firefighting tasks.

Prerequisite: Students must sign and submit CAC Liability Waiver to Fire Science Program Director (located on CAC FSC website). Recommendations: Students should be in good physical condition and have no existing health conditions which may preclude them from fully participating in the course.

#### FSC140 Firefighter I and II

13 Credits (12 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Introductory fire science course primarily designed for the fire department recruit. Course includes firefighting skills, equipment and administrative policies; fire department operations; personnel policies; and International Fire Service Accreditation Congress Practical Skills Testing. Prerequisites: EMS100, EMS125, FSC129, FSC134; Students must sign and submit CAC Liability Waiver to Fire Science Program Director (located on CAC FSC website). Recommendations: Students should be in good physical condition and have no existing health conditions which may preclude them from fully participating in the course.

#### FSC180 Wildland Fire, Module 1

3 Credits (3 Lectures) POS

**Typically Offered:** Fall and Spring

Wildland Fire Module 1 is designed for individuals with little or no experience in the wildland environment and provides preparation for performing as a beginning-level Wildland firefighter on an engine or hand crew. This course of instruction will provide an introduction to wildland fire prevention, fire behavior, suppression methods, equipment considerations, safety and incident command. This course encompasses the National Wildfire Coordinating Group content: S-110, S130/S190, S133, S134 and L-180. NWCG Certificate will be awarded after successful completion of the course and examination.

General Information:

- 1. Student is responsible for obtaining text book package from the SPC-CAC book store.
- 2. On the first day of class, CAC provides the course tools and equipment.
- 3. Students are required to complete instructor-facilitated homework assignments that include the successful completion of online independent study courses.

FEMA Website: http://training.fema.gov/IS/NIMS.asp Courses: National Incident Management System NIMS: IS-100.b - (ICS 100) Introduction to Incident Command Systems.



IS-700.a - National Incident Management Systems (NIMS), an Introduction.

IS-200.b - (ISC 200) ICS for Single Resource and Initial Action Incidents.

URL NWCG Website: http://training.nwcg.gov/courses/s110.html S-110, Basic Wildland Fire Orientation.

#### FSC181 NWCG Advanced Firefighter Training, S-131

.5 Credit (.5 Lecture)

**Typically Offered:** Fall, Spring and Summer

Advanced firefighter training. National Wildfire Coordinating Group standardized course. *Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC180.* 

### FSC182 NWCG Portable Pumps and Water Use, S-211

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Combined self-paced/field exercise format providing training for a portable water pump operator, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading options available.

### FSC183 NWCG Wildland Power Saws, S-212

1.5 Credits (1.5 Lectures)

**Typically Offered:** Fall, Spring and Summer

Skill course designed to instruct prospective chain saw operators in the requirements of the wildfire power saw operator position, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available.

### FSC184 NWCG Supervisory Concepts and Techniques, S-281 (L-281)

1 Credit (1 Lecture)

Typically Offered: Fall, Spring and Summer

Instruction in basic supervision applicable to the single resource boss in the Incident Command System (ICS) and non-operations first-level supervisors, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available.

#### **ICON LEGEND**

AGEC: Dual Enrollment:

Intensive Writing: // Programs of Study/Tech Prep: POS

Reading Required: RDG094: RDG094

### FSC185 NWCG Basic Incident Command System, I-200

1 Credit (1 Lecture)

**Typically Offered:** Fall and Spring

Designed to introduce Wildland Firefighters to the principles of the Incident Command System (ICS) associated with incident-related performance in wildfires. This course is part one in a series of seven to meet the requirements to obtain NWCG certification for Engine Boss, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC180.

### FSC186 NWCG Crew Boss (Single Resource), S-230

1.5 Credits (1.5 Lectures)

**Typically Offered:** Fall, Spring and Summer

Instruction to produce student proficiency in the performance of all duties associated with the single resource crew boss, which includes preparation, mobilization, assignment, tactics and safety, and demobilization at wildfires. This course is required to obtain the NWCG Engine Boss qualification, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: NWCG S-131 OR FSC181.

## FSC187 NWCG Engine Boss (Single Resource), S-231

.5 Credit (.5 Lecture)

**Typically Offered:** Fall, Spring and Summer

Skill course required for Engine Boss, to produce student proficiency associated with the single resource engine boss. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss, per National Wildfire Coordinating Group (NWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: NWCG S-131 OR FSC181.

#### FSC188 NWCG Ignition Operations, S-234

2 Credits (2 Lectures)

**Typically Offered:** Fall, Spring and Summer

Combined classroom/field exercise providing an entry-level training in the functional roles and responsibilities connected with firing operations at wildfire situations. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss, per National Wildfire Coordinating Group (NWWCG standardized course). Satisfactory/Unsatisfactory grading option is available. Prerequisite: NWCG S-290 OR FSC191.



### FSC189 NWCG Interagency Incident Business Management, S-260/S-261

2 Credit (2 Lectures)

**Typically Offered:** Fall and Spring

Interagency incident business management skills to meet general training needs of all firefighter positions and required to obtain National Wildfire Coordinating Group (NWCG) Certification for Engine Boss. This Course is also a requirement for the completion of the CAC Wildland Firefighter I Certificate. Satisfactory/Unsatisfactory grading option is available.

### FSC190 NWCG Basic Air Operations, S-270

1.5 Credits (1.5 Lectures)

**Typically Offered:** Fall and Spring

Basic firefighter air operations, including aircraft types and capabilities. Aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft and requirements for helicopter take-off and landing areas. This course is required to obtain National Wildfire Coordinating Group (NWCG) certification for Engine Boss and required for Wildland Firefighter I Certificate completion. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC181 or NWCG S-131.

### FSC191 NWCG Intermediate Wildland Fire Behavior, S-290

2 Credits (2 Lectures)

**Typically Offered:** Fall and Spring

Prepares prospective supervisors to undertake safe and effective fire management operations. This course is required to obtain National Wildfire Coordinating Group (NWCG) Certification for Engine Boss and required for the CAC Wildland Firefighter I Certificate. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC180 or NWCG 130/190.

#### **FSC192 Initial Attack Incident Commander**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

Incident commander focuses on six instructional units: Foundation Skills; Intelligence Gathering and Documentation; Sizing Up the Incident; Developing a Plan of Action; Post-fire Activities; Evaluating Incident Objectives and Managing the Incident. Discussion and exercise format culminate in unit tests and performance based evaluations. *Prerequisite: FSC180*.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS

SUN Course:

#### FSC193 Followership to Leadership

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Open Exit

A self-assessment opportunity for individuals preparing to step into a leadership role while working through a series of problem solving events in small teams. Training includes: leadership values and principles, transition challenges for new leaders, situational leadership, team cohesion factors, ethical decision-making and after action review techniques. *Prerequisite: FSC180*.

#### **FSC202 Supervisory Training for Firefighters**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Administrative and personnel methods applied to fire safety, department organization and personnel management. Includes fire service planning and relationships with other city depts.

#### FSC203 Fire Operations in the Wildland/ Urban Interface

2 Credits (2 Lectures)

**Typically Offered:** Fall and Spring

Designed for structural and wildland firefighters who make tactical decisions when confronting wildland fire that threatens life, property and improvements in the wildland/urban interface. This course fulfills the requirements for S215 NWCG. *Prerequisite: FSC181*.

#### **FSC204 Firefighting Tactics and Strategy**

3 Credits (3 Lectures)

**Typically Offered:** Consult CAC Class Schedule.

Methodical approaches for coordinating personnel, equipment and apparatus on an emergency incident with emphasis on building construction, firefighter safety and the functions of command. Commander preparation and application of concepts involved in the development and deployment of on-scene strategic or tactical plans, while utilizing simulation exercises. *Prerequisite: FSC140*.

#### FSC204A Regional Incident Command/ Mutual Aid Training

4 Credits (4 Lectures)

Typically Offered: Consult CAC Class Schedule.

Methods of coordinating personnel, equipment and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fire utilizing demonstration and simulation. This course also covers the eight functions of Command and is designed for rural Pinal County fire agencies. *Prerequisite: FSC140 or equivalent, or three years of firefighter experience*.



#### **FSC205 Command Strategies for Major Emergencies**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Methods of managing major emergency incidents to include major wildland fires, complex hazardous materials incidents and multi-casualty medical incidents. Management of incidents with multi-agency coordination and the incorporation of federal, state and local resources while utilizing simulation exercises. Students must be employed as a member of public safety. Prerequisites: FSC204 or equivalent course, and Program Director consent.

#### FSC208 Firefighter Safety and Building Construction

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Actions necessary to provide for the safety of firefighters operating on the fireground. Effects that fire and heat may have on various types of building construction resulting in the loss of structural integrity. Includes signs and symptoms of structural damage. Prerequisite: FSC140 or current firefighter.

#### FSC209 Fire Origin, Cause & Determination

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Methods of determining points of fire origin, path of travel and fire cause. Includes recognizing and preserving evidence, interviewing witnesses, arson laws, types of arson fires, court testimony, reports and records.

#### **FSC220 Fire Officer Leadership**

3 Credits (3 Lectures)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

Supervisory capabilities which include leadership skills and management styles. Also includes stress management, communication and motivational skills, and roles of the company officer. The course addresses ethics, use and abuse of power at the company officer level, creativity in the fire service environment and management of the multiple roles of the company officer. This course is required for IFSAC certification as a Fire Officer I. Students must be employed as a member of public safety. Prerequisites: FSC202 and Program Director consent.

#### FSC238 Vehicular Extrication and Victim Stabilization

2 Credits (2 Lectures)

**Typically** Fall, Spring and Summer Offered:

Participative course designed for Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations. Students must be employed as a member of public safety. Prerequisites: Basic EMT certification or equivalent, nurse with emergency department and Program Director consent.

#### **FSC250 Ladder Company Officer**

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

Overview of all aspects of ladder company operations including activities, expectations and responsibilities required of the ladder captain. Students must be employed as a member of public safety. Prerequisite: Program Director consent.

#### **FSC252 Engine Company Officer**

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

Overview of all aspects of engine company operations including the activities and responsibilities performed by the captain as well as mechanisms for developing a personal supervisory style. Students must be employed as a member of public safety. Prerequisites: Firefighter, either volunteer or paid, and Program Director consent.

#### **FSC255 Fire Instructor I**

3 Credits (3 Lectures)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

A course designed to train firefighters and emergency services instructors to teach a fire related class with basic instructional knowledge and from a prepared lesson plan. Students must be employed as a member of public safety. Prerequisite: FSC140 or Program Director consent.

**ICON LEGEND** 

AGEC: 💽

Dual Enrollment:

Intensive Writing: IW Reading Required: RDG094: R Programs of Study/Tech Prep: POS SUN Course:



#### **FSC256 Fire and Emergency Services Instructor Level II**

1.5 Credits (1.5 Lectures)

**Typically** Offered:

Fall, Spring, Summer and Open Entry/Open Exit

Knowledge for the Student/Instructor to develop, modify and recognize lesson plan types and formats; create lesson plans; develop guidelines for the use of audiovisual equipment. Students must be employed as a member of public safety. Satisfactory/Unsatisfactory grading option is available. Prerequisite: FSC255.

#### **FRENCH** (FRE)

#### **FRE101 Elementary French I**

4 Credits (4 Lectures, 1 Lab) FRE 1101

**Typically** Fall Offered:

The basic skills of listening, understanding, speaking, reading, and writing French, with a survey of cultural aspects of the French language.

#### FRE102 Elementary French II

4 Credits (4 Lectures, 1 Lab) FRE1102

**Typically** Spring Offered:

Refinement of basic communication skills in French, emphasizing reading, writing, speaking and listening exercises. Survey of cultural norms, beliefs and traditions from areas where French is spoken. Prerequisite: FRE101 or successful completion of 1 year of high school French.

#### FRE201 Intermediate French I

4 Credits (4 Lectures, 1 Lab) FRE2201 2

**Typically** Fall Offered:

Development of reading, writing, speaking and listening skills and proficiency in French at the novice intermediate level. Continuation of understanding, appreciation and sensitivity to cultural norms, values and beliefs in areas where French is spoken. Prerequisites: RDG094 and (FRE102 , or 2 years high school French, or instructor consent, or CLEP score 54 or higher).

#### FRE202 Intermediate French II

4 Credits (4 Lectures, 1 Lab) FRE2202

**Typically** Spring Offered:

Continued development of speaking, writing, listening and reading proficiency in French at the intermediate level. Continued study and appreciation of cultures of the Frenchspeaking world. Prerequisite: FRE201 or three years high school French or instructor consent.

#### **GENERAL EDUCATION DEVELOPMENT** (GED)

#### **GED089 GED Multi-level Studies**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Development of reading, writing, math, science, social studies and other academic knowledge and skills. Students are assessed upon entry to determine readiness for passing the General Educational Development (GED) tests. The course content varies according to the skills needed for test preparation. Levels and standards align with Arizona Department of Education Adult Education ABE/ASE Standards. Course may be taken multiple times for credit as long as students demonstrate an appropriate level of improvement based on assessment scores. If a student does not improve and maintain that level of improvement after four sessions, he/she will not be permitted to continue to register for GED classes. Prerequisite: Pretest to determine existing skill level.

#### **GEOGRAPHIC INFORMATION SYSTEMS** (GIS)

#### **GIS101 Introduction to Geographic Information Technologies**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall, Spring and Summer Offered:

Introduction to geospatial technologies, including remote sensing, Global Positioning System (GPS), Geographic Information Systems (GIS), statistical analysis, map overviews, map projections and cartography.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS





#### **GIS102 Map and Image Interpretation**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

Reading, analysis and interpretation of maps/remote sensing images used by geoscientists, including topographic, geologic and other geoscience maps for basic air photo interpretation. Students will detect, identify, and analyze objects or features from film and digital aerial photography and other types of high resolution remotely sensed images. The laboratory portion of this course focuses on manual and digital image interpretation for land cover mapping, forestry, agriculture, and geology and planning applications. *May be taken two times for credit. Prerequisite: MAT101 or MAT162.* 

#### **GIS111 Introduction to GIS**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Introduction to desktop Geographic Information Systems (GIS) technology using ArcGIS software to produce multi-dimensional spatial maps.

#### **GIS112 Intermediate GIS**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Development of intermediate level knowledge and skills in Geographic Information Systems (GIS), including statistical applications, spatial databases, spatial analysis and related technology and overview of spatial data. *Prerequisites: GIS101, GIS102 and GIS111.* 

#### **GIS113 Advanced GIS**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Advanced data and spatial analysis techniques in Geographic Information Systems, using ArcGIS. *Prerequisite: GIS101, GIS102, GIS111 and GIS112*.

### GIS150 GIS and Global Positioning Systems (GPS)

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Exploration into the functionality and relationship between Geographic Information Systems (GIS) and Global Positioning Systems (GPS), including how to prepare, manage and retrieve GIS data for mobile devices.

#### **ICON LEGEND**

AGEC: Dual Enrollment:

Intensive Writing: // Programs of Study/Tech Prep: POS
Reading Required: RDG094: 
SUN Course:

#### GIS196 GIS Internship I

3 Credits (3 Internships - 135 Hours)

**Typically Offered:** Fall, Spring and Summer

Students work in GIS internships to help students select GIS specialty track, refine GIS skills and gain teamwork skills. *Prerequisites: GIS101, GIS102 and GIS111 completed with a grade of "C" or better.* 

#### **GIS210 GIS Programming**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Application of programming languages to GIS data to analyze data, creates user interfaces, create web services and achieve the full potential of ArcGIS software. *Prerequisite: CIS181 or (CIS216 or CIS218 or any computer programming course).* 

#### **GIS230 Applied GIS: The Environment**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Spring

Use Geographic Information Systems (GIS), the leading technique used in ecosystem analysis, to analyze data types, sources and applications; to integrate the physical and topographic information in a landscape with characteristics of the biotic components of the environment; and to address environmental systems and problems. This course focuses on GIS applications to analyze and interpret ecological data. Use GIS to interpret spatial information in relation to land use and to create a decision matrix to plan, manage and restore land for more effective land use and success in environmental restoration efforts. *Prerequisite: GIS113*.

### GIS231 Applied GIS: Transportation Systems

4 Credits (3 Lectures, 3 Labs)

Typically Offered: Spring

Geographic Information Systems (GIS) applications to transportation includes 1) modeling techniques such as shortest path, location and allocation, vehicle routing and traffic assignment; 2) integration modeling and planning; and 3) exploration of other transportation systems pertaining to utilities such as pipeline networks and electrical transportation and distribution systems. Apply GIS principles to transportation using state-of-the-practice computing technology for transportation planning in a GIS environment. *Prerequisite: GIS113*.



#### **GIS232 Applied GIS: Communities**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall

Explore GIS fundamentals as applied to a range of disciplines focusing on municipalities, including 1) city and county government agency data: crime, election, building, assessment and zoning data; 2) techniques for displaying data in map form; and 3) GIS theory, data collection and input, data management, spatial analysis, visualization, map preparation and presentation. *Prerequisite: GIS113*.

#### **GIS250 Remote Sensing I**

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Introduction to digital remote sensing and satellite imagery analysis, including: fundamental principles of remote sensing with an emphasis on the theoretical and applied realms of the discipline; physics of electromagnetic radiation, digital photogrammetry, image interpretation, spatial resolution, airborne and space-borne sensors and image classification; and reinforcement of concepts through laboratory exercises and field work. *Prerequisite: GIS102*.

#### **GIS251 Remote Sensing II**

4 Credits (3 Lectures, 3 Labs)

Typically Fall and Spring

Use remote sensing tools to create aerial photography and data for Geographic Information Systems (GIS) based natural resource mapping and monitoring. Explore non-photographic systems used for natural resource management, including satellite-borne sensors, radar, LiDAR, video, digital cameras and various airborne multi-spectral and hyperspectral sensors. Data from these systems and aerial photography provide key inputs to GIS. *Prerequisite: GIS250*.

#### GIS296 GIS Internship II

3 Credits (3 Internships - 135 Hours)

Typically Offered: Fall, Spring and Summer

The GIS Internship II is designed for GIS A.A.S. Degree seeking students as their capstone course in which they apply their GIS knowledge and skill in a real-world setting based on their selected GIS track, interests and skills. This internship requires 135 hours of applied work in a work setting. Prerequisites: GIS113, (DFT131 or GIS241), (GIS230 or GIS231 or GIS232), (CIS120 or AGB124), GIS196 and instructor consent. This is the GIS A.A.S. Degree capstone course and all GIS AAS Degree coursework must be completed prior to enrollment in this course.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:

#### **GIS299 GIS Research Methods**

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Introduction to GIS focused research methods useful for academic and professional investigations of information practices and technologies. By examining the applications, strengths and major criticisms of geospatial methodologies drawn from both the qualitative and quantitative traditions, this course stresses developing skills and knowledge to make various decisions and the steps involved in crafting and executing a research methodology, as well as the ability to create critically assessed GIS-based research. *Prerequisite: GIS232 or GIS251*.

#### GEOGRAPHY (GEO)

### **GEO101 Introduction to Cultural and Historical Geography**

3 Credits (3 Lectures) 🗟 🎜

**Typically Offered:**Fall and Spring

Historical and contemporary spatial variations among cultural groups and spatial functioning of society. Illustrations from a variety of cultures showing how culture is constructed, contested, and contextualized. *Prerequisite: RDG094*.

## GEOGRAPHY (PHYSICAL) (GPH)

### GPH111 Introduction to Physical Geography

4 Credits (3 Lectures, 3 Labs)  $\mathcal{R}$ 

**Typically Offered:** Fall and Spring

Spatial and functional relationships among climates, landforms, soils, water and plants. *Prerequisite: RDG094*.

#### GEOLOGY (GLG)

#### **GLG101 Physical Geology**

4 Credits (3 Lectures, 3 Labs) 

■ GLG 1101 

■ R

**Typically Offered:** Fall and Spring

Basic principles of geology. Earth materials, external processes, internal processes, mineral and energy resources, and planetary geology. *Prerequisites: MAT092 and RDG094*.



#### **GLG102 Historical Geology**

4 Credits (3 Lectures, 3 Labs) 🗟 🇷

**Typically Offered:**Fall and Spring

Rocks, fossils, organic evolution, geologic time, plate tectonics, earth's origin and the major time periods of earth history. *Prerequisites: MAT092 and RDG094*.

#### **GLG110 Environmental Geology**

4 Credits (3 Lectures, 3 Labs) 🗟 🗷

**Typically Offered:** Fall and Spring

Geological studies as they apply to interactions between humans and the Earth, including geologic processes and hazards, resources and global change. *Prerequisites: MAT092* and *RDG094*.

## HEALTH CAREERS CENTER (HCC)

#### **HCC100 Introduction to Healthcare**

3 Credits (3 Lectures) POS R

**Typically Offered:** Fall, Spring and Summer

Introduction to healthcare, medical terminology and the human body, personal and workplace safety, behaviors for success, communication and healthcare skills, and securing and maintaining employment. *Prerequisite: RDG094*.

#### **HCC110A Medical Terminology A**

3 Credits (3 Lectures) 🚜

Typically Offered: Fall, Spring and Summer

Study of medical terminology and its application to assigned body systems. *Prerequisite: RDG094*.

#### **HCC110B Medical Terminology B**

3 Credits (3 Lectures) 🦧

**Typically Offered:** Fall, Spring and Summer

Study of medical terminology and its applications to assigned body systems and specialties. *Prerequisite: RDG094* 

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS
Reading Required: RDG094: ROG094: SUN Course:

#### **HCC111 Healthcare Law and Ethics**

2 Credits (2 Lectures) POS R

**Typically Offered:** Fall, Spring and Summer

Introduction to the foundations of law and ethics in healthcare, legal issues for healthcare practitioners, and professional, social and interpersonal healthcare issues. *Prerequisite: RDG094*.

#### **HCC112 Interpersonal Skills**

2 Credits (2 Lectures) POS R

**Typically Offered:** Fall, Spring and Summer

Communication skills, basic principles of psychology, developmental stages of the life cycle, hereditary, cultural, and environmental influences on behavior and professional issues. *Prerequisite: RDG094*.

## **HCC113 Math and Dosage Calculations for Health Occupations**

1 Credit (1 Lecture) 🦧

Typically Offered: Fall, Spring and Summer

Mathematical concepts and dosage calculations required in a variety of health occupations. *Prerequisites: MAT082 and RDG094.* 

#### **HCC116 Medical Terminology Accelerated**

3 Credits (3 Lectures) POS R

**Typically Offered:** Fall, Spring and Summer

Study of medical terminology and its applications to all body systems and assigned specialties. Fast-paced for students with medical backgrounds. *Prerequisite: RDG094*.

# HEALTH INFORMATION MANAGEMENT (HIM)

#### **HIM115 Health Information Technology I**

3 Credits (3 Lectures) R

Typically Fall

The fundamental concepts in Health Information, including healthcare system, root foundations of the profession, healthcare data and information systems, structures and information management methodologies as well as classification systems, terminologies and vocabularies. At the end of this course, students will be familiar with the healthcare system, accreditation, certification and licensure standards. *Prerequisite: RDG094*.



#### **HIM117 Health Information Technology II**

3 Credits (3 Lectures)

**Typically Offered:** Spring

The fundamental concepts in Health Information including healthcare informatics data management and use to include an overview of statistics, research and epidemiology, performance management, patient safety, data analysis, registries and law. At the end of this course, students will have a thorough understanding of the management and uses of data. *Prerequisite: HIM115*.

## HIM121 Legal Aspects of Health Information

2 Credits (2 Lectures)

**Typically Offered:** Spring

Continued study of law and ethical concepts including the medical legal system, criminal vs. civil law, statutory law, contracts, administrative law, medical malpractice and the lawful principles related to patient care and Health Information Management. *Prerequisites: HCC111, HIM115.*Corequisite: HIM117.

## HIM131 Introduction to Insurance and Insurance Billing I

3 Credits (3 Lectures) 🚜

**Typically Offered:** Fall and Spring

Introductory course to insurance systems, billing processes, clinical vocabularies, ethical and legal issues and computer applications used to complete these processes. *Prerequisite: RDG094*.

#### **HIM138 ICD Coding**

3 Credits (3 Lectures)  $\mathcal{R}$ 

Typically Fall

Fundamental coding techniques using the International Classification of Diseases (9th Revision) Clinical Modification (ICD-9-CM) and provides hands-on practical skills for student learning and skills building. Emphasis is placed on specificity and the application of professional standards in the assignment of codes to diagnoses and procedures using coding rules. *Prerequisite: RDG094. Corequisite: HCC116.* 

#### HIM139 ICD Coding for ICD-10 CM & PCS

2 Credits (1 Lecture, 3 Labs)

Typically Offered: Fall and Summer

Coding nomenclature using ICD-10-CM and PCS implemented nationwide and effective 2013. Code sets for ICD-10 require higher level anatomy and physiology knowledge and increased levels of specificity. This course is only open to HIM students, graduates and credentialed coders familiar with ICD-9. *Prerequisites: HIM138 and HCC116*.

#### **HIM158 CPT Coding**

3 Credits (3 Lectures)

Typically Spring Offered:

Fundamental coding techniques using the Current Procedural Terminology (CPT) and the HCPCS coding system and providing hands-on practical skills for student learning and skills building. Emphasis is placed on specificity and the application of professional standards in the assignment of codes to diagnoses and procedures using coding rules. *Prerequisite: HIM138*.

### HIM160 Health Information Technology Seminar

2 Credits (1 Lecture, 3 Labs)

Typically Summer Offered:

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)  $\mathcal{R}$ 

**Typically Offered:** Spring

Real world scenarios for student application of knowledge and skills building in data content, insurance systems, billing processes, clinical vocabularies, ethical and legal issues, and computer applications. *Prerequisite: RDG094*.

**ICON LEGEND** 

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos

SUN Course:



### HIM175I Practicum – Coding and Reimbursement

4 Credits (4 Practica – 180 hours)

**Typically Summer** 

Practical experience of 180 hours, under supervision of an instructor, with an emphasis on applying medical coding principles and procedures to medical records. *Prerequisite: Instructor consent.* 

#### **HIM200 Healthcare Reimbursement**

2 Credits (2 Lectures)

**Typically** Fall

Builds on fundamental concepts in reimbursement methodologies, including clinical coding, coding compliance, reimbursement systems and revenue cycle management. At the end of this course students will be familiar with reimbursement reporting requirements. *Prerequisite: HIM158*.

### HIM205 Healthcare Statistics and Research

2 Credits (2 Lectures)

Typically Fall Offered:

Emphasizes developing student's knowledge and skills with data collection methods, computation, organization and presentation of reported health statistics. Expands on Institutional Review Board (IRB) processes and policies. *Prerequisites: HIM160 and MAT101 or higher.* 

#### **HIM208 Advanced Coding**

2 Credits (2 Lectures)

**Typically** Fall

Continued study in intermediate coding concepts and advanced student skill training utilizing all coding methodologies. Students perform coding functions using real medical records and both the manual system and an encoder/grouper. *Prerequisites: HIM138 and HIM158*.

#### **HIM210 Supervision and Quality**

2 Credits (2 Lectures)

**Typically Offered:** Spring

Enhances the student's ability to perform qualitative and quantitative analysis of data for peer review, quality assessments, and the development of improvement programs in healthcare facilities and organizations for reporting and accreditation requirements. *Prerequisite: HIM205*.

#### **HIM215 Health Information Systems**

3 Credits (3 Lectures)

Typically Spring

Continued study in the areas of data storage, retrieval and security as well as information systems and communication technologies. This course promotes the application of analysis, design, evaluation, selection, acquisition and utilization of health information systems in healthcare organization settings. *Prerequisites: CBA113A and HIM160. Corequisite: CBA114A*.

### HIM275Q Health Information Technology Practicum

4 Credits (4 Practica – 180 Hours)

Typically Summer

Through a practical externship of at least 180 hours, students apply knowledge and skills learned in the Health Information Technology program in a health care facility setting under the direction of a Registered Health Information Technician (RHIT) or Registered Health Information Administrator (RHIA). Prerequisites: HIM215, (all program requirements completed prior to enrollment in HIM275Q) and HIT Program Director consent.

### HEALTH KNOWLEDGE AND SKILLS (HKS)

#### **HKS155 Introduction to Phlebotomy**

3 Credits (2 Lectures, 3 Labs)  $\mathcal{R}$ 

**Typically Summer** 

An introduction to the basic knowledge and practical experience necessary for the safe and successful collection of blood specimens. Students have the opportunity for practical experience in a hospital setting. *Prerequisites: High School Diploma or GED; Immunizations required; and RDG094. Corequisite: HKS255.* 

**ICON LEGEND** 

Intensive Writing: IW

AGEC: 🔂

Dual Enrollment: 🥨

Programs of Study/Tech Prep: POS
SUN Course:

Reading Required: RDG094: R

t: **2** p: **POS** 



#### **HKS255 Phlebotomy Practicum**

3 Credits (3 Practica – 135 hours)

**Typically Summer** 

An application of basic phlebotomy training to provide safe and successful collection of blood specimens. Students have the opportunity for practical experience in an outpatient blood collection site or hospital setting. *Corequisite: HKS155*.

### HEALTH PATIENT MANAGEMENT (HPM)

#### **HPM105 Pharmacy Techniques**

3 Credits (3 Lectures)

**Typically Offered:** Spring

An overview of pharmacy. History of pharmacy, pharmacy terminology, role and responsibilities of a pharmacy technician in comparison to that of the pharmacist, and ethical and legal information. Theory of procuring, manipulating, calculating and preparing drugs for dispensing.

#### **HPM125 Nursing Assistant**

6 Credits (4 Lectures, 6 Labs) 22 R

**Typically Offered:**Fall and Spring

Entry-level nursing skills, supervised clinical experience, and basic anatomy, physiology, nutrition and medical terminology pertinent to nursing assistants in nursing homes or hospitals. Potential students convicted of a felony may not apply for state certification or licensure until five years after the absolute discharge of sentence. (All court-ordered terms of probation or parole must be completed at least five years prior to the date of application.) *Prerequisites: HS diploma or GED, RDG094 and Registration Packet must be completed*.

## **HPM136 Business Skills for Massage Therapy**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Spring

Career options in the massage field, including entrepreneurial opportunities, medical applications and spa work. Insurance billing and preparation for taking the national certification examination. *Prerequisite: RDG094*.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: 
Programs of Study/Tech Prep: POS
SUN Course:

#### **HPM140 Medical Assisting Skills I**

4 Credits (3 Lectures, 3 Labs) R

**Typically Offered:**Fall and Spring

Medical record, medical asepsis and the OSHA Standard, sterilization and disinfection, vital signs, the physical examination, eye and ear assessment and procedures, physical agents to promote tissue healing, gynecologic, prenatal and pediatric examinations, minor office surgery and administration of medication. *Prerequisites: RDG094 and instructor consent.* 

#### **HPM141 Medical Assisting Skills II**

4 Credits (3 Lectures, 3 Labs) R

Typically Fall and Spring

Cardiopulmonary procedures, colon procedures, radiology and diagnostic imaging, introduction to the clinical laboratory, urinalysis, phlebotomy, hematology, blood chemistry and serology, and microbiology. *Prerequisites: RDG09 and instructor consent.* 

#### **HPM150 Chiropractic Assistant Training**

2 Credits (2 Lectures)

Typically Fall Offered:

Introduction to administrative and clinical chiropractic procedures. This course is a requirement in the massage therapy program and is available as continuing education for chiropractic assistants.

### **HPM151 Study of Acupuncture for Healthcare Professionals**

1 Credit (1 Lecture)

**Typically** Fall

Introduction to acupuncture principles and practices that are part of patient care in a chiropractic medical practice. This course is required in the massage therapy program and is available as continuing education for chiropractic assistants.

#### HPM152 Study of Physiotherapy for Healthcare Professionals

1 Credit (1 Lecture)

Typically Fall

Introduction to physiotherapy principles and practices that are part of patient care in a chiropractic medical practice. This course is a requirement in the massage therapy programs and is available as continuing education for chiropractic assistants.



## **HPM160 Applied Anatomy for Massage Therapy**

3 Credits (3 Lectures) 🚜

Typically Fall

Study of bones, joints and muscles while developing palpation skills with practical application in concurrent massage class experience. *Prerequisite: RDG094*.

### **HPM162 Basic Pharmacology for Health Occupations**

3 Credits (3 Lectures) R

**Typically Offered:** Fall, Spring and Summer

Introduction to drug sources, uses and classifications including purpose, side effects, cautions, interactions and patient education. *Prerequisite: RDG094*.

#### **HPM164 Pharmacy Certification Review**

2 Credits (2 Lectures) R

Typically Spring

Preparation for taking the national pharmacy certification exam necessary for placement in the field and verification of competency. *Prerequisite: RDG094*.

### HPM169 Clinical Laboratory Assistant Basics I

4 Credits (3 Lectures, 3 Labs)

Typically Fall

This course defines the role of the clinical laboratory assistant in the healthcare delivery system: infection control principles, safety practices, procedures to collect specimens, methods for preparing blood and body fluid specimens for analysis, and the performance of basic tests at the clinical assistant level will be discussed. An overview of quality control protocols and potential pre-analytical errors will be provided. *Prerequisites: Phlebotomy Certificate and instructor consent.* 

### HPM170 Clinical Laboratory Assistant Basics II

4 Credits (3 Lectures, 3 Labs)

**Typically Offered:** Spring

An introduction to the basics of six areas of the clinical laboratory; Immunology, Clinical Chemistry, and Donor Room (collection, screening, and component processing) are discussed as well as a focus on specific Hematology, Urinalysis, and Microbiology testing at the clinical assistant level. *Prerequisite: HPM169*.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos SUN Course: Procedures
4 Credits (3 Lectures, 3 Labs)

**HPM171 Administrative Medical** 

**Typically** Fal

Medical business practices, basic practice finances, managed care/insurance and procedural and diagnostic coding.

#### **HPM173 Pathophysiology**

3 Credits (3 Lectures) R

Typically Offered: Fall, Spring and Summer

Pathological conditions and terminology, causes, incidence, signs, symptoms, diagnosis, treatment and special considerations associated with the major diseases of the body systems studied. *Prerequisite: RDG094*.

## HPM175C Medical Assistant Degree Practicum

4 Credits (4 Practica – 180 Hours)

Typically Offered: Contact CAC Class Schedule

Supervised, unpaid practical experience of 180 hours in an ambulatory health care setting performing both administrative and clinical procedures. This course is required for the Medical Assistant A.A.S. Degree. Students must receive a grade of C or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's consent may retake this course only once with instructor consent. Prerequisites: Mandatory requirements specific to HPM175C must be met before enrollment; all program courses must be successfully completed before enrolling in HPM175C and instructor consent.

### **HPM175E Medical Assistant Certificate Practicum**

4 Credits (4 Practica – 180 Hours)

Typically Offered: Contact CAC Class Schedule

Practical experience of 180 hours in a medical facility, under the supervision of a physician, where the students apply clinical principles and procedures in a situation with actual patient contact. This course is required for the Medical Assistant Certificate. *Prerequisite: Instructor consent.* 



#### **HPM175H Practicum – Pharmacy** Technician

4 Credits (4 Practica - 180 Hours))

**Typically** Contact CAC Class Schedule Offered:

Practical experience of 180 hours under the supervision of a pharmacist performing a variety of technical duties related to preparation and dispensing of drugs according to standard procedures. Students must receive a grade of "C" or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: Mandatory requirements specific to HPM175H must be met before enrollment; all program courses must be successfully completed before enrollment and instructor consent.

#### **HPM175L Practicum – Massage Therapy** (Relaxation Massage)

1 Credit (1 Practicum - 45 Hours)

**Typically** Fall and Spring Offered:

Practicum consisting of 45 hours of hands-on experience with emphasis on relaxation (Swedish) massage under the supervision of an instructor. Students must receive a grade of "C" or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: HPM180; Mandatory requirements specific to HPM175L must be met before enrollment and instructor consent.

#### **HPM175M Practicum – Massage Therapy** (Therapeutic Massage)

1 Credit (1 Practicum – 45 Hours) POS

**Typically** Fall and Spring Offered:

Practicum consisting of 45 hours of hands-on experience with emphasis on therapeutic massage under supervision of an instructor. Students must receive a grade of "C" or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: HPM181; Mandatory requirements specific to HPM175M must be met before enrollment; instructor consent.

#### **HPM175N Practicum – Massage Therapy** for Special Populations

1 Credit (1 Practicum – 45 Hours)

**Typically** Fall and Spring Offered:

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 HPM175N must be met before enrollment and instructor consent.

#### **HPM1750 Practicum – Massage Therapy** (Spa Treatments and Hydrotherapy)

1 Credit (1 Practicum – 45 Hours)

**Typically** Fall and Spring Offered:

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 HPM1750 must be met before enrollment and instructor consent.

#### **HPM175P Clinical Laboratory Assistant Practicum**

3 Credits (3 Practica - 135 Hours)

**Typically** Summer Offered:

Practical experience of 135 hours under the supervision of a laboratory technologist performing a variety of clinical skills including phlebotomy, waived testing, basic procedures, documentation and the use of information systems. Students must receive a grade of C or better to pass this course. Students who fail will not be allowed to repeat this course. Students who withdraw with instructor's permission may retake this course only once with instructor permission. Prerequisites: Phlebotomy certificate; all program courses must be successfully completed before enrollment; mandatory requirements specific to HPM175P must be met before enrollment and instructor consent.

#### **HPM180 Therapeutic Massage I**

3 Credits (3 Lectures) POS

**Typically** Fall and Spring Offered:

Introduction to massage history, benefits and contraindications, draping, hygiene and safety, relaxation (Swedish) massage techniques and benefits, and business and ethics.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment: Intensive Writing: IW

Reading Required: RDG094: R

Programs of Study/Tech Prep: POS SUN Course:



#### **HPM181 Therapeutic Massage II**

3 Credits (3 Lectures) POS

**Typically Offered:** Fall and Spring

Corporate chair massage, sports massage, Trager massage, range of motion and stretching, proper body mechanics, hygiene, safety, draping and professional decorum.

### HPM210 Review for Registered Medical Assistant Examination

3 Credits (3 Lectures)

**Typically Offered:** Spring

A comprehensive approach to reviewing both administrative and clinical competencies for the medical assistant A.A.S. degree graduate preparing to take the Registered Medical Assistant (RMA) Medical Assistant Certification Examination offered by the American Medical Technologists (AMT). Prerequisite: Medical Assistant graduate with an Associate of Applied Science Degree.

#### **HPM280 Therapeutic Massage III**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Muscle-specific and condition-specific massage designed to aid in the rehabilitative process including carpal tunnel syndrome, thoracic outlet syndrome, sciatic, low back and neck pain.

#### **HPM281 Therapeutic Massage IV**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Special populations massages including pregnant women, lymphatic massage, geriatric massage and foot reflexology along with the proper use of body mechanics, hygiene, safety, draping and professional decorum.

#### **HPM282 Therapeutic Massage V**

3 Credits (3 Lectures) POS

**Typically Offered:** Fall and Spring

This course consists of 30 hours of spa technology (balneotherapy) and 15 hours of hydrotherapy.

# HEAVY EQUIPMENT OPERATIONS (HEO)

### **HEO100 Introduction to Heavy Equipment Operations**

5 Credits (1 Lecture, 12 Labs)

Typically Summer

Basic heavy equipment operation knowledge and experience, including theory, safety and operation of various types of equipment used in the industry, as well as workplace ethics, time management and teamwork. *Prerequisites: Current and valid driver license and instructor consent.* 

#### **HEO121 Heavy Equipment Operations I**

5 Credits (3 Lectures, 6 Labs)

**Typically Offered:** Fall and Spring Summer

Introduction to the use of heavy equipment with emphasis on safety, preventive maintenance and grade stake interpretation. *Prerequisite: Valid driver license.* 

#### **HEO122 Heavy Equipment Operations II**

5 Credits (3 Lectures, 6 Labs)

**Typically Offered:** Spring

Expanded operation of heavy equipment to include interpreting blueprints, staking and estimating costs, using technology to conduct research and construct more complex projects.

Prerequisites: HEO121 and a valid driver license.

#### **HEO127 Heavy Equipment Reconditioning**

4 Credits (2 Lectures, 6 Labs)

**Typically Offered:**Fall and Spring

Fundamentals of heavy equipment reconditioning procedures. *Prerequisite: Valid driver license.* 

### **HEO128 Diesel Equipment Service and Repair**

4 Credits (2 Lectures, 6 Labs)

**Typically Offered:** Fall, Spring and Summer

Service and repair of diesel and heavy equipment. *Prerequisite: Current and valid driver license.* 

**ICON LEGEND** 

AGEC: Intensive Writing: *IW*Reading Required: RDG094: R

Dual Enrollment: 
Programs of Study/Tech Prep: POS

SUN Course:



#### **HEO221 Advanced Heavy Equipment** Operations III

5 Credits (3 Lectures, 6 Labs)

**Typically** Fall Offered:

Advanced instruction and application of heavy equipment operation comprehensive skills, knowledge and abilities. Prerequisites: HEO122 and valid driver license.

#### **HEO222 Applied Heavy Equipment** Construction

5 Credits (3 Lectures, 6 Labs)

**Typically** Fall, Spring and Summer Offered:

Heavy Equipment Operator capstone construction project and introduction to job seeking techniques. Prerequisites: HEO122 or instructor consent; current and valid driver license.

#### **HEO223 Commercial Driver License Preparation**

3 Credits (3 Lectures)

**Typically** Spring Offered:

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) 🖸 🗷

**Typically** Fall, Spring and Summer Offered:

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) 🖸 🗷

**Typically** Fall, Spring and Summer Offered:

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.

#### **ICON LEGEND**

Dual Enrollment: AGEC: 🔂 Programs of Study/Tech Prep: POS Intensive Writing: IW Reading Required: RDG094: R SUN Course:

#### **HIS103 History of Western Civilization I**

3 Credits (3 Lectures) 🖸 🚜

**Typically** Fall and Spring Offered:

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) 🖸 🚜

**Typically** Fall and Spring Offered:

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) 🗟 🗷

**Typically** Every other spring; consult CAC Class Schedule. Offered:

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) 🗟 🗷

**Typically** Fall Offered:

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) 🗟 🇷

**Typically** Fall Offered:

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) 🗟 🎗

Typically Fall

An examination of the characteristics and development of civilizations, religions and philosophies of the Far East and Southeast Asia from ancient times to the mid-nineteenth century. *Prerequisite: RDG094*.

#### **HIS201 Women in United States History**

3 Credits (3 Lectures) 🗟 🗷

Typically Offered: Spring and Summer

The history of women in American society from colonial times to the present with an emphasis on female leadership, social movements, race, ethnicity, social class, work, religion and the changing definitions of women's roles. Field trips may be required. *Prerequisite: RDG094*.

### HIS208 Eastern Civilization – 1850 to Modern Times

3 Credits (3 Lectures) 🔁 IW 🚜

Typically Spring

An examination of the characteristics and development of civilizations, religions and philosophies of the Far East and Southeast Asia from the mid-nineteenth century to modern times. *Prerequisite: RDG094. Corequisite: ENG102* .

#### HONORS (HNR)

#### **HNR201 Honors Seminar I**

1 Credit (1 Recitation)

**Typically Offered:** Fall and Spring

Honors students and faculty work closely together on in-depth projects outside of the regular curriculum. The Honors Project is developed and research is shared through in-depth discussion, analysis and presentation of findings. Required for Honors students in the 18-hour academic transfer program. Must be taken concurrently with each content course taken for Honors credit. Prerequisites: HNR204, ENG101 and Honors cohort student. Corequisites: HNR205, ENG102 and each content course for Honors credit.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: **2**Programs of Study/Tech Prep: POS
SUN Course:

#### **HNR202 Honors Seminar II**

1 Credit (1 Recitation)

**Typically Offered:** Fall and Spring

Honors students and faculty work closely together on in-depth projects outside of the regular curriculum. The Honors Project is developed and research is shared through in-depth discussion, analysis and presentation of findings. Required for Honors students in the 18-hour academic transfer program. Must be taken concurrently with each content course taken for Honors credit. Prerequisites: HNR204, ENG101 and Honors cohort student. Corequisites: HNR205, ENG102 and each content course for Honors credit.

#### **HNR203 Honors Seminar III**

1 Credit (1 Recitation)

**Typically Offered:**Fall and Spring

Honors students and faculty work closely together on in-depth projects outside of the regular curriculum. The Honors Project is developed and research is shared through in-depth discussion, analysis and presentation of findings. Required for Honors students in the 18-hour academic transfer program. Must be taken concurrently with each content course taken for Honors credit. Prerequisites: HNR204, ENG101 and Honors cohort student. Corequisites: HNR205, ENG102 and each content course for Honors credit.

#### **HNR204 Honors Colloquium I**

3 Credits (3 Lectures, 3 Recitations) IWR

**Typically Offered:** Fall and Spring

The Honors Colloquium is required for Honors students in the 18-hour program. Honors Colloquium I is the first course requirement in the honors sequence designed for the academic transfer student. HNR204 may be taken either Fall or Spring semester, but must be taken independently of other Honors courses. The course provides a forum for reading and analyzing Daniel J. Boorstin's The Discoverers: A History of Man's Search to Know His World and Himself, an academic text which examines the significance and chronology of major events and movements in Western civilization, as well as the contributions of certain individuals and societies or groups. Application, analysis and synthesis are encouraged in oral and written responses. In addition, the course offers the opportunity for the Honors student to complete a proposal for an in-depth study/research project in an area of interest, monitored by the colloquium professor and a mentor who has uncommon knowledge or ability in the area of the student's interest. Also, the course provides enrichment activities of cultural significance. Prerequisite: RDG094. Corequisite: ENG101 ...



#### **HNR205 Honors Colloquium II**

3 Credits (3 Lectures, 3 Recitations) **IW** 

**Typically Offered:** Fall and Spring

The Honors Colloquium is required for Honors students in the 18-hour program. Honors Colloquium II is the second course requirement in the Honors course sequence designed for the academic transfer student. The course provides a forum for reading and analyzing Daniel J. Boorstin's The Creators: A History of Heroes of the Imagination, an academic text which examines human accomplishment in the fields of architecture, music, painting, sculpting and writing. Application, analysis and synthesis are encouraged in oral and written responses. In addition, the course offers the opportunity for the Honors student to complete and present an in-depth study/research project in an area of interest, monitored by the colloquium professor and a mentor who has uncommon knowledge or ability in the area of the student's interest. Also, the course provides enrichment activities of cultural significance. Prerequisites: HNR204 and RDG094. Corequisite: ENG102 .

#### **HNR255 Leadership Development**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall and Spring

A theoretical and applied study of leadership within the context of service. Approaches the study of the humanities as they relate to leadership theory, ethics and management. *Prerequisite: RDG094*.

## HOSPITALITY MANAGEMENT (HRM)

#### **HRM100 Introduction to Hospitality**

3 Credits (3 Lectures) 🛂 🗷

**Typically Offered:** Fall, Spring and Summer

An introduction to and career exploration of the hotel, restaurant, recreation, tourism and related industries. *Recommended: RDG094*.

#### **HRM101 Facilities Management**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Spring

The principles of property/facilities management with focus on lodging and food service operations. Concepts of the physical plant and engineering systems are introduced. Environment and energy conservation issues are discussed. *Prerequisite: RDG094*.

#### **HRM102 Management of Guest Services**

3 Credits (3 Lectures) R

**Typically** Fall

Front office procedures from the reservations process to checkout, including customer service, account settlement, revenue management, interoffice communication and human resource supervision. *Prerequisite: RDG094*.

## HRM103 Managing Food Service Operations

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

The principles of commercial food service operations with a systemic concept to operations approach. *Prerequisite: RDG091*.

## HRM106 Supervision in the Hospitality Industry

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically** Fall

Concepts of supervision principles and effective management within the hospitality industry including diverse workforce management, leadership and regulatory environment awareness. *Prerequisite: RDG094*.

#### **HRM208 Hospitality Law**

3 Credits (3 Lectures)

**Typically Offered:** Spring

Legal principles that govern the hospitality industry including basic contracts, administrative law, and government regulations of legal concerns resulting from owner-customer relations and the establishment and operation of a place of public accommodation. *Prerequisite: HRM100*.

**ICON LEGEND** 

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: 
Programs of Study/Tech Prep: POS
SUN Course:



# HUMANITIES (HMC, HMS)

#### **HMC115 Introduction to Brazilian Culture**

3 Credits (3 Lectures) R

**Typically Spring** 

A focused study of the people of Brazil involving a survey of culturally significant aspects of that country. *Prerequisites: RDG094 and ENG100.* 

#### **HMC201 International Travel Experience**

3 Credits (3 Internships)

**Typically Offered:** Fall and Spring

This course provides CAC students who receive a CAC International Studies Scholarship to earn credit for international exchanges. During their stay at a foreign university, students tailor their foreign study to their particular major and design a study that focuses on a specific aspect of their major which supports firsthand observation. The independent study specific requirements will be negotiated between the student and the instructor. Prerequisite: ENG100. Only students selected to receive a CAC International Studies scholarship to study at a foreign college or university for one semester may enroll. The independent study will be directed by a CAC instructor and the course syllabus must meet the approval of the CAC International Studies Program Director.

## HMC250 Humanities in the Western World I

3 Credits (3 Lectures) 🗟 🎗

**Typically Offered:** Fall and Spring

The culture, ideas and values of western civilization with an emphasis on the intellectual and artistic achievements in art, architecture, music, literature and/or philosophy up to 1400. *Prerequisites: RDG094 and ENG100. Recommended: Sophomore status.* 

## HMC251 Humanities in the Western World II

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:**Fall and Spring

The culture, ideas and values of western civilization with an emphasis on the intellectual and artistic achievements in art, architecture, music, literature and/or philosophy from 1400 to 1800. *Prerequisites: RDG094 and ENG100. Recommended: Sophomore status.* 

## HMC252 Humanities in the Western World III

3 Credits (3 Lectures) 🗟 🎗

**Typically Offered:**Fall and Spring

The culture, ideas and values of western civilization with an emphasis on the intellectual and artistic achievements in art, architecture, music, literature and/or philosophy from 1400 to 1800. *Prerequisites: RDG094 and ENG100. Recommended: Sophomore status.* 

## HMS200 Comparative Cultures and Society

3 Credits (3 Lectures) 🚜

Typically Offered: Fall, Spring and Summer

A focused study of a given country and its people, involving a survey of culturally significant aspects of that country. The selected country will vary.

# INTERDISCIPLINARY STUDIES (IDS)

#### **IDS100 Service Learning I**

3 Credits (2 Lectures, 1 Internship)

**Typically Offered:** Fall and Spring

Participation in service to the community that incorporates academic skills and knowledge to produce meaningful, real-world results. *May be taken two times for credit. Prerequisite:* ENG101 .

**ICON LEGEND** 

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos

SUN Course:



#### **LITERATURE**

(LIT)

#### **LIT101 Introduction to Literature**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall and Spring

Introduction to fiction, poetry, and drama, including literary analysis of various genres, literary devices and production and reception of literature by various audiences. *Prerequisite: RDG094*.

#### LIT201 American Literature I

3 Credits (3 Lectures) 🖸 IW 🥂

**Typically** Fall

The chief literary works produced in America from the colonial period through the Civil War. *Prerequisite: RDG094*. *Corequisite: ENG102*.

#### **LIT202 American Literature II**

3 Credits (3 Lectures) 🔁 IW

Typically Spring

Survey of a diverse range of American literary works from the Civil War to modern times, emphasizing literary history, criticism and socio-cultural and historical contexts. *Prerequisite: ENG101. Corequisite: ENG102.* 

#### **LIT203 English Literature I**

3 Credits (3 Lectures) 💽 IW

Typically Fall

Major English literary works from Old English to 1800. *Prerequisite: ENG101. Corequisite: ENG102.* 

#### LIT204 English Literature II

3 Credits (3 Lectures) 🖸 IW

Typically Spring

The chief English literary works from the Romantic period to the Modern period. *Prerequisite: ENG101. Corequisite: ENG102.* 

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos SUN Course:

#### **LIT206 World Literatures**

3 Credits (3 Lectures) 🗟 🚜

**Typically Offered:**Fall and Spring

Introduction to literary works from diverse global cultures, focusing on illuminating both the universality and diversity of human experience. *Prerequisite: RDG094*.

#### **LIT232 African American Literature**

3 Credits (3 Lectures)

Typically Fall

Exploration of major literary works written by African Americans beginning with the 1700s through the present, including textual analysis, socio-cultural, political and/or historical context. *Prerequisite: ENG101. Corequisite: ENG102.* 

#### **LIT233 American Ethnic Literature**

3 Credits (3 Lectures) 🔁 IW

Typically Offered: Consult CAC Class Schedule.

Exploration of identity through a survey of American ethnic writers. Focus on textual analysis, socio-cultural, political and/or historical context. *Prerequisite: ENG101. Corequisite: ENG102.* 

## LIT234 U.S. Latino/a Literature and Culture

3 Credits (3 Lectures)  $\mathcal{R}$ 

Typically Offered: Consult CAC Class Schedule.

United States Latino/a authored literature from the sixteenth century to the present day, including fiction, poetry, essays, drama and memoirs. *Prerequisites: RDG094; ENG100 or test into ENG101*.

#### **LIT254A Literature and Film**

3 Credits (3 Lectures) 🔁 IW

**Typically** Fall

Narrative mediums of literature and film through the study of select literary works and their film adaptations. Examines film as both an interpretation of literature and as the unique product of artistic, historical and sociocultural forces. *Prerequisite: ENG102*.



#### **LIT254B Literature and Film**

3 Credits (3 Lectures)

**Typically** Spring Offered:

Narrative mediums of literature and film through the study of select literary works and their film adaptations. Examines film as both an interpretation of literature and as the unique product of artistic, historical and sociocultural forces. To receive credit for this course, the topic must vary significantly from LIT254A. Prerequisites: LIT254A and instructor or Division Chair consent.

#### **LIT255 The Horror Novel**

3 Credits (3 Lectures)

**Typically** Fall Offered:

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

3 Credits (3 Lectures) 🔁 IW

**Typically** Spring Offered:

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) 🚜

**Typically** Consult CAC Class Schedule. Offered:

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: RDG094and (ENG100 with grade of "C" or better or test into ENG101).

#### LIT291 Children's Literature for Educators

3 Credits (3 Lectures) 🗟 IW

**Typically** Fall and Spring Offered:

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)

**Typically** Fall and Spring Offered:

An introduction to quality assurance, quality improvement and quality improvement tools including: Statistical Process Control (SPC) software and hardware applications. Related topics include: International Standards Organization Quality Standards (ISO 9000) and Theory of Constraints (TOC). Writing technical papers with an oral presentation is included.

#### **MET125 Principles of Fabrication**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall, Spring and Summer Offered:

Principles and applications of common metal removal processes and sheet metal fabrication including drilling, turning, milling, shearing, and bending. Recommended: Experience using hand tools.

#### **MET127 Manufacturing Process and Materials**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Production processes, materials, techniques, systems and applications used in industry. Resources and systems of production management from manual, mechanized, automated and integrated stages are presented.

**ICON LEGEND** 

Intensive Writing: IW

AGEC: 🔃

Dual Enrollment:

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R SUN Course:



### MET132 Fluid Power Hydraulics - Pneumatics

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Fluid theory, production, consumption, control and application of the transmission of energy through hydraulic and pneumatic components, including valves, actuators, pumps and circuits. *Prerequisite: MAT092*.

#### **MET150 VB.NET for Engineering**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Object Oriented Programming techniques in Visual Basic (VB.NET) used to control external peripherals such as motors, lights and electromechanical equipment through the Universal Serial Bus (USB) port, including flowcharting, pseudocoding, coding, testing and documenting programs in accordance with specifications. *Recommended: Computer programming experience*.

#### **MET221 Electro-Mechanical Technology**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Mechanical concepts and basic electro-mechanical systems, including electronic circuits incorporating electro-mechanical and electro-optical transducers and auxiliary devices. *Prerequisites: ELC122 and MAT092*.

#### **MET226 Electro-Mechanical Systems**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Diagnostics, troubleshooting, design, maintenance, schematic reading and preventive maintenance of electric, hydraulic, pneumatic and vacuum systems of industrial machines.

Prerequisites: ELC220 and MET221.

#### **MET230 Semiconductor I Seminar**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Semi-conductor Manufacturing Technician Fabrication Cleanroom employment seminar. *Corequisite: CHM130 or higher*.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS

f Study/Tech Prep: POS SUN Course:

#### MET232 Solids Modeling - SolidWorks

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

CAD modeling, solid part generation, assembly of parts and working drawing creation. Applications of CAD/CAM in Computer Integrated Manufacturing.

#### **MET261 LabVIEW I Programming**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall, Spring and Summer

LabVIEW I focuses on using LabVIEW programming concepts, techniques, features, VIs and functions to create test and measurement analysis and report generation applications.

#### **MET262 LabVIEW 2 Programming**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

LabVIEW 2 focuses on programming concepts, techniques, features, VIs and functions used to create tests and measurements, data acquisition, instrument control, data logging, measurement analysis and report generation applications. *Prerequisite: MET261*.

#### **MET263 LabVIEW 3 Programming**

3 Credits (2 Lectures, 3 Labs)

Typically Offered: Fall, Spring and Summer

Develop professional user interfaces, applications and document VIs effectively using LabVIEW software. Use the four fundamental areas of LabView software development, specifically design, implement, test and deploy. *Prerequisite: MET262*.

#### **MET264 LabVIEW FPGA Applications**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Learn LabVIEW field-programmable gate array (FPGA) applications to extend LabVIEW to other user interfaces. Emphasis on design and compiling processes. *Prerequisite: MET263*.



#### **MET265 LabVIEW Overview**

4 Credits (2 Lectures, 6 Labs)

Typically Offered: Fall, Spring and Summer

The LabVIEW Overview prepares students for the Certified LabVIEW Associate Developer (CLAD) Certification Exam by reviewing key skills, knowledge and abilities embedded in the LabVIEW course series. *Prerequisite: MET264*.

### MET290 Material, Safety and Equipment Overview for Nanotechnology

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

An overview of the materials, safety and equipment issues encountered in the practice of "top down" and "bottom up" nanofabrication. The course focuses on safety, environmental and health issues related to equipment operation and materials handling as well as cleanroom protocol. *Prerequisites:* CHM130 and MAT151.

### **MET291 Basic Nanotechnology Processes**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

A hands-on introduction to the processing involved in "top down," "bottom up" and hybrid nanofabrication. The course details a step-by-step description of the equipment, facilities processes and process flow needed to fabricate devices and structures. *Prerequisite: MET290*.

### **MET292 Materials in Nanotechnology**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

An in-depth, hands-on exploration of nanofabrication materials including chemical bonding, crystal structure and identification and prevention of defects. The relationship between material structure, properties and processing is emphasized.

Prerequisite: MET291.

### **MET293 Patterning for Nanotechnology**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Hands-on treatment of all aspects of advanced pattern transfer and pattern transfer equipment, including probe techniques, stamping and embossing, electron beam and optical contact and stepper systems. *Prerequisite: MET292*.

### MET294 Materials Modification in Nanotechnology

3 Credits (2 Lectures, 3 Labs)

Typically Offered: Fall, Spring and Summer

Examine the contribution of nanomaterials to a wide range of industries. Specific material properties and processes will be examined for their contribution to the field of composites, biotechnology and energy applications. *Prerequisite: MET293*.

### MET295 Characterization, Testing of Nanotechnology Structures and Materials

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Examine a variety of techniques and measurements essential for testing and controlling material fabrication and final device performance. Characterization includes optical, physical and electrical approaches. *Prerequisite: MET294*.

### MASS COMMUNICATIONS (MSC)

### **MSC101 Media and Society**

3 Credits (3 Lectures) 🖸 🗷

**Typically Offered:** Fall and Spring

An introduction to mass communications and the importance media play in shaping the societal and cultural experiences of humans. Demonstrates how communication changes with technology, from the printing press to electronic books. *Prerequisite: RDG094*.

### **MSC102 Writing for the Print Media I**

3 Credits (3 Lectures) DJRN 2201 R

**Typically Offered:** Fall and Spring

Beginning reporting with practice in organizing and writing basic news stories, culminating in producing stories for the college newspaper. *Prerequisite: RDG094*.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment: **2**Programs of Study/Tech Prep: **POS** 

Intensive Writing: *IW*Reading Required: RDG094: *R* 



### **MSC107 Basic Script Writing**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Script theory and application in preparing a final, full-length script, emphasizing techniques for visual and oral media production. Prerequisites: ENG102 and MSC101.

### **MSC109 TV/Video Production**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

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) R

**Typically** Fall and Spring Offered:

Preparing copy and photographs for campus publications. May be taken four times for credit. Prerequisite: RDG094.

### **MSC120 Graphic Design and Adobe InDesign**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

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) R

**Typically** Fall and Spring Offered:

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)  $\mathcal{R}$ 

**Typically** Fall and Spring Offered:

An introduction to the use of Adobe Illustrator design tool and placing of illustration in a web or print design. Prerequisite: RDG094.

### **MSC130 Digital Photography and Photoshop**

3 Credits (3 Lectures) POS

**Typically** Fall, Spring and Summer Offered:

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) R

**Typically** Spring Offered:

A survey of the prominent figures and movements in photography as well as advancements in photographic technology and processes from 1827 to present. Prerequisites: ENG100 and RDG094.

### **MSC180 Basic Photojournalism**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

An introduction to visual storytelling, emphasizing composition, lighting, photo editing skills and legal and ethical issues. Fully adjustable Digital Single Lens Reflex (DSLR) camera required. Prerequisite: MSC130.

### MSC202 Writing for the Print Media II

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Advanced reporting of feature stories, interviews, reviews, columns and editorials. Prerequisite: MSC102.

**ICON LEGEND** 

Intensive Writing: IW

AGEC: 🔃

Dual Enrollment:

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



### **MSC205 Portfolio Preparation**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Spring

Use digital photography and graphic design to prepare a portfolio of original artwork for professional use. *May be taken two times for credit. Prerequisite: ART101*.

### **MSC220 Advanced Graphic Design**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Advanced Graphic Design expands experience with computer software, presents more complex design guidelines and type face rules and offers complex design assignments. Students will pursue more individualized advanced projects. *Prerequisite: MSC120*.

# MSC230 Advanced Digital Photography and Adobe Photoshop

3 Credits (3 Lectures) POS

**Typically Offered:** Fall, Spring and Summer

Advanced Digital Photography expands experience with computer software, presents more complex photographic instruction and offers complex assignments. Students will pursue individualized projects. *Prerequisite: MSC130*.

### **MSC240 Mass Media and the Public Mind**

3 Credits (3 Lectures)

Typically Fall and Spring

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 and MSC101*.

### **MATHEMATICS**

(MAT)

#### **MAT082 Basic Arithmetic**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Development of arithmetic skills as a foundation for other mathematics courses, stressing number awareness and arithmetic processes.

### **MAT086 Pre-Algebra**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

A review of the fundamental concepts of algebra. This course provides a strong base for success in future algebra courses. *Prerequisite: MAT082. Recommended: RDG091.* 

### MAT090 Math Help 911

1 Credit (1 Lecture)

**Typically Offered:** Fall and Spring

Instructional assistance to strengthen students' math concepts and study skills for their 082, 086 or 092 math course(s). *May be taken six* (6) *times for credit. Note: Students typically take two 8-week sessions per semester.* 

### **MAT092 Introductory Algebra**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

A review of the basic skills of arithmetic and algebra, with the emphasis on developing sound algebraic and problem solving skills. *Prerequisite: MAT086. Recommended: RDG091*.

### MAT100 Math Help 411

2 Credits (2 Lectures)

**Typically Offered:** Fall and Spring

Customized practice of math concepts and study skills; complements MAT121, 141, and/or 151. May be taken three times for elective credit only with instructor consent. For elective credit only. Prerequisite: MAT092.

**ICON LEGEND** 

AGEC: The Intensive Writing: IW

Dual Enrollment: 🥝

Programs of Study/Tech Prep: POS

Reading Required: RDG094: 

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### **MAT101 Essential Mathematics**

4 Credits (4 Lectures)

**Typically Offered:** Consult CAC Class Schedule.

A review of the basic skills of mathematics with emphasis on developing sound mathematical skills in arithmetic, algebra, geometry and problem-solving. *Prerequisites: MAT092 and RDG091*.

### **MAT111 Math for Electricians**

2 Credits (1.5 Lectures, 2 Labs)

**Typically Offered:** Fall, Spring and Summer

Introduction to math principles for electricians including basic arithmetic, algebra and fundamental 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)

**Typically Offered:** Fall, Spring and Summer

Operations/properties of real numbers, exponents and complex numbers; factoring, solution/application of linear and quadratic equations; operations on rational and radical expressions. *Prerequisite: MAT092. Recommended: RDG091.* 

### MAT122 Intermediate Algebra, Accelerated

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Operations/properties of real numbers, exponents and complex numbers; factoring, solution/application of linear and quadratic equations; operations on rational and radical expressions. *Prerequisite: MAT092. Recommended: RDG091.* 

### **MAT141 College Mathematics, Standard**

4 Credits (4 Lectures) 🗟 🇷

Typically Offered: Fall, Spring and Summer

General mathematics including personal finance, set theory, linear programming, exponential growth and decay, probability and statistics. *Prerequisites: RDG094; MAT101 or higher*.

### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:

### **MAT151 College Algebra, Standard**

4 Credits (4 Lectures) DMAT 1151 🗗 🖸 🚜

**Typically Offered:** Fall, Spring and Summer

Accelerated algebra that includes the topics: equations, functions, transformations, linear and quadratic functions and inequalities, systems of linear equations and inequalities, exponential and logarithmic functions, polynomials, rational functions, sequences and series. *Prerequisites: MAT121 and RDG094*.

### **MAT162 Applied Statistics**

3 Credits (3 Lectures) 🗟 🗷

**Typically Offered:** Fall and Spring

Graphical and quantitative description of data; binomial, normal and t distributions; one and two sample hypothesis tests and confidence intervals; simple linear regression and correlation. *Prerequisites: RDG094; MAT121 or higher*.

# MAT182 Trigonometry with Algebra Review

4 Credits (4 Lectures) 🗟 🎗

**Typically Offered:** Fall, Spring and Summer

A comprehensive coverage of trigonometry and selected topics from college algebra, including measurements of angles, trigonometric functions and inverse trigonometric functions, trigonometric equations and identities, graphing of trigonometric functions, solutions of triangles, applications, complex numbers, polar coordinates, DeMoivre's theorem, logarithms, exponential functions, partial fraction decomposition, conic sections, sequences and series. *Prerequisites: RDG094 and MAT151*.

### **MAT187 Pre-Calculus**

5 Credits (5 Lectures) MAT1187

**Typically Offered:**Fall and Spring

Pre-Calculus topics include: angles and their measures, properties and graphs of trigonometric functions, trigonometric equations and identities, solutions of triangles, applications, polar coordinates, quadratic equations, logarithmic and exponential functions, systems of equations, partial fractions, conic sections, sequences and series. *Prerequisites: RDG094, MAT121 with a grade of "B" or higher.* 



### **MAT201 Math for Elementary Teachers I**

3 Credits (3 Lectures) 🗟

**Typically Offered:** Fall, Spring and Summer

Numbers and operations, including algebraic reasoning and problem solving. *Prerequisite: MAT141 or MAT151*.

### **MAT202 Math for Elementary Teachers II**

3 Credits (3 Lectures) 💽

**Typically Offered:** Fall, Spring and Summer

Measurement, geometry, probability, and data analysis using appropriate technologies; problem solving, reasoning, and proofs are integrated throughout the course. *Prerequisite: MAT141 or MAT151*.

### **MAT211 Brief Calculus, Standard**

4 Credits (4 Lectures) 🔕

**Typically Offered:** Fall and Spring

Foundations of differential and integral calculus, including applications to business and economics. *Not open to students with credit in MAT221 or MAT231. Prerequisite: MAT151.* 

### **MAT212 Brief Calculus, Accelerated**

3 Credits (3 Lectures) 🔂

**Typically Offered:** Consult CAC Class Schedule.

Foundations of differential and integral calculus including applications to business and economics. *Not open to students with credit in MAT221 or MAT231. Prerequisite: MAT151.* 

### **MAT215 Math for Business Analysis**

4 Credits (4 Lectures) 🗟

**Typically Offered:** Fall and Spring

A study of mathematics focused on solving business-related problems by applying the concepts of linear programming, optimization, statistics, probability and multivariable calculus. *Prerequisite: MAT211 or MAT212*.

### MAT221 Analytical Geometry and Calculus I

4 Credits (4 Lectures) MAT 2220 22

Typically Offered: Fall, Spring and Summer

An introduction to analytic geometry, limits, continuity, differential and integral calculus of single variable functions and related applications. *Prerequisites: MAT187 or (MAT151 and MAT182)*.

### MAT231 Analytical Geometry and Calculus II

4 Credits (4 Lectures) MAT 2230 🗔

**Typically Offered:**Fall and Spring

Techniques of integration for both proper and improper integrals with applications of physics and social science, elements of analytic geometry and the analysis sequences and series. *Prerequisites: MAT221*.

### MAT241 Analytical Geometry and

**Calculus III** 

4 Credits (4 Lectures) MAT 2241

**Typically** Fall

Multivariable calculus including vectors, vector-valued functions, partial differentiation, multiple integration and an introduction to vector fields. *Prerequisite: MAT231*.

### **MAT262 Ordinary Differential Equations**

3 Credits (3 Lectures MAT 2262 💽

Typically Spring

An introduction to first and higher order ordinary differential equations with applications. *Prerequisite: MAT231*.

### **MAT275 Modern Differential Equations**

4 Credits (4 Lectures) 🗟

Typically Spring

Designed for engineering students this introduction to first and higher order ordinary differential equations with applications focuses on problem solving using MATLAB. *Students may not receive credit for both MAT262 and MAT275. Prerequisite: MAT231.* 

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment:

Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



### **MUSIC HISTORY AND LITERATURE** (MHL)

### **MHL100 Music Appreciation**

3 Credits (3 Lectures) 🗟 🇷

**Typically** Fall, Spring and Summer Offered:

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) 🗟 🚜

**Typically** Fall, Spring and Summer Offered:

Survey of popular music, noting unique musical styles of the associated composers and performers. Impact of popular music on social and historic events of the past century. Prerequisite: RDG094.

### MHL209 Visual Art, Music and Learning

3 Credits (3 Lectures) R

**Typically** Fall, Spring and Summer Offered:

An introduction to the effects of the arts on learning, student learning styles, visual culture and visual arts, and music theory and culture. Prerequisite: RDG094. Cross Listed: ART209.

### **MUSIC PERFORMANCE** (MUP)

#### **MUP104 Concert Choir**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

Concert Choir, a major performance ensemble, is dedicated to the performance of varied choral literature from all historical periods, styles and ethnic origins which perform for community concerts, graduations and at least one major CAC concert each semester. May be taken more than four times for credit. Prerequisite: Ability to match pitch.

### **MUP105 Voice Class**

2 Credits (2 Recitations)

**Typically** Fall and Spring Offered:

An introduction to the basics of proper vocal technique, including breath management, tone production, tone quality, resonance, vocal physiology, vocal registration, vocal health and management, and how to practice. These principles will be practiced by singing in class, both in group and solo situations. May be taken two times for credit.

### **MUP107 Band**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

A performing organization open to Central Arizona College students and Pinal County residents. The ensemble performs a wide range of standard concert band literature as well as lighter works. Experience is gained by performing concerts on campus. May be taken four times for credit. Prerequisite: Instructor consent.

### **MUP109B Private Instruction: Brass**

1 Credit (1 Recitation)

**Typically** Fall and Spring Offered:

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.

**ICON LEGEND** 

AGEC: 🔕 Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS



#### **MUP109D Private Instruction: Percussion**

1 Credit (1 Recitation)

**Typically** Fall and Spring Offered:

Private instruction on percussion instruments that concentrates on appropriate mallet selection, tone production, technique and performance of a varied repertoire. May be taken four times for credit. Prerequisite: Instructor consent. Recommended: MUP107 and/or MUP112.

### **MUP109G Private Instruction: Guitar/Bass** Guitar

1 Credit (1 Recitation)

**Typically** Fall and Spring Offered:

Private instruction on guitar/bass guitar that concentrates on learning to play and read music, chords and a varied repertoire. Student must supply instrument and perform in a public recital. May be taken four times for credit.

### **MUP109P Private Instruction: Piano Keyboard**

1 Credit (1 Recitation)

**Typically** Fall and Spring Offered:

Performance of piano keyboard repertoire, technical skills, and keyboard theory including scales, progressions, transposition, improvisation and harmonization commensurate with student's level of achievement. May be taken four times for credit.

### **MUP109V Private Instruction: Voice**

1 Credit (1 Recitation)

**Typically** Fall and Spring Offered:

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.

### **ICON LEGEND**

AGEC: 🔕

Intensive Writing: IW

Reading Required: RDG094: 7

Dual Enrollment: Programs of Study/Tech Prep: POS SUN Course:

#### **MUP109W Private Instruction: Woodwind**

1 Credit (1 Recitation)

**Typically** Fall and Spring Offered:

Private instruction on a woodwind instrument that concentrates on proper tone production, articulation, technique and performance of a varied repertoire. May be taken four times for credit. Prerequisite: Instructor consent. Recommended: MUP107 and/or MUP112.

#### **MUP110 Piano Class**

2 Credits (.5 Lecture, 2 Labs, 1 Recitation)

**Typically** Fall and Spring Offered:

Class instruction of piano keyboard repertoire, technical skills and keyboard theory commensurate with student's level of achievement. May be taken four times for credit.

### **MUP112 Jazz Ensemble**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

A performing organization open to Central Arizona College students. The jazz styles of swing, rock and Latin are studied and performed. An emphasis is placed on learning and developing improvisational skills. Experience is gained by performing for the college, schools and community. May be taken four times for credit. Prerequisite: Instructor consent.

### **MUP116 Introduction to Handbells**

1 Credit (1 Lecture)

**Typically** Fall and Spring Offered:

An introduction to concepts and technical skills required to ring handbells. Topics include basics of reading music, handbell history, ringing stop techniques and rhythms.

#### **MUP117 Jazz Choir**

2 Credits (6 Labs)

**Typically** Fall and Spring Offered:

Jazz Choir, a major performance ensemble, is an auditioned group of musicians who perform vocal jazz literature for CAC and community organizations. The concerts are varied and represent a broad perspective of the American vocal jazz genre. Singers represent the college as performers in public functions throughout Arizona and at vocal jazz festivals throughout the United States, in addition to an annual spring recruitment tour. May be taken more than four times for credit. Corequisite: MUP104.



### **MUP118 Bell Choir Ringers**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

An ensemble designed for the intermediate to advanced musician seeking to learn new instruments and to study great music specifically composed and arranged for handbells. Repertoire performed at public functions as well as college concerts. May be taken four times for credit. Prerequisite: Instructor consent.

### MUSIC THEORY AND COMPOSITION (MTC)

### **MTC100 Music Fundamentals**

3 Credits (3 Lectures)

**Typically** Fall Offered:

Music fundamentals, including melody, harmony and rhythm, and development of basic music skills, including accurate performance, development of music literacy and acquisition of basic musical understanding, basic theory and structure of music.

### MTC101 Aural Fundamentals

.5 Credit (2 Labs)

**Typically** Fall Offered:

An introduction to the fundamentals of tonal aural problems and rhythms taught through sight singing and ear training. Corequisite: MTC100.

### MTC102 Theory of Music I

3 Credits (3 Lectures)

**Typically** Spring Offered:

Concepts of music theory taught through ear training and written work to include structure of tonality through Roman numeral analysis. Prerequisite: MTC100. Corequisite: MTC103. Recommended: MUP109P or MUP110.

#### MTC103 Aural Skills I

.5 Credit (2 Labs)

**Typically** Spring Offered:

A study of tonal aural problems and rhythms taught through sight singing and ear training. This is a continuation of Aural Fundamentals. Prerequisite: MTC101. Corequisite: MTC102.

### MTC204 Theory of Music II

3 Credits (3 Lectures)

**Typically** Spring Offered:

Concepts of music theory taught through ear training and written work to include non-dominant seven chords and to conclude with ninth, eleventh and thirteenth chords. Prerequisite: MTC102. Corequisite: MTC205. Recommended: MUP109P or MUP110.

### MTC205 Aural Skills II

.5 Credit (2 Labs)

**Typically** Fall and Spring Offered:

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.

**ICON LEGEND** 

AGEC: 📵 Intensive Writing: IW Dual Enrollment:

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



### NURSING (NUR)

### **NUR121 Introduction to Nursing Transitions**

8 Credits (4 Lectures, 12 Labs)

**Typically** Fall and Spring Offered:

Within the framework of transitions theory, the focus is on individuals and families in defined practice settings. Included is the situational transition of the individual to the nursing student role, and the patient's admission to and movement within the healthcare system as it relates to health-illness and developmental transitions. This course provides the opportunity for the practice of nursing in real and simulated structured situations. Prerequisites: Nursing cohort student; BIO201; BIO202; eligible for ENG101 and MAT121; C.N.A. or L.P.N. licensure from the Arizona State Board of Nursing. Corequisite: NUR126.

### **NUR122 Nursing in Health Illness Transitions**

8 Credits (4 Lectures, 12 Labs)

**Typically** Fall and Spring Offered:

Focus on individuals and families with commonly occurring health concerns as they transition across the lifespan. Identification and application of nursing therapeutics in defined practice settings to assist patients making health-illness and situational transitions. Prerequisites: ENG101, NUR121, NUR126, PSY101.

### **NUR126 Principles of Pharmacology and Drug Dosages**

2 Credits (2 Lectures)

**Typically** Fall and Spring Offered:

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

**ICON LEGEND** 

AGEC: 📵

Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS SUN Course:

concentrations of solutions used in health occupations. Prerequisites: Nursing cohort student; BIO201; BIO202; eligible for ENG101 and MAT121; C.N.A. or L.P.N. licensure from the Arizona State Board of Nursing. Corequisite: *NUR121*.

### **NUR145 Pharmacology**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Introduction and foundational study of drugs and therapeutic substances applied to nursing. Includes classifications, prototypes, therapeutic actions, side effects, interactions and ethical-legal aspects of drug therapy. Medication administration concepts and dosage calculations are included. Prerequisites: NUR121, NUR126.

### **NUR150 Nursing Professional Transitions**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

This optional course provides leadership, professional development and specialized course content to prepare first year nursing students to transition into the LPN role. Upon the successful completion of this course, the first year nursing student is eligible to take the NCLEX-PN exam. Prerequisites: Admitted Nursing Cohort student; NUR121, NUR122, NUR126 and NUR145.

### **NUR221 Nursing in Developmental**

### **Transitions**

8 Credits (4 Lectures, 12 Labs)

**Typically** Fall and Spring Offered:

Nursing care of the patient across developmental stages in the lifespan. Gordon's functional health patterns and Meleis transitions theory are used as the framework to examine healthy and unhealthy transitions and nursing therapeutics, which promote healthy developmental transitions. Prerequisites: ENG102, NUR122, NUR145 and PSY203.

### **NUR222 Nursing in Organizational Transitions**

8 Credits (4 Lectures, 12 Labs)

**Typically** Fall and Spring Offered:

Focus on the patient with complex health problems and their family/caregiver(s) and perform higher-level nursing skills. Application of evidence-based clinical practice and Meleis transitions theory within organizational settings. Prerequisites: BIO205, NTR200, NUR221 and SOC100. Corequisites: (MAT121 or higher), Humanities (3) and PAC or DAN course (1 credit).



# NUTRITION/DIETETICS (NTR)

### **NTR100 Contemporary Issues**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

The identification and application of current nutrition information and its impact on health and wellness. *May be taken four times for credit.* 

### **NTR104 Nutrition**

3 Credits (3 Lectures) R

**Typically Offered:** Fall, Spring and Summer

An introductory study of the optimal diet for health and fitness, principles of basic nutrition and nutritional needs throughout the life cycle. *Prerequisite: RDG094* 

### NTR104L Personal Wellness Lab

1 Credit (3 Labs)

**Typically Offered:** Fall and Spring

A scientific investigation into one's own personal health and wellness status

#### NTR105 ServSafe Certification

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Applied course in food safety and sanitation to identify and analyze the factors which cause foodborne illnesses through the study of proper purchasing, preparation, handling and storage.

# NTR123 Nutrition Throughout the Life Cycle

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Examines the role of nutrition during every stage of life; common problems and concerns and nutritional adequacy with an emphasis on birth through age eighteen. *Prerequisite: NTR104 or NTR141 or NTR200*.

### NTR127 Breastfeeding and Human Lactation

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

An introduction to breastfeeding principles for the healthcare professional including the decision to breastfeed, basic anatomy and physiology of milk production and consumption, normal breastfeeding, feeding behaviors, growth patterns, nutritional needs and breastfeeding concerns.

### NTR129 Introduction to Healthcare for Nutrition Professionals

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Fall, Spring and Summer

Fundamentals common to all healthcare occupations with an emphasis on nutrition. *Prerequisite: RDG094*.

### **NTR130 Diabetes Overview**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

An introduction to diabetes, risk factors for developing diabetes, detection methods and management techniques.

### **NTR131 Introduction to Diabetes**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

An introduction to diabetes, types of diabetes tools for management, complications, recommended therapies and lifestyle modifications.

### NTR134 Healthy Weight for Kids

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Overviews the challenges and strategies that can help children achieve and maintain a healthy weight as a means to reduce the incidence of chronic health conditions, including diabetes, heart disease and others.

ICON LEGEND

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos



### NTR135 Healthy Weight for Adults

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

An overview of the behavior management and treatment strategies that can help adults achieve and maintain a healthy weight as a means to reduce the incidence of chronic health conditions, including diabetes, heart disease and others.

### NTR136 Management of Gestational **Diabetes**

1 Credit (1 Lecture)

**Typically** Offered:

Fall, Spring and Summer

An overview of gestational diabetes; management techniques, potential complications, nutritional management and strategies for monitoring.

### NTR137 Carbohydrate Counting

1 Credit (1 Lecture)

**Typically** Offered:

Fall, Spring and Summer

A-Z guide to carbohydrate counting for people with diabetes. Addresses the basic concepts as well as more advanced issues related to tight blood glucose control.

### NTR141 Nutrition and Wellness

4 Credits (3 Lectures, 3 Labs) 🗟 🚜

**Typically** Offered:

Fall, Spring and Summer

Concepts, procedures and techniques to achieve the optimal diet for health and fitness, principles of basic nutrition, nutritional needs throughout the life cycle and a scientific investigation into one's own personal health and wellness status. Prerequisite: RDG094.

### NTR142 Applied Food Science

3 Credits (3 Lectures) R

**Typically** Offered:

Fall, Spring and Summer

Applied scientific principles of food preparation and production. Students must purchase ingredients for assignments. Prerequisite: RDG094.

#### **ICON LEGEND**

AGEC: 🔕

Dual Enrollment:

Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

#### NTR150 Overview of Nutrition Professions

1 Credit (1 Lecture)

**Typically** Offered:

Fall, Spring and Summer

Overview of the career opportunities in the fields of nutrition, dietetics, foodservice management, wellness and nutrition communication.

### NTR156 Foundations of Dietary Manager Internship

2 Credits (2 Lectures)

**Typically** Offered:

Fall and Spring

Identify rotation facilities and Registered Dietitian preceptor to successfully complete a dietary manager's internship. The course emphasizes the legal and ethical aspects specific to internships for nutrition professionals. Satisfactory/ Unsatisfactory grading option is available. Corequisites: NTR104 and CUL105.

### **NTR157 Foundations of Dietetic Technician Internship**

2 Credits (2 Lectures)

**Typically** Offered:

Fall and Spring

Identify rotation facilities and Registered Dietitian preceptor required to successfully complete a dietetic technician internship. The course emphasizes the legal and ethical aspects specific to dietetic technicians. Satisfactory/Unsatisfactory grading option is available. Students must receive a grade of "A" to proceed to NTR296. Prerequisites: Complete all Dietetic Technician A.A.S. degree general education requirements and instructor consent.

### **NTR191 Nutrition Counseling Skill Development**

3 Credits (3 Lectures)

**Typically** Offered:

Fall, Spring and Summer

Comprehensive skill development of step-by-step nutrition counseling. Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.

### **NTR196 Dietary Manager Internship**

3 Credits (3 Internships – 150 Hours)

**Typically** Offered:

Fall, Spring and Summer

Supervised application of food production, food service management and nutritional care principles in clinical and community environments. Prerequisites: NTR156, NTR223 and NTR240.



#### **NTR200 Human Nutrition**

3 Credits (3 Lectures) R

**Typically Offered:** Fall, Spring and Summer

The scientific principles of human nutrition emphasize nutrient metabolism, the relationships between diet and disease, and the importance of nutrition in health promotion and disease prevention. *Prerequisite: RDG094*.

### **NTR201 Nutrition Literacy**

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Develop the skills and knowledge to assess Nutrition Literacy; defined as the ability to access, explain and use health-related information and services to make sound, thoughtful health decisions and to tailor counseling and education materials to maximize client understanding. *Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200.* 

### **NTR222 Nutrition Assessment**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

The anthropometric, biochemical, clinical, dietary and behavioral evaluation and assessment of nutritional status throughout the life cycle. *Prerequisites: NTR123, NTR129 and (CHM130 or CHM138 or higher CHM course).* 

### **NTR223 Food Service Management**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Current management theories related to institutional food service emphasizing quality improvement and evaluation of service, meal planning, recipe development, safe and sanitary food procurement and production methods, facility layout and design, staffing, marketing and financial management. *Prerequisite: CUL105 OR NTR105*.

#### NTR232A Food and Culture

1 Credit (1 Lecture) R

**Typically Offered:** Fall, Spring and Summer

Customs and cultures as they relate to food as well as to knowledge, attitudes and behaviors in promoting wellness. *Prerequisite: RDG094*.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:

### **NTR240 Clinical Nutrition**

3 Credits (3 Lectures)

Typically Offered: Fall, Spring and Summer

In-depth study of the role of nutrition in the prevention and treatment of diseases. *Prerequisites: NTR141 or NTR104 or NTR200*.

### **NTR247 Weight Management Theory**

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

Comprehensive analysis of physiological, psychological and environmental influences on body weight. Researching various weight management theories, discerning between behavioral and non-behavioral methods. Assessing appropriate weight management strategies. *Prerequisites: NTR141 or (NTR104 and NTR104L) or NTR200*.

### **NTR272 Certified Breastfeeding Counselor**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Provides the necessary skills to educate and support the breastfeeding mother with greater details about breastfeeding issues and special challenges/situations.

### NTR290 LIFESTEPS® Leader Training

1 Credit (1 Lecture)

Typically Offered: Fall, Spring and Summer

Provides hands-on skill development in the application of behavioral techniques and the delivery of behavioral feedback that can be used in a variety of nutrition education settings. Also, basic information on nutrition, physical activity and group facilitation and dynamics as they relate to obesity and weight management as well as a detailed overview of the LIFESTEPS® Weight Management Program.

# NTR295 Dietetic Technician Professional Practice Internship

1 Credit (1 Internship – 60 Hours)

**Typically Offered:** Fall, Spring and Summer

Competencies required for the Dietetic Technician A.A.S. specifically in the areas of ethics, scope of practice, professional development, legislation and communication. Satisfactory/Unsatisfactory grading option is available. Prerequisites: All 22 credits of general education requirements for Dietetic Technician A.A.S. Degree completed and instructor consent.



### **NTR296 Dietetic Technician Internship**

6 Credits (6 Internships – 390 Hours)

**Typically Offered:**Fall and Spring

The application of life cycle nutrition, assessment, disease prevention and medical nutrition therapy in clinical, community and food service management settings.

Satisfactory/Unsatisfactory grading option is available.

Prerequisites: Dietetic Technician A.A.S. degree requirements completed with a "C" or better and Program Director or instructor consent.

### OFFICE AUTOMATION SYSTEMS (OAS)

### **OAS101 Keyboard - Alphabetic**

1 Credit (3 Labs)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Closed Exit

Mastery of essential microcomputer keyboard skills. Emphasis on alphabetic material using the touch technique.

### OAS103 Keyboard – Speed/Accuracy

1 Credit (3 Labs)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Closed Exit

Improve keyboard speed and accuracy. Emphasis on alphabetic, numeric and symbol material using the touch technique.

### OAS104 Ten-Key Pad

1 Credit (3 Labs)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Closed Exit

Key numeric data using touch technique on the computer numeric ten-key pad.

### **OAS125 Proofreading and Editing**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring, Summer and Open Entry/Closed Exit

Analyze and correct communication, forms, reports and other documents by applying proofreading methods and markings, checking for consistency of facts, correcting data and following standard practices. *Prerequisite:* ENG100.

**ICON LEGEND** 

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS



# PHILOSOPHY (PHI)

### **PHI101 Introduction to Philosophy**

3 Credits (3 Lectures) PHI 1101 🗟 🧷

**Typically Offered:** Fall and Spring

Representative problems and theories regarding the nature of reality and the acquisition of knowledge including examination and development of personal philosophical positions. *Prerequisite: RDG094*.

### **PHI103 Introduction to Logic**

3 Credits (3 Lectures) PHI 1103 R

**Typically Offered:**Every other spring; consult CAC Class Schedule.

Introduction to Logic includes techniques for reasoning deductively and inductively, avoiding fallacies and using language accurately. Application of formal and informal techniques to the development, analysis and evaluation of arguments. *Prerequisites: MAT101 or higher, RDG094*.

### **PHI105 Introduction to Ethics**

3 Credits (3 Lectures) PHI 1105 IW R

Typically Fall

Major philosophical theories of conduct with an emphasis on the application of normative ethical theory to contemporary topics. *Prerequisite: RDG094. Corequisite: ENG102.* 

### **PHI112 World Religions**

3 Credits (3 Lectures) 🗟 🎗

**Typically Offered:** Fall, Spring and Summer

A survey of the major world religions focusing on the founders, history, system of beliefs, concepts of God/gods, private and public worship and sacred scriptures. *Prerequisite: RDG094*.

### PHYSICAL EDUCATION (PED)

# PED100 History and Philosophical Foundations of Sport and Physical Education

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

The historical and philosophical foundations of sport and physical education, current and future directions of instruction, administration and research.

### PED101 History of Intercollegiate Athletics

3 Credits (3 Lectures) R

**Typically Offered:** Fall, Spring and Summer

Examination of the origins and development of intercollegiate athletics and the relationship with the academic institutions that house these programs. Emphasis on amateurism, academics, finance and commercialism from the 1920's to the present. *Prerequisite: RDG094*.

### **PED102 Management of Sport**

3 Credits (3 Lectures) 🚜

**Typically Offered:** Fall, Spring and Summer

A comprehensive overview of sport management; fundamentals and history; structure, policy and the governance of sport; sport economics and finance; sport marketing; and professional relations in sport. *Corequisite: RDG094*.

### **PED103 Foundations of Exercise**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Fundamentals of basic biomechanics, motor learning/control/development, exercise physiology, exercise metabolism, physiology of training, nutrition and sports psychology.

### **PED104 Anatomical Kinesiology**

3 Credits (3 Lectures) POS R

**Typically Offered:** Fall and Spring

Muscles, bones, joints and nerves and how they produce movement. Applying kinesiology to improve and maintain the muscular strength, endurance, flexibility and overall health of individuals. *Corequisite: RDG094*.

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: 
SUN Course:



### PED105 Women and Sport in the U.S.

3 Credits (3 Lectures) 🚜

**Typically Offered:** Fall, Spring and Summer

The history of women in sports from the early 1900s to present with an emphasis on Olympic, intercollegiate and professional competition and the role gender has played in determining access to participation and leadership roles. *Prerequisite: RDG094*.

### **PED108 Introduction to Athletic Training**

3 Credits (3 Lectures) POS R

**Typically Offered:** Fall and Spring

Basic concepts of the prevention and treatment of athletic injuries and the primary importance of appropriate rehabilitation. *Corequisite: RDG094*.

### **PED109A Athletic Training Practicum I**

2 Credits (2 Practica – 90 Hours)

**Typically Offered:** Fall and Spring

An introduction to practical work experience in the athletic training setting. *Corequisite: PED108*.

### **PED109B Athletic Training Practicum II**

2 Credits (2 Practica – 90 Hours)

**Typically Offered:** Fall and Spring

Clinical application of practical work experience in the athletic training setting. *Prerequisite: PED109A*.

### **PED109C Athletic Training Practicum III**

2 Credits (2 Practica – 90 Hours)

**Typically Offered:** Fall and Spring

Clinical application of practical work experience in the athletic training setting. *Prerequisite: PED109B*.

### **PED109D Athletic Training Practicum IV**

2 Credits (2 Practica – 90 Hours)

**Typically** Fall and Spring

Clinical application of practical work experience in the athletic training setting. *Prerequisite: PED109C*.

#### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: ROG094

### **PED112 Introduction to Strength Training**

3 Credits (3 Lectures)

**Typically Offered:**Fall and Spring

A comprehensive guide to the design and implementation of strength and conditioning programs.

### **PED114 Introduction to Coaching**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

An introduction to philosophies of coaching youth, high school and collegiate athletics, emphasizing both competitive and recreational settings.

### **PED115 Coaching Methods I**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

An overview of coaching methods, emphasizing both competitive and recreational settings and practical applications of concepts. *Satisfactory/Unsatisfactory grading option is available. Prerequisite: PED114.* 

### PED202A Team Sports Officiating – Baseball

1 Credit (1 Lecture)

**Typically Offered:**Fall, Spring and Summer

Fundamentals of baseball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### PED202B Team Sports Officiating – Basketball

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Fundamentals of basketball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### PED202C Team Sports Officiating – Football

1 Credit (1 Lecture)

**Typically Offered:** Fall, Spring and Summer

Fundamentals of football officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.



### PED202D Team Sports Officiating -Soccer

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

Fundamentals of soccer officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### PED202E Team Sports Officiating -Softball

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

Fundamentals of softball officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### PED202F Team Sports Officiating -Volleyball

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

Fundamentals of volleyball sport officiating techniques and mechanics. Techniques and mechanics are based on National Federation High School Rules. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PED209 Introduction to Rehabilitation Techniques**

3 Credits (3 Lectures) POS

**Typically** Fall and Spring Offered:

A comprehensive guide to the design, implementation and supervision of rehabilitation programs for the individual who is preparing for a career in treating sports-related injuries. Prerequisite: PED104, PED108.

### **PED215 Coaching Methods II**

3 Credits (1 Lecture, 6 Labs)

**Typically** Fall, Spring and Summer Offered:

In-depth examination of coaching, emphasizing methods and concepts in both competitive and recreational settings. Satisfactory/Unsatisfactory grading option is available. Prerequisite: PED115.

### PHYSICAL EDUCATION ACTIVITY (PAC)

### **PAC100 Strength and Conditioning for Varsity Sports**

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

Activity course focusing on the pre-season, in-season and offseason strength and conditioning programs for the varsity athlete. Programs will vary by sport.

Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: Varsity athlete.

### **PAC100B Introduction to Yoga Techniques**

1 Credit (1 Lecture)

**Typically** Fall, Spring and Summer Offered:

An in-depth study into the eight limbs of yoga, including the physical poses, breathing and meditation techniques, along with yoga's history and philosophy. Different yoga styles will be introduced. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

### **PAC101A Basic and Beginning Techniques** of Golf

1 Credit (3 Labs)

**Typically** Fall and Spring Offered:

The basic elements of the game of golf, the rules of golf, golf course etiquette and basic golf play. Requires students to travel to off-campus golf course. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC101J Basic and Beginning Techniques** of Weight Training

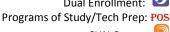
1 Credit (3 Labs)

**Typically** Fall, Spring and Summer Offered:

The basic lifts and explanation of muscle groups affected. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

**ICON LEGEND** 

AGEC: 🔂 Intensive Writing: IW Dual Enrollment:



Reading Required: RDG094: R SUN Course:



# PAC101K Basic and Beginning Techniques of Yoga

1 Credit (3 Labs)

Typically Offered:

Fall, Spring and Summer

A slow and relaxed form of stretching where breathing (pranayama) and positions (asanas) are performed. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### PAC101L Basic and Beginning Techniques of Karate

1 Credit (3 Labs)

Typically Offered:

Fall and Spring

The art of Chinese karate emphasizing defense techniques against basic kicks, punches and grab attacks. Satisfactory/ Unsatisfactory grading option is available. May be taken two times for credit.

### PAC101M Basic and Beginning Techniques of Basketball

1 Credit (3 Labs)

Typically Offered:

Spring

The basic skills of the game of basketball, the rules and techniques for basketball as well as general basketball play. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC101R Aerobic Weight Training I**

1 Credit (3 Labs)

Typically Offered:

Fall and Spring

Basic circuit weight training in conjunction with an aerobic exercise such as running in place, rope jumping or using exercise bikes. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

# PAC101V Basic and Beginning Techniques of Volleyball

1 Credit (3 Labs)

Typically Offered:

Fall and Spring

Basic volleyball skills, including the rules and techniques for volleyball players in various positions as well as general volleyball play. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **ICON LEGEND**

AGEC: 🔕

Dual Enrollment:

Intensive Writing: *IW*Reading Required: RDG094: *R* 

Programs of Study/Tech Prep: POS

SUN Course:

#### **PAC102A Intermediate Golf**

1 Credit (3 Labs)

Typically Offered:

Fall and Spring

A concentrated approach to golf skills with emphasis on individual skill level. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC101A or appropriate experience.

### **PAC102J Intermediate Weight Training**

1 Credit (3 Labs)

Typically Offered:

Fall, Spring and Summer

Weight training techniques for use throughout the life cycle. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC102K Intermediate Yoga and Fitness**

1 Credit (3 Labs)

Typically Offered:

Fall and Spring

Learn intermediate yoga poses, breathing techniques and meditation exercises. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

#### **PAC102L Intermediate Karate**

1 Credit (3 Labs)

Typically Offered:

Fall and Spring

Intermediate martial art forms and techniques; the study of anatomy, physiology and physics as related to karate. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: PAC101L.

### PAC103 Special Activity (Adaptive)

1 Credit (3 Labs)

Typically Offered:

Consult CAC Class Schedule.

A special physical education activity class for the student who is unable to participate in the regular physical education program. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC104 Police Officer Physical Training**

3 Credits (2 Lectures, 3 Labs)

Typically Offered:

Consult CAC Class Schedule.

Advanced principles of aerobic exercise, strength development and flexibility, emphasizing methods for stress reduction, value of nutrition awareness and development of individual exercise programs. *Prerequisite: Acceptance to CARLOTA*.



### **PAC105 Physical Fitness: Core Emphasis**

1 Credit (3 Labs)

**Typically Offered:** Fall, Spring and Open Entry/Closed Exit

Activity course focused on a balanced development of physical fitness. This course utilizes fitballs, tubing and/or other non-weight equipment to strengthen the core, upper and lower body. Satisfactory/Unsatisfactory grading option is available. *May be taken four times for credit.* 

### **PAC106 Aerobics and Weight Training**

2 Credits (6 Labs)

**Typically Offered:**Fall and Spring

Fundamental skills and principles of weight training and aerobics. Satisfactory/Unsatisfactory grading option is available. *May be taken more than four times for credit.* 

### **PAC107 Zumba® Toning**

1 Credit (3 Labs)

**Typically Offered:** Fall, Spring and Summer

Zumba® Toning is a high-energy, aerobic, calorie-crunching workout for those who love Zumba® Fitness and want to tone and sculpt the body to the next level. With an invigorating blend of Latin and International music, this fitness-dance class targets strengthening the core while improving cardiovascular endurance. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Recommended: Any pre-existing health condition needs to be acknowledged and signed off by a physician, thus clearing the student to perform an high-intensity exercise routine.

### PAC108 Zumba®

1 Credit (3 Labs)

**Typically Offered:** Fall, Spring and Summer

Zumba® is a calorie-crunching workout. With a high-energy blend of Latin and International music, this fitness-dance class strengthens the core while improving cardiovascular endurance. Satisfactory/Unsatisfactory grading option available. May be taken more than four times for credit.

**ICON LEGEND** 

AGEC: 📵

AGEC: Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos SUN Course:

### **PAC109 Central Boot Camp**

1 Credit (3 Labs)

**Typically** Fall

Total body workout through fitness inspired boot camp regimen, including upper and lower body workouts infused with abdominal conditioning and stretching techniques. Course utilizes outdoor areas of campus. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit.

### PAC110 Aqua Zumba®

1 Credit (3 Labs)

**Typically Offered:** Fall, Spring and Summer

Aqua Zumba® is a high-intensity, calorie-crunching workout performed in the water to a blend of Latin and International music. This fitness-dance class is designed to strengthen the body core while improving cardio vascular endurance. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Recommended: Any pre-existing health condition needs to be acknowledged and signed off by a physician, thus clearing the student to perform an high-intensity exercise routine.

### **PAC111 Water Aerobics**

1 Credit (3 Labs)

Typically Offered: Fall, Spring and Summer

Aquatic exercise emphasizing stretching techniques, endurance, flexibility, and toning for swimmers and non-swimmers. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

### **PAC112 Introduction to Scuba Diving**

1 Credit (.5 Lecture, 2 Labs)

**Typically Offered:** Fall, Spring and Summer

Scuba knowledge and skills to safely gain experience in the diving environment and, ultimately, to dive independently. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisites: Age 15 (minors require signature of parent/guardian), Assumptions of Risk statement, meet medical fitness standards, demonstrate swimming competency.

### **PAC113 Total Body Conditioning**

1 Credit (3 Labs)

**Typically Offered:** Fall, Spring and Summer

Total body workout through aerobic exercise. This course covers upper body conditioning and abdominal conditioning, stretching techniques, safety, diet and nutrition. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.



### **PAC114 Aerobic Martial Arts**

1 Credit (3 Labs)

Typically Offered: Consult CAC Class Schedule.

Aerobic workout using martial arts techniques. This course covers upper and lower body conditioning, stretching techniques, safety and nutrition. Satisfactory/Unsatisfactory grading option available. May be taken four times for credit.

### **PAC115 Spinners**

1 Credit (3 Labs)

**Typically Offered:** Fall, Spring and Summer

Aerobic workout using stationary bicycles. This course covers core, upper and lower body conditioning, stretching techniques and safety. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit.

### PAC121 Theory and Practice of Basketball I

2 Credits (6 Labs)

**Typically Offered:**Fall

Fundamental techniques of team play and strategy in the sport of basketball. Includes mechanics of basketball, rules and total body conditioning. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC122 Theory and Practice of Baseball I**

2 Credits (6 Labs)

Typically Fall

Fundamentals of baseball, including techniques of team play, rules, conditioning and mechanics of baseball. Satisfactory/ Unsatisfactory grading option is available. May be taken two times for credit.

### PAC123 Theory & Practice of Track & Field I

2 Credits (6 Labs)

**Typically** Fall

Fundamentals and techniques of track and field events, including psychological aspects, training and styles used in track and field events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

#### **ICON LEGEND**

AGEC: 
Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: Pos

### **PAC125 Theory and Practice of Softball I**

2 Credits (6 Labs)

**Typically** Fall

Fundamentals of softball, including techniques of team play, rules, conditioning and mechanics of softball. Satisfactory/ Unsatisfactory grading option is available. May be taken two times for credit.

### PAC126 Theory and Practice of Cross-Country I

2 Credits (6 Labs)

**Typically** Fall

Fundamentals of racing strategies, mechanics of cross country, rules, conditioning and cross training are emphasized. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC127 Theory and Practice of Volleyball I**

2 Credits (6 Labs)

**Typically** Fall

Fundamentals of volleyball including techniques of team play, rules, theory, conditioning and mechanics of volleyball. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.

# PAC200 Advanced Competition/Fitness Swimming

2 Credits (1 Lecture, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

This class is designed to improve/master rhythmic breathing along with stroke coordination, speed- and flip-turns, distance swimming and endurance training, water entries, diving starts and/or other skills as desired by students to further enhance skills for competition or fitness swimming. Satisfactory/ Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Ability to swim freestyle (or other stroke).

### **PAC201J Advanced Weight Training**

2 Credits (6 Labs)

**Typically Offered:** Fall, Spring and Summer

Development and implementation of individualized weight training programs based on the student's activities and/or interests. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.



#### **PAC201N Aerobics**

1 Credit (3 Labs)

Typically Offered: Fall, Spring and Summer

A variety of exercises that stimulate lung activity such as running, swimming, cycling and jogging. Satisfactory/
Unsatisfactory grading option is available. May be taken two times for credit.

### **PAC207 Lifeguard Training**

1 Credit (3 Labs)

**Typically Offered:**Fall and Spring

Minimum skills necessary for qualification as a non-surf lifeguard as stipulated in the American Red Cross Lifeguard Training Certification program. A water proficiency test will be given at the beginning of the course. Satisfactory/ Unsatisfactory grading option is available. May be taken two times for credit. Prerequisites: Adult CPR and Standard First Aid Certifications; swimming proficiency test.

### **PAC209 Water Safety Instructor**

2 Credits (1 Lecture, 3 Labs)

**Typically Offered:** Fall and Spring

This course trains instructor candidates to teach American Red Cross (ARC) Water Safety Courses, the ARC Infant and Preschool Aquatics Program and the ARC Learn to Swim Program. Students must successfully complete pre-course written and water proficiency tests and be at least 17 years of age by the end of the course. Current prerequisite certifications required for enrollment. Satisfactory/Unsatisfactory grading option is available. May be taken three times for credit. Prerequisites: Lifeguard Training, Adult CPR, Standard First Aid Certifications; pre-course written test; swimming proficiency test.

### PAC221 Theory and Practice of Basketball II

2 Credits (6 Labs)

**Typically Offered:** Spring

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 is available. May be taken four times for credit. Prerequisite: PAC121 or instructor consent.

### **ICON LEGEND**

AGEC: <a> Intensive Writing: IW</a>

Dual Enrollment: Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

SUN Course:

### **PAC222 Theory and Practice of Baseball II**

2 Credits (6 Labs)

**Typically Offered:** Spring

Advanced techniques of baseball including techniques of team play, rules, conditioning, and mechanics of baseball.

Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: PAC122 or instructor consent.

### PAC223 Theory and Practice of Track and Field II

2 Credits (6 Labs)

**Typically Offered:** Spring

Advanced techniques of track and field events including psychological aspects, training and styles used in track and field events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC123 or instructor consent.

### **PAC225 Theory and Practice of Softball II**

2 Credits (6 Labs)

Typically Spring

Advanced techniques of softball, including techniques of team play, rules, conditioning and mechanics of softball.

Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC125 or instructor consent.

### PAC226 Theory and Practice of Cross Country II

2 Credits (6 Labs)

**Typically Offered:** Spring

Advanced techniques of racing strategies, mechanics of cross country, rules, conditioning and cross training for cross country racing. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PAC126 or instructor consent.

### PAC227 Theory and Practice of Volleyball II

1 Credit (3 Labs)

Typically Spring

Advanced techniques of volleyball, including techniques of team play, rules, conditioning and mechanics of volleyball. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: PAC127 or instructor consent.



### PAC230 Arizona Seals Swimming Academy I

2 Credits (6 Labs)

**Typically Offered:** Fall and Spring

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the U.S. This course emphasizes the fundamentals of swimming focusing on comfort in the water. Structured practice sessions include stroke development, stroke proficiency, endurance training, resistance exercise and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Short-course program I.

Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Student must meet minimum water proficiency eligibility criteria.

### PAC231 Arizona Seals Swimming Academy II

2 Credits (6 Labs)

**Typically Offered:** Fall and Spring

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the U.S. The course emphasizes the fundamentals of swimming focusing on comfort in the water. Structured practice sessions include stroke development & proficiency, endurance training, resistance exercise and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Short-course program II.

Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Student must meet minimum water proficiency eligibility criteria.

# PAC232 Arizona Seals Swimming Academy III

2 Credits (6 Labs)

**Typically Offered:**Fall and Spring

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the U.S. This course emphasizes the fundamentals of swimming focusing on comfort in the water. Structured practice sessions include stroke development & proficiency, endurance training, resistance exercise and flexibility.

Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Long-course program. Satisfactory/Unsatisfactory grading option is available. May be taken four times for credit. Prerequisite: Student must meet minimum water proficiency eligibility criteria.

# PHYSICAL EDUCATION HEALTH (PEH)

### **PEH101 Personal Health**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall, Spring and Summer

The significance of physical, mental, emotional and social health to the individual and society, community health programs and national health indicators. Special emphasis on health problems of the individual. *Prerequisite: RDG094*.

### PEH102 First Aid/CPR

2 Credits (2 Lectures)  $\mathcal{R}$ 

**Typically Offered:**Fall and Spring

A study of first aid dealing with fractures, dislocations, wounds, hemorrhages, poisoning, drowning and cardiopulmonary respiration. Students can receive Standard First Aid and Adult CPR Red Cross certification. Satisfactory/Unsatisfactory grading option is available. May be taken more than four times for credit. Corequisite: RDG094.

#### **PEH110 Lifetime Fitness and Wellness**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

An introduction to a complete and personalized lifetime fitness and wellness program with thorough discussion on lifestyle management, wellness and components of physical fitness and mental health.

# **PEH111 Nutrition for Health, Fitness and Sport**

3 Credits (3 Lectures)

**Typically Offered:** Fall, Spring and Summer

Nutrition, exercise, health related and sports related fitness including: the essential nutrients and the recommended nutrient intake for fitness and sport, weight maintenance through proper nutrition and exercise for health and sport.

### **ICON LEGEND**

AGEC: 🔕

Intensive Writing: /W

Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS



### **PEH200 Sports Safety Training**

3 Credits (3 Lectures) R

**Typically Offered:**Fall and Spring

Sports Safety Training, CPR and AED for the Professional Rescuer including soft tissue and skeletal injury prevention, first aid and emergency steps for breathing and cardiac care. May be taken four times for credit. *Corequisite: RDG094*.

### **PEH203 Group Fitness Instructor Methods**

3 Credits (3 Lectures) R

**Typically Offered:** Fall and Spring

American Council on Exercise (ACE) preparation course for the Group Fitness Instructor Certification exam. *Prerequisite: RDG094* 

### **PEH204 Personal Training Methods**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Consult CAC Class Schedule.

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)

**Typically Offered:**Fall and Spring

Development of skills in one or more of the following rodeo events: steer wrestling, calf roping, team roping, bull riding, bareback riding, saddle bronco riding, barrel racing, goat tying or breakaway roping. May be taken four times for credit. Prerequisite: Intercollegiate Rodeo team member.

### **PEV201 Varsity Basketball I**

1 Credit (3 Labs)

**Typically** Fall

Hone basketball skills, knowledge and strategies. Explain and adhere to NJCAA regulations, basketball etiquette and team rules. *May be taken two times for credit. Prerequisite: Intercollegiate Basketball team member.* 

### **PEV202 Varsity Baseball I**

1 Credit (3 Labs)

Typically Fall

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)

Typically Fall

Hone track and field skills, knowledge and strategies. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: Intercollegiate Track and Field team member.

### **PEV205 Varsity Softball I**

1 Credit (3 Labs)

**Typically** Fall

For members of the intercollegiate varsity softball team. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: Intercollegiate Softball team member.

**ICON LEGEND** 

AGEC: Intensive Writing: IW
Reading Required: RDG094: R

Dual Enrollment: 
Programs of Study/Tech Prep: Pos
SUN Course:

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### **PEV206 Varsity Cross Country I**

1 Credit (3 Labs)

**Typically** Fall

Varsity level Cross-Country I includes rules and athlete code of conduct, training and competition strategies, teamwork and sports etiquette. *May be taken two times for credit.*Prerequisite: Intercollegiate Varsity Cross-Country team member.

### **PEV207 Varsity Volleyball I**

1 Credit (3 Labs)

**Typically** Fall

Hone volleyball skills, knowledge and strategies. May be taken two times for credit. Prerequisite: Intercollegiate Varsity Volleyball Team member.

### **PEV211 Varsity Basketball II**

1 Credit (3 Labs)

**Typically Offered:** Spring

Intercollegiate varsity basketball with application of theory in NJCAA events. Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit. Prerequisite: PEV201 or instructor consent.

### **PEV212 Varsity Baseball II**

1 Credit (3 Labs)

**Typically Offered:** Spring

Intercollegiate Varsity Baseball with application of theory in NJCAA events. *May be taken two times for credit.*Prerequisite: PEV202 or instructor consent.

### **PEV213 Varsity Track and Field II**

1 Credit (3 Labs)

Typically Spring

Intercollegiate Varsity Track and Field with application of theory in NJCAA events. *Satisfactory/Unsatisfactory grading option is available. May be taken two times for credit.*Prerequisite: PEV203 or instructor consent.

#### **ICON LEGEND**

AGEC: Intensive Writing: IW

Dual Enrollment: Programs of Study/Tech Prep: Pos

Reading Required: RDG094: R

rograms of Study/Tech Prep: POS SUN Course:

### **PEV215 Varsity Softball II**

1 Credit (3 Labs)

**Typically Offered:** Spring

Intercollegiate Varsity Softball with application of theory in NJCAA events. *May be taken two times for credit.*Prerequisite: PEV205 or instructor consent.

### **PEV216 Varsity Cross Country II**

1 Credit (3 Labs)

**Typically Offered:** Spring

Intercollegiate Varsity Cross Country with application of theory in NJCAA events. *May be taken two times for credit. Prerequisite: PEV206 or instructor consent.* 

### **PEV217 Varsity Volleyball II**

1 Credit (3 Labs)

**Typically Offered:** Spring

Intercollegiate Varsity Volleyball with application of theory in NJCAA events. *Satisfactory/unsatisfactory grading option is available. May be taken two times for credit. Prerequisite:* PEV207 or instructor consent.

### For Physical Geography, see Geography.

### PHYSICS (PHY)

### **PHY100 Physical Universe**

4 Credits (3 Lectures, 3 Labs) 🖘 🗷

**Typically Offered:**Fall and Spring

The basic principles of physics and chemistry and their application in science, technology and everyday life. Emphasis is on the fundamental behavior of matter and energy in physical systems with concepts presented and applied at the mathematical level of elementary algebra. *Prerequisites: RDG094; MAT092 or higher.* 

### PHY111 College Physics I

4 Credits (3 Lectures, 3 Labs) 

■ PHY1111 

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Typically Fall

Non-calculus treatment of the principles of physics for non-physics majors, covering the motion of particles in one and two dimensions, Newton's laws, energy, momentum, angular momentum, conservation laws, gravitation, fluids, mechanical waves, sound, temperature, heat, heat engines, the laws of thermodynamics and special relativity. *Prerequisites: RDG094; MAT182 or MAT187*.



### **PHY112 College Physics II**

4 Credits (3 Lectures, 3 Labs) PHY1112 📵

**Typically** Spring Offered:

Non-calculus treatment of the principles of physics for nonphysics 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) PHY1121

**Typically** Fall Offered:

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) PHY1131

**Typically** Spring Offered:

Second course in the three-semester, calculus-based University Physics sequence covering electric charge and current, electric and magnetic fields in vacuum and materials, elementary AC and DC circuit analysis with resistive, capacitive and inductive elements, displacement current, electromagnetic waves and Maxwell's equations. Prerequisite: PHY121. Corequisite: *MAT231*.

### **PHY223 University Physics III: Vibrations** and Waves

4 Credits (3 Lectures, 3 Labs)

**Typically** Offered:

Final course in the three-semester, calculus-based University Physics sequence, covering thermodynamics, kinetic theory, physical and wave optics, matter waves, relativity, photons and atomic physics. Prerequisites: MAT231 and PHY122.

### **POLITICAL SCIENCE** (POS)

### **POS101 American Politics**

3 Credits (3 Lectures) POS 1110 2 R

**Typically** Fall and Spring Offered:

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) R

**Typically** Fall and Summer Offered:

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) POS 1120 2

**Typically** Spring Offered:

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)  $\mathcal{R}$ 

**Typically** Fall and Summer Offered:

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.

**ICON LEGEND** 

AGEC: 🔕

Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



### **POS220 U.S. and Arizona Constitutions**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:**Fall and Spring

An examination of the U.S. Constitution, the Bill of Rights and other significant amendments, and the Constitution of the State of Arizona, including the historic background, theory, organization and functions of the U.S. federal and state systems of government. Course is required to meet the Arizona State Department of Education U.S. Constitution and Arizona government requirements for teacher certification. Course meets the state requirements for the A.A.S Degree in Corrections. Students selecting POS220 (3) should not enroll in either POS103 (1) or POS105 (2). Prerequisite: RDG094. Recommended: This course meets the Arizona State requirements for teacher certification. Students selecting POS220 (3) should not enroll in either POS103 (1) or POS105 (2). This is a required course for the Corrections AAS Degree.

# PORTUGUESE (POR)

### **POR115 Conversational Portuguese I**

3 Credits (1 Lecture, 2 Recitations)

**Typically Offered:** Spring

Introduction to conversational Portuguese. Fundamentals of authentic speaking and listening skills in Portuguese, with minimal grammar instruction. Introduction to cultures of the Portuguese-speaking world.

# PSYCHOLOGY (PSY)

### **PSY101 Introduction to Psychology**

3 Credits (3 Lectures) PSY1101 222

**Typically Offered:** Fall, Spring and Summer

Introduction to principles and theories of human behavior, development, personality and cognition, and the relationship to societal issues. Historical views and research methodology applied to psychology are also presented. *Field trips may be required. Prerequisite: RDG094*.

### **PSY200 Social Psychology**

3 Credits (3 Lectures) 🔕

**Typically Offered:**Every other fall; consult CAC Class Schedule.

Principles of sociology and psychology with emphasis on the individual and his/her reciprocal interaction with groups, basic psychological factors, social attitudes, language and communication, society and cultures, small groups and their relation to the individual, leadership and group dynamics. *Prerequisite: PSY101*.

### **PSY202 Psychology of Abnormality**

3 Credits (3 Lectures)

**Typically Offered:**Every other fall; consult CAC Class Schedule.

Theories of normality and abnormality, models of psychopathology, classification and treatment of mental disorder and principles of various forms of psychotherapy. *Prerequisite: PSY101*.

### **PSY203 Developmental Psychology**

3 Credits (3 Lectures) 🗟 IW

**Typically Offered:** Fall, Spring and Summer

Biosociopsychological approach to the study of human development, focusing on personality, social, physical and cognitive changes from conception to late adulthood. *Prerequisite: PSY101. Corequisite: ENG102.* 

### PSY205 Personality and Social Adjustment

3 Credits (3 Lectures) 🔁 IW

**Typically Offered:**Every other spring; consult CAC Class Schedule.

Principles of mental health applicable to human behavior and everyday social interaction, including theory, beliefs, hypothesis testing and positive life planning. *Prerequisites: ENG101*; *Corequisite:ENG102* 

AGEC: Intensive Writing: //W Progra
Reading Required: RDG094: 
Reading Required: RDG094: RDG09

Dual Enrollment: Programs of Study/Tech Prep: Pos



#### **PSY230 Introduction to Statistics**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically** Fall and Spring Offered:

Descriptive statistics, probability and application, probability distributions of random variables, inferential statistics and statistical decision-making. Prerequisites: MAT121; RDG094.

### **PSY277 Human Sexuality**

3 Credits (3 Lectures) 🗟

**Typically** Every other spring; consult CAC Class Schedule. Offered:

An exploration of psychological, sociological, physiological aspects of human sexuality within the context of individual development, family, culture, and society. Prerequisites: SOC100 or PSY101 and ENG101 . Cross Listed: SOC277.

### RADIOLOGY

(RAD)

### **RAD100 Fundamentals of Radiologic Science and Healthcare**

1 Credit (1 Lecture)

**Typically** Spring Offered:

Introduction to the field of radiology, the healthcare system and the Radiologic Technology program. Content also includes an introduction to radiologic terminology, ethics, patient care, health care systems, accreditation and professional organizations and radiation protection. Prerequisites: HCC100, HCC111, HCC116 and Radiologic Technology cohort student.

### RAD110 Radiographic Positioning I

4 Credits (2 Lectures, 6 Labs)

**Typically** Spring Offered:

An introduction to radiographic positioning and a review of related anatomy, covering anatomy and physiology and the fundamentals of radiographic positioning for the upper and lower extremities, shoulder girdle, chest, pelvis, pelvic girdle, abdomen and vertebral column. Prerequisite: Radiologic Technology cohort student.

#### **ICON LEGEND**

AGEC: 🔕 Intensive Writing: IW

Dual Enrollment: Programs of Study/Tech Prep: POS

Reading Required: RDG094: R

### **RAD120 Principles of Radiographic Exposure I**

3 Credits (3 Lectures)

**Typically** Spring Offered:

An introduction to the fundamental factors of film-screen image production, processing, film imaging with related accessories and image analysis. Prerequisite: Radiologic Technology cohort student.

### **RAD130 Patient Care in Radiologic** Science

2 Credits (2 Lectures)

**Typically** Summer Offered:

Basic concepts of patient care, physical and psychological needs of the patient/family. Infection control measures, routine/emergency patient care procedures; patient safety, assessment, radiologic technologist/patient communications and patient care devices are presented. Prerequisite: Radiologic Technology cohort student.

### **RAD140 Practicum I**

3 Credits (3 Practica – 240+ Hours)

**Typically** Summer Offered:

Initial clinical radiography experience that applies radiographic theory to the performance of procedures. Through structured, sequential competency-based assignments under supervision, students acquire proficiency in clinical practice and the performance of radiographic exams. Prerequisite: Radiologic Technology cohort student.

### **RAD150 Radiation Physics I**

3 Credits (3 Lectures)

**Typically** Offered:

The fundamentals of radiation production/characteristics including the basics of atomic structure, the nature of radiation, interactions of photons with matter and associated terminology. Prerequisite: Radiologic Technology cohort student.

### **RAD160 Radiographic Positioning II**

4 Credits (2 Lectures, 6 Labs)

**Typically** Summer Offered:

Human structure/function, sectional anatomy and the fundamentals of radiographic positioning of the bony thorax, contrast studies of urinary and digestive systems, cranium, arthrography, myelography, venography, pediatric imaging, basic mobile radiography and imaging during trauma and surgery. Prerequisites: RAD110 and Radiologic Technology cohort student.



# RAD170 Principles of Radiographic Exposure II

3 Credits (3 Lectures)

**Typically** *Fall* 

Digital image acquisition, image display and image analysis. *Prerequisites: RAD120 and Radiologic Technology cohort student.* 

#### **RAD180 Practicum II**

3 Credits (3 Practica – 240 Hours)

**Typically** Fall

Structured, sequential competency-based assignments under supervision; students will acquire proficiency in clinical practice and the performance of radiographic exams. *Prerequisite: Radiologic Technology cohort student.* 

#### **RAD200 Practicum III**

7 Credits (7 Practica – 600 Hours)

**Typically Offered:** Spring

Through structured, sequential competency-based assignments under supervision, students acquire proficiency in clinical practice and the performance of radiographic exams. *Prerequisite: Radiologic Technology cohort student.* 

### **RAD210 Radiation Physics II**

3 Credits (3 Lectures)

Typically Summer

A continuation of "Radiation Physics I" covering the basics of imaging systems and quality control. *Prerequisites: RAD140 and Radiologic Technology cohort student.* 

### RAD230 Radiobiology and Radiation Protection

3 Credits (3 Lectures)

**Typically Summer** 

This course builds and expands on the basic and radiation protection concepts presented in the "Fundamentals of Radiologic Science and Healthcare." Content includes the principles of the interaction of ionizing radiation, biological systems and concepts of radiation protection. *Prerequisites: RAD100 and Radiologic Technology cohort student.* 

### **ICON LEGEND**

AGEC: Intensive Writing: IW

Dual Enrollment: 
of Study/Tech Pren: POS

Reading Required: RDG094: R

Programs of Study/Tech Prep: POS SUN Course:

### **RAD240 Practicum IV**

4 Credits (4 Practica – 360 Hours)

Typically Summer

Through structured, sequential competency-based assignments under supervision, students will acquire proficiency in clinical practice and the performance of radiographic exams. *Prerequisite: Radiologic Technology cohort student.* 

### **RAD250 Pharmacology and Venipuncture**

1 Credit (1 Lecture)

**Typically** Fall

The theory and practice of pharmacology, including basic techniques of venipuncture and administration of diagnostic contrast agents and/or intravenous medications. *Prerequisite: Radiologic Technology cohort student.* 

### **RAD260 Radiographic Pathology**

2 Credits (2 Lectures)

Typically Fall

The concepts of disease and the etiology of selected pathologic conditions are examined with an emphasis on the radiographic appearance of various diseases and the influence of pathologic changes on considerations of technique. *Prerequisite: Radiologic Technology cohort student.* 

#### **RAD270 Advanced Imaging**

2 Credits (2 Lectures)

Typically Fall
Offered:

An overview of the various fields of medical imaging with a focus on Computed Tomography. *Prerequisite: Radiologic Technology cohort student.* 

### **RAD280 Registry Review**

3 Credits (3 Lectures)

**Typically** Fall **Offered:** 

A comprehensive review geared toward preparing students for the national ARRT registry examination. *Prerequisite: Radiologic Technology cohort student.* 



### RAD290 Practicum V

4 Credits (4 Practica - 360 Hours)

**Typically** Offered:

The final course in the clinical radiography experiences series that applies radiographic theory to the performance of procedures and continued application and reinforcement of skills mastered in previous practicums. Through structured, sequential competency-based clinical assignments under supervision, students continue to refine and enhance proficiency in an effort to achieve professional entry level competency. Observations in specialized imaging areas will be optional during this practicum. Prerequisites: RAD240 and Radiologic Technology cohort student.

### READING

(RDG)

### **RDG090 Introduction to College Literacy**

4 Credits (4 Lectures)

**Typically** Fall, Spring and Summer Offered:

Reading strategies to increase comprehension, including vocabulary clarification techniques, vocabulary reference materials, graphic organizers and genre-specific attributes recognition. Prerequisites: English speaking proficiency and (COMPASS score below 47 or an ASSET score below 33).

### **RDG091 College Vocabulary**

4 Credits (4 Lectures)

**Typically** Fall, Spring and Summer Offered:

Increase reading comprehension and vocabulary skills by emphasizing the relationship between words and ideas, word parts, word history, context clues, and how they all contribute to determining the topic, main idea and details in a reading selection. To pass the course, a grade of "C" or better must be achieved. Prerequisite: RDG090.

### RDG091A College Vocabulary for English **Language Learners**

4 Credits (4 Lectures)

**Typically** Fall Offered:

Reading comprehension and vocabulary skills for ELL students emphasizing the relationship between words and ideas, word parts, word history, context clues of Standard American English and how they contribute in determining the topic, main idea and details of a reading selection. Students may take only one: RDG091 or RDG091A. Prerequisite: RDG090.

### **RDG094 College Reading**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

Emphasizes effective reading and critical thinking skills leading to increased reading comprehension necessary for college-level texts. Completion of this course with a grade of "C" or better fulfills the college reading proficiency requirement. Prerequisite: RDG091 or appropriate placement score.

### **RDG094A College Reading for English Language Learners**

3 Credits (3 Lectures)

**Typically** Fall Offered:

Reading comprehension and critical reading skills necessary for college-level texts with language skill development and cultural awareness for ELL students. Students may take only one: RDG094 or RDG094A. Completion of this course with a grade of "C" or better fulfills the college reading proficiency requirement. Prerequisite: RDG091 or RDG091A.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS





# REAL ESTATE (REA)

### **REA122 Real Estate Principles and Practices**

6 Credits (6 Lectures)

**Typically Offered:** Fall, Spring and Summer

Basic principles of real estate including estates, real estate code, commissioner's rules, land description, title acquisition, contracts, escrow procedures, title insurance, encumbrances-burdens in title, financing, government restrictions, toxic waste and environmental hazards, water rights, ethics, valuations, taxation and property management. The course meets a requirement for licensure of real estate sales personnel. Satisfactory/Unsatisfactory grading option is available.

### **REA124 Introduction to Contract Writing**

1 Credit (1 Lecture)

**Typically Offered:** Fall and Spring

A required course for real estate license activation on writing real estate contracts.

### RECREATION (REC)

### REC101 Recreation, Leisure and the Quality of Life

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall, Spring and Summer

The conceptual foundations of recreation, play and leisure from cultural, historical, philosophical, physiological, psychological and sociological perspectives, and the significance of recreation, play and leisure on life quality.

Prerequisite: RDG094.

### **REC102 Leisure and Society**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically Offered:** Fall, Spring and Summer

Analysis of the human relationship to leisure; a survey of the historical, environmental, philosophical, political, psychological and socioeconomic foundations for the development of systems that provide leisure programs. *Corequisite: RDG094*.

### **REC108 Recreation Practicum**

3 Credits (1 Lecture, 6 Labs)

**Typically Offered:** Fall, Spring and Summer

The special duties and problems of aides and supervisors of recreation programs; observation and participation in assigned situations.

### **REC203 Leisure Delivery Systems**

3 Credits (3 Lectures) 🚜

**Typically Offered:** Fall, Spring and Summer

Development, management and organization of public, nonprofit and private sectors of the leisure services profession and industry. *Corequisite: RDG094*.

# **REC220 Introduction to Nonprofit Youth and Human Service Agencies**

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Exploration of the nonprofit youth and human service agency sector, its unique structure and its role in the delivery of services, the economy and society at large.

### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: SUN Course:



### **REC230 Program Planning**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Effective leisure and recreation program planning in the public, nonprofit and private sectors.

### **REC250 Leadership in Recreation**

3 Credits (3 Lectures)

**Typically** Fall and Spring Offered:

Theories and strategies for leadership in recreation and tourism settings, including communication skills, group dynamics, motivational processes and supervisory skills.

### RENEWABLE ENERGY TECHNOLOGY (RET)

### **RET105 Introduction to Renewable Energy**

3 Credits (3 Lectures)

**Typically** Fall, Spring and Summer Offered:

An introduction to energy systems and renewable energy resources, with a scientific examination of the energy field and an emphasis on alternate energy sources, their technology and application. Explores society's present needs and future energy demands, examines conventional energy sources and systems, including fossil fuels and nuclear energy, alternate, renewable energy sources such as solar, biomass (conversions), wind power, geothermal and hydro energy conservation methods.

### **RET150 Pollution Controls and Industrial** Waste

2 Credits (2 Lectures)

**Typically** Fall, Spring and Summer Offered:

Industrial pollution control of chemical, physical and biological treatment processes, including pollution prevention, waste minimization and disposal.

### **ICON LEGEND**

AGEC: 📵

Intensive Writing: IW Reading Required: RDG094: R

Dual Enrollment: Programs of Study/Tech Prep: POS

SUN Course:

### **RET160 OSHA Safety for Renewable**

### **Energy**

1 Credit (1 Lecture)

**Typically** Offered:

Fall, Spring and Summer

Training for renewable energy workers, including renewable energy science terminology and principles, safety equipment and OSHA standards.

### **RET250 Ethanol Process Fundamentals**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically** Offered:

Fall, Spring and Summer

The history, chemistry, legal and political issues and fundamental processes of ethanol production, including the rationale for feedstock and additives used in ethanol processing and co-product production and use. Ethanol plant Process Flow Diagram (PFD) includes residence time, pressures and temperatures in production stages. Prerequisite: RDG094.

### **RET252 Biofuels Facilities Design and Boiler Systems**

3 Credits (3 Lectures) R

**Typically** Offered:

Fall, Spring and Summer

Biofuels facilities including boiler system design, operation, maintenance, philosophy, code and standard compliance and troubleshooting. Prerequisite: RDG094.

### **RET255 Distillation and Evaporation Theory**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically** Offered:

Fall, Spring and Summer

Basic distillation and evaporation theory including design of column internals, critical design aspects of trays, packings and ancillary equipment. Philosophy and practice of troubleshooting systems. Prerequisite: RDG094.

### **RET275 Biodiesel Production and Design**

3 Credits (3 Lectures) R

**Typically** 

Offered:

Fall, Spring and Summer

Biodiesel production and design in transformation of biomass and other resources into biofuels and bio products. Includes biodiesel history, chemistry, legal factors and political factors. Technical applications focus on technologies for bioconversion of renewable resources. Consideration of technologies for future energy needs. Prerequisite: RDG094.



### **RET296 Renewable Energy Technology** Internship

4 Credits (4 Internships) R

**Typically** Spring Offered:

Internship in renewable energy sector with placements tailored to the students' academic program, interests and skills. Since each internship is different and different skills may be learned. May be taken two times for credit. Prerequisites: RDG094 and instructor consent.

### SIGN LANGUAGE (SLG)

### **SLG101 American Sign Language I**

4 Credits (4 Lectures)

Typically Consult CAC Class Schedule. Offered:

Introduction to the Deaf culture and the vocabulary and sentence structures of American Sign Language (ASL). Mastery of receptive and expressive basic communication skills.

### SLG102 American Sign Language II

4 Credits (4 Lectures)

Consult CAC Class Schedule. **Typically** Offered:

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)

Consult CAC Class Schedule. **Typically** Offered:

A continuation of the skills taught in SLG102. This course emphasizes improved fluency and comprehension of ASL, Deaf culture and the evolution of ASL. Course is taught primarily in American Sign Language. Prerequisite: SLG102.

### **SLG202 American Sign Language IV**

4 Credits (3 Lectures, 1 Recitation) 2  $\mathbb{R}$ 

Typically Consult CAC Class Schedule. Offered:

Building upon the skills taught in SLG201, this course emphasizes advanced sign language fluency, conversational skills, comprehension skills and cultural features. Course is taught primarily in American Sign Language. Prerequisites: RDG094, SLG201.

### SKILLS – WORKFORCE (SKL)

### SKL110 Life Math Skills

3 Credits (3 Lectures)

Consult CAC Class Schedule or the Workforce **Typically** Offered: Office.

A study of basic arithmetic skills including whole numbers, fractions, decimals and percents as applied in business situations. A variety of payroll concepts, loans and credit purchases, budgeting and banking services.

### **SKL115 Employment Readiness Program** Part I

3 Credits (2 Lectures, 3 Labs)

Consult CAC Class Schedule or the Workforce Typically Offered: Office.

The first of a two-part simulated, interactive workplace environment to prepare students with soft skills necessary for employment. Skills included are positive work habits, communication skills, workplace effectiveness and increased basic employability skill levels. Satisfactory/Unsatisfactory grading option is available.

### **SKL116 Employment Readiness Program** Part II

3 Credits (2 Lectures, 3 Labs)

**Typically** Consult CAC Class Schedule or the Workforce Offered:

The second of a two-part simulated, interactive workplace environment to prepare students with soft skills necessary for employment. Skills included are workplace effectiveness, business etiquette and job search. Satisfactory/Unsatisfactory grading option is available.

**ICON LEGEND** 

AGEC: 🔕 Intensive Writing: IW Reading Required: RDG094: R Dual Enrollment:

Programs of Study/Tech Prep: POS



### **SKL117 Employment Skills**

1 Credit (1 Lecture)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Employability skills necessary to identify personal interests and abilities, locate employment, and keep a job once employed. *Satisfactory/Unsatisfactory grading option is available.* 

# SKL120 Intro to Solar and Green Construction Concepts

5 Credits (4 Lectures, 3 Labs)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of green collar jobs and the skills related to weatherization, alternative energy and green construction concepts. Satisfactory/Unsatisfactory grading option is available.

### **SKL121 Intro to Green Block Construction**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of construction using alternative block materials and the skill sets related to the green collar jobs in this trade. Satisfactory/Unsatisfactory grading option is available.

### **SKL122 Intro to Steel Framing**

1 Credit (1 Lecture)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of steel framing construction and the skill sets related to the green collar jobs in this alternative market. *Satisfactory/Unsatisfactory grading option is available.* 

#### **SKL123 Intro to Weatherization**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of insulation, appliance and low voltage systems that relate to the green collar jobs in weatherization.

Satisfactory/Unsatisfactory grading option is available.

### **ICON LEGEND**

AGEC: Dual Enrollment:

Intensive Writing: IW Programs of Study/Tech Prep: POS

Reading Required: RDG094: RDG094

### SKL124 Intro to Rammed Earth and Straw Bale Construction

1 Credit (1 Lecture)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of rammed earth and straw bale construction and the skill sets related to the green collar jobs in these alternative programs. *Satisfactory/Unsatisfactory grading option is available*.

### **SKL125 Intro to Solar Panel Systems**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of solar panel systems and the skill sets related to the green collar jobs in solar panel installation. *Satisfactory/ Unsatisfactory grading option is available.* 

### **SKL126 Building Analyst Energy Auditor**

2 Credits (2 Lectures)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Introduction to Building Analyst and Energy Audit Training, including residential energy consumption devices, maintenance and safety issues, conservation and projected savings. May lead to Building Performance Institute (BPI) Building Analyst Certification. Satisfactory/Unsatisfactory grading option is available.

## SKL130 Intro to Weatherization, Solar and Green Construction

5 Credits (4 Lectures, 3 Labs)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Overview of green collar jobs and the skills related to weatherization, alternative energy and green construction concepts. Satisfactory/Unsatisfactory grading option is available.

### **SKL141 Overview of Office Assistant**

2 Credits (2 Lectures)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

An overview of various office environments in which office assistants are employed, including the use of basic office machines such as copiers, faxes, telephones and others as well as general duties such as filing, customer service, making change and filling out forms. Students completing the course will have a comprehensive overview of the functions and duties of an Office Assistant position. Satisfactory/Unsatisfactory grading option is available.



#### **SKL142 Green Office Solutions**

1 Credit (1 Lecture)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

An overview of current methods of green conservation techniques related to office environments in use today, including cost savings resulting from "green" techniques. Satisfactory/Unsatisfactory grading option is available.

### **SKL143 Basic Accounting Concepts**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule or the Workforce

Offered: Office.

The concepts of accounting for front office clerk. *Satisfactory/ Unsatisfactory grading option is available.* 

### **SKL144 Proofreading for Accuracy**

1 Credit (1 Lecture)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Introduction to proofreading skills to identify and modify basic grammar, spelling and formatting within common computer generated materials.

### **SKL145 Communication Skills**

3 Credits (3 Lectures)

**Typically** Consult CAC Class Schedule or the Workforce

Offered: Office.

Written and oral communication in organizations with emphasis on writing business letters, memos and reports; speaking and listening skills; critical analysis of appropriate writing; and managing various communication situations.

### **SKL146 Employment Coaching Workshop**

1 Credit (1 Lecture)

**Typically** Consult CAC Class Schedule or the Workforce

Offered: Office

An interactive workshop designed to coach individuals to implement successful employment strategies with emphasis on specific tools for researching the job market and acquiring employment.

### SKL149 Practicum for Computer Applications for Business Users

3 Credits (1 Lecture, 2 Practica)

Typically Consult CAC Class Schedule or the Workforce

Offered: Office.

Hands-on learning to further develop skills through employer based experiences. Students will work in an office environment utilizing the information, skills and software taught throughout the program. This is an unpaid practicum.

### SOCIAL WORK UNDERGRADUATE (SWU)

### **SWU171 Introduction to Social Work**

3 Credits (3 Lectures) R

**Typically Offered:**Fall and Spring

A descriptive and analytical historical perspective of the profession of social work, social problems and the social welfare system. *Prerequisite: RDG094*.

# SWU242 Introduction to Child Welfare Service in a Diverse World

3 Credits (3 Lectures)

**Typically Offered:**Every other fall; consult CAC Class Schedule.

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)

Typically .

Offered: Spring

Purpose, structures and delivery systems of human service agencies, including 40 hours of volunteer experience in local human service agencies. *Prerequisite: SWU171 and division chair consent.* 

**ICON LEGEND** 

AGEC: Intensive Writing: IW

Dual Enrollment: 🥨

Programs of Study/Tech Prep: POS

Reading Required: RDG094: R



### SWU295 Foundations of Social Work Practice: Effective Helping in a Diverse World

3 Credits (3 Lectures)

**Typically Offered:**Every other spring; consult CAC Class Schedule.

Theoretical foundations and skills base for effective culturally competent communication and interviewing with individuals, families, small groups and larger systems. *Prerequisite: ENG101* .

# SOCIOLOGY (SOC)

### **SOC100 Introduction to Sociology**

3 Credits (3 Lectures) SOC 1101 🗟 🗸

Typically Offered: Fall, Spring and Summer

The systematic study of society; the role and impact of society on individual and group social interaction. *Prerequisite: RDG094*.

### **SOC102 Contemporary Issues in Society**

3 Credits (3 Lectures) 🗟 🎗

**Typically Offered:** Fall, Spring and Summer

A systematic study of contemporary American and global social problems from a sociological viewpoint. *Prerequisite: RDG094*.

### **SOC200 Racial and Ethnic Minorities**

3 Credits (3 Lectures) SOC 2215 IW

**Typically Offered:** Every other spring; consult CAC Class Schedule.

Race and ethnicity in American society including such topics as discrimination, segregation, conflict, power and assimilation with an emphasis on contemporary issues.

\*Prerequisites: SOC100\*\* and ENG101\*\* Corequisite:

ENG102\*\* ENG102\*\*

### ICON LEGEND

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: ROG094

### **SOC203 Marriage and the Family**

3 Credits (3 Lectures) 🗟 🗷

**Typically Offered:**Fall and Spring

A comprehensive examination of marriage and the family as a cultural unit and a social institution. *Prerequisite: RDG094*.

### **SOC212 Gender in Society**

3 Credits (3 Lectures) 🔕

**Typically Offered:**Every other fall; consult CAC Class Schedule.

Social structures and processes related to the construction of gender in society, including theoretical perspectives, impact of politics past and present, sex versus gender, and gender in the workplace, media, religion, medicine and in global perspective. *Prerequisite: ENG101* .

### **SOC250 Family Violence**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:**Every other fall; consult CAC Class Schedule.

The introduction to concepts related to family/intimate violence with an emphasis on legal, social and psychological aspects of abuse. *Prerequisite: RDG094*.

### **SOC277 Human Sexuality**

3 Credits (3 Lectures) 🗟

**Typically Offered:**Every other spring; consult CAC Class Schedule.

An exploration of psychological, sociological and physiological aspects of human sexuality within the context of individual development, family, culture and society.

Prerequisites: SOC100 or PSY101 and ENG101. Cross Listed: PSY277.

### **SPANISH**

(SPA)

### **SPA101 Elementary Spanish I**

4 Credits (4 Lectures, 1 Lab) SPA 1101

**Typically Offered:** Fall, Spring and Summer

The basic skills of understanding, speaking, reading and writing Spanish with a survey of cultural materials from Spanish-speaking countries.



### SPA102 Elementary Spanish II

4 Credits (4 Lectures, 1 Lab) SPA 1102

**Typically** Fall, Spring and Summer Offered:

Refinement of basic communication skills in Spanish, emphasizing reading, writing, speaking and listening exercises. Survey of cultural norms, beliefs and traditions from areas where Spanish is spoken. Prerequisite: SPA101 or one full year of high school Spanish completed with a grade of "B" or better or instructor consent.

### **SPA115 Conversational Spanish I**

3 Credits (1 Lecture, 2 Recitations)

**Typically** Fall, Spring and Summer Offered:

Introduction to conversational Spanish. Fundamentals of authentic speaking and listening skills in Spanish, with minimal grammar instruction. Introduction to cultures of the Spanishspeaking world.

### **SPA116 Conversational Spanish II**

3 Credits (3 Recitations)

**Typically** Fall, Spring and Summer Offered:

Development of Spanish speaking and listening skills at the novice level, with grammatical explanations kept to a minimum, so that students learn primarily through pattern practice, repetition and practical application. SPA116 is a continuation of SPA115. Prerequisite: SPA115 or assessed competency.

### **SPA117 Costa Rican Culture and Spanish Conversation I**

3 Credits (3 Lectures)

**Typically** Summer Offered:

Students will immerse themselves within the culture by living with Costa Rican families in Costa Rica conversing daily in conversational classes and participating in daily cultural activities and excursions.

### **SPA118 Costa Rican Culture and Spanish Conversation II**

3 Credits (3 Lectures)

**Typically** Summer Offered:

Students will immerse themselves within the culture by living with Costa Rican families in Costa Rica conversing daily in conversational classes and participating in daily cultural activities and excursions. Prerequisite: SPA117.

### SPA201 Intermediate Spanish I

4 Credits (4 Lectures, 1 Lab) SPA 2201 R

**Typically** Fall and Spring Offered:

Development of reading, writing, speaking and listening skills proficiency in Spanish, at the novice intermediate level. Continuation of understanding, appreciation and sensitivity to aspects of Hispanic cultures. Prerequisites: RDG094; SPA102 or four semesters of high school Spanish with a grade of "B" or better.

### SPA202 Intermediate Spanish II

4 Credits (4 Lectures, 1 Lab) SPA 2202 🔃

**Typically** Fall, Spring and Summer Offered:

Continued development of speaking, writing, listening and reading proficiency in Spanish at the intermediate level. A continued study and appreciation of cultures of the Spanishspeaking world. Prerequisite: SPA201 or instructor consent.

### **TECHNOLOGY**

(TEC)

### **TEC129 Computer Skills for Technicians**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall and Spring Offered:

Practical use of computer software in industrial and technological applications. An introduction to word processing, spreadsheets, databases, presentations and the Internet.

**ICON LEGEND** 

AGEC: 🔕

Intensive Writing: IW

Reading Required: RDG094: R

Dual Enrollment:

Programs of Study/Tech Prep: POS



# THEATER (THE)

### **THE100 Theater Appreciation**

3 Credits (3 Lectures) 🗟 🗷

**Typically Offered:** Fall and Spring

Survey of theater, including the origins of drama, influence of significant plays, contributions of the actors, directors, designers, stage managers and playwrights. Evaluation of stage and filmed versions of plays and how society influenced the development and creation of plays. *Prerequisite: RDG094*.

### **THE101 Beginning Acting I**

3 Credits (2 Lectures, 3 Labs) R

**Typically Offered:** Fall and Spring

Intro to the fundamentals of acting through physical expression, improvisation and performance of short scenes. Designed for students with little or no experience. *Prerequisite: RDG094*.

### **THE102 Beginning Acting II**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Continuing study of the fundamentals of acting with emphasis on script analysis, character analysis and the rehearsal process through the performing of two or three short scenes. *Prerequisite: THE101*.

#### **THE103 Introduction to Technical Theater**

3 Credits (2 Lectures, 3 Labs) R

Typically Fall and Spring

Theater safety, production organization and management, and introduction to basic technical design concepts, including scenic, stage lighting and sound design. Students perform the technical aspects for selected events in the Pence Center for the Performing and Visual Arts during the semester. *Prerequisite: RDG094*.

### **ICON LEGEND**

AGEC: Dual Enrollment: Intensive Writing: IW Programs of Study/Tech Prep: Pos
Reading Required: RDG094: ROG094: ROG094

### **THE104 Stagecraft**

3 Credits (2 Lectures, 3 Labs) R

**Typically Offered:**Fall and Spring

Basic backstage techniques in building, painting and rigging of scenery. Operation of stage lighting, sound and curtain equipment. *May be taken two times for credit. Prerequisite: RDG094*.

### THE105 Lighting I

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Introduction to the technical aspects of concert and theatrical lighting, including basic design, color theory, instrument types, power distribution, control, safety and the proper hanging, connection, focus and control of instruments. *Prerequisite: EIT101*.

### **THE110 Stage Combat**

3 Credits (2 Lectures, 3 Labs) R

**Typically Offered:** Fall and Spring

Stunt fighting including hand-to-hand combat and the possible use of rapier, rapier-and-dagger or quarterstaff. *May be taken two times for credit. Prerequisite: RDG094.* 

### **THE112 Introduction to the Performing Arts**

2 Credits (1 Lecture, 3 Labs)  $\mathcal{R}$ 

Typically Offered: Fall, Spring and Summer

Students meet once per week to explore the theater as an art form. Students work 28 hours over the course of the semester behind the scenes of a theatrical production to gain first-hand experience and attend one live theater production. *May be taken four times for credit. Prerequisite: RDG094*.

### **THE113 Theater Workshop: Stagecraft**

2 Credits (6 Labs) R

**Typically Offered:** Fall and Spring

Production experience in technical theater as a member of one or more technical activities. Positions are stage lighting, sound reinforcement and recording, properties, costumes, scenic artist, multimedia graphics design and set construction. *May be taken four times for credit. Prerequisite: RDG094.* 



### **COURSE DESCRIPTIONS**

#### **THE115 Introduction to Cinema**

3 Credits (3 Lectures) 🗟 🇷

**Typically Offered:** Fall, Spring and Summer

Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. *Prerequisite: RDG094*.

#### **THE116 Contemporary Cinema**

3 Credits (3 Lectures) 🗟 🗷

**Typically Offered:** Fall, Spring and Summer

Survey of various genres of motion picture films since 1960, including criticism of aesthetic and technical elements. *Prerequisite: RDG094*.

#### **THE117 Theater Workshop: Drama**

2 Credits (6 Labs) R

**Typically Offered:** Fall, Spring and Summer

Participation as an actor, understudy or assistant to the director in the semester's production. Actors are selected by audition. Participation as an assistant to the director is based on availability of a position. *May be taken four times for credit. Prerequisite: RDG094.* 

### **THE163 Scenic Design**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Design, plan and execute scenery with emphasis on craftsmanship, a safe work environment, creating and maintaining an organized work place and estimating time and energy to build various units of scenery.

#### THE164 Costume Design

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Costume design and execution using traditional and creative methods and generating all production work. Course includes design, fitting, sewing and repairs; budgeting and calculations to maximize efficiency and minimize cost; and creative and critical problem solving techniques. *Prerequisite: THE104*.

#### **ICON LEGEND**

AGEC: Dual Enrollment: 
Intensive Writing: IW Programs of Study/Tech Prep: Pos

Reading Required: RDG094: 🚜 SUN Course: 🤎

#### THE165 Makeup Design

2 Credits (1 Lecture, 3 Labs)

**Typically Offered:**Fall and Spring

Makeup design and execution using traditional and newly developed methods, including corrective makeup, old age makeup, facial prosthetics, facial hair/wig appliances, as well as a wide range of fantasy makeup applications. *Prerequisite: THE104*.

#### **THE203 Intermediate Acting I**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall and Spring

Continuing study of the fundamentals of acting with emphasis on movement and voice. In addition to performing in scenes and/or one-act plays, students learn two monologues to further prepare them for auditioning. *Prerequisite: THE102 or instructor consent.* 

#### **THE204 Intermediate Acting II**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Continuing study of the fundamentals of acting with emphasis on career opportunities, further training opportunities and the introduction of acting style. In addition to performing in scenes and/or one-act plays, students learn two monologues to further prepare them for auditioning. *Prerequisite: THE203 or instructor consent.* 

#### THE205 Stagecraft II

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Advanced stagecraft techniques and concepts, including the visual aspects of theater created through design, planning and executing scenery creation. Emphasis is on quality craftsmanship, a safe work environment, creating and maintaining an efficient and organized work place, estimating time and energy required to build various units of scenery and executing designs to meet deadlines. *Prerequisite: THE104*.

#### THE261 Acting for the Camera

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall and Spring

Develop an actor's approach to the special demands of acting in front of a camera. Emphasis is placed on the development of specific performance skills used for television and film acting. A capstone portfolio includes a variety of audition shorts. *Prerequisite: THE101 or instructor consent. Cross Listed: EIT261.* 

### **COURSE DESCRIPTIONS**



### THE270 Education through Drama in the Elementary Classroom

3 Credits (3 Lectures)

**Typically Offered:** Fall and Spring

Hands-on opportunity to learn and teach drama based classroom activities that support learning in the elementary classroom. Develop an understanding of the research supporting the use of drama in the classroom. *Cross Listed: EDU270*.

# VETERINARY TECHNICIAN (VET)

# **VET113 Math and Dosage Calculations for Veterinary Technicians**

1 Credit (1 Lecture)

Typically Offered: Fall, Spring and Summer

Mathematical concepts and dosage calculations required for a veterinary technician. *Prerequisites: RDG094 and MAT082*.

#### **VET116 Veterinary Medicine Terminology**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Mathematical concepts and dosage calculations required for a veterinary technician. *Prerequisite: RDG094*.

### WELDING

(WLD)

#### **WLD110 Survey of Welding Processes**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Fundamental welding processes and procedures including basic shield arc, oxy-acetylene, tungsten inert gas and metal inert gas welding using manual setting machines and digital machines.

#### **WLD120 Oxy-Acetylene Welding**

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

The fundamentals of oxy-acetylene welding including equipment use and safety procedures in brazing, cast iron, silver soldering, running all-directional beads and machine cutting.

#### WLD121 Shielded Metal Arc Welding I

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:**Fall, Spring, Summer and Open Entry/Open Exit

The fundamentals of arc welding using manual setting machines and digital machines with emphasis on running beads in all positions, identification of electrodes, hand flame cutting with the torch and identification of metal.

#### WLD122 Shielded Metal Arc Welding II

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Advanced arc welding using manual and digital setting machines with emphasis on out-of-position welding, basic destructive and non-destructive testing, oxy-acetylene cutting, arc air cutting, plasma arc cutting. *Prerequisite:* WLD120 or WLD121.

#### WLD125 Pipe Welding I

3 Credits (2 Lectures, 3 Labs)

**Typically Offered:** Fall, Spring and Summer

Basic pipe welding of underground and industrial pipelines. Students will cut, bevel, fit and weld pipe. *Prerequisite: WLD122*.

#### **WLD128 Blueprint Reading for Welders**

3 Credits (3 Lectures)

Typically Offered: Fall, Spring and Summer

The fundamentals of reading and interpreting welding symbols and blueprints as they pertain to the area of welding technology.

**ICON LEGEND** 

AGEC: Intensive Writing: ///

Dual Enrollment: **2**Programs of Study/Tech Prep: **POS** 

Reading Required: RDG094: R

SUN Course:



#### COURSE DESCRIPTIONS

#### **WLD221 Gas Tungsten Arc Welding**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

Techniques of both arc and oxy-acetylene welding; the theory, operation, safety, care and maintenance of the Gas Tungsten Arc Welding equipment both manual and digital. Additionally students will use oxy-acetylene torch and tungsten inner gas welding processes on ferrous and non-ferrous metals with various joint designs. Prerequisite: WLD120.

#### **WLD222 Gas Metal Arc Welding**

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

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 spoolgun using aluminum. Discuss the operation of digital settings on MIG machines. Prerequisite: WLD121.

#### **WLD223 Automatic and Semi-Automatic** Welding

3 Credits (2 Lectures, 3 Labs)

**Typically** Offered:

Offered:

Fall, Spring and Summer

Development of the necessary skills to enter the welding industry, including TIG and MIG techniques.

Prerequisite: WLD221.

#### WLD225 Shielded Metal Arc Welding III

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall, Spring and Summer

Use of E7018 and E6011 electrodes in the flat, horizontal and overhead welding positions, with emphasis on basic joints placed in out-of-position per AWS D1-1 Guided Bend Test, and Destructive Methods. Prerequisite: WLD122.

#### WLD227 Welding Design and Fabrication

3 Credits (2 Lectures, 3 Labs)

**Typically** Fall, Spring, Summer and Open Entry/Open Exit Offered:

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.

#### **ICON LEGEND**

AGEC: 🔃

Dual Enrollment:

Programs of Study/Tech Prep: POS

Intensive Writing: IW Reading Required: RDG094: R

SUN Course:

### **WOMEN AND GENDER STUDIES** (WGS)

#### WGS100 Introduction to Gender and **Women's Studies**

3 Credits (3 Lectures)  $\mathcal{R}$ 

**Typically** Every other spring; consult CAC Class Schedule. Offered:

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**



Mrs. Gladys Christensen District 1



**Dr. Debra Banks**District 2



Mr. Richard Gibson
District 3



Mrs. Rita Nader District 4



Mr. Jack Yarrington
District 5

#### **COLLEGE ADMINISTRATION**

#### Doris Helmich Ed.D.

President Chief Executive Officer

#### Chris Wodka, M.B.A., CPA

Vice President of Financial & Administrative Services Chief Financial Officer

#### Jim Kimsey, M.A.

Vice President of Human Resources Chief Human Resources Officer

#### James Moore, Ed.D.

Vice President of College Affairs

#### Vacant

Associate Vice President of Academic Affairs Chief Academic Officer

#### Vacant

Associate Vice President of Student Affairs

#### Richard King, M.S.

Associate Vice President of Technology Services Chief Technology Officer

#### Terri Ackland, M.A.

Dean of Arts & Social Sciences

#### Julian Easter, M.S.

Dean of Health Careers & Sciences

#### Janice Pratt, Ed. D., M.B.A., C.H.A., C.H.E

Assistant Dean of Professional & Workforce Education

#### Debbie Foster, M.A.

Assistant Dean of Communications, Math & Learning Support

#### Jennifer Gonzales, M.Ed.

Assistant Dean of Student Affairs

#### William F. Brown, M.B.A.

**Executive Director of Institutional Research** 

#### Luisa Ott, CPA, CFE

Executive Director of Accounting Services/Comptroller

#### Tom DiCamillo, M.S.A.

Executive Director of Public Relations & The Foundation



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CompTIA Network+ Certification

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B.S., Colorado State University - Pueblo

Willey, Mary, Accounting Clerk II, District/SPC

Williams, Eugene, Professor of Diesel Technology

District/SPC

Diploma - Diesel & Heavy Equipment Repair,

Des Moines Area Community College

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

Winter, Dionne, Director – Diagnostic Sonography

District/SMC

B.S., University of Phoenix

M.S., DeVry University

RDMS, American Registry for DMS

Wisniewski, Sharon, Coordinator - STEM

District/SPC

B.S., University of Wisconsin, Milwaukee

M.S., University of Wisconsin, Milwaukee

Wodka, Chris, Vice President Business Affairs, CFO,

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, SPC 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, 1970-19

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

Blasco, Nancy, 1999-2013 Library Assistant I

Blow, James, 1979 – 2008 Facilities Assistant III, AVC

Facilities Assistant III, AVC Bloxham, Anne, 1972-1983

Systems Analyst, SPC

Bolgren, Carol, 1978-2003

Office Assistant II, 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

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

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

Faucette, Dixon, 1972-1998

Professor of Engineering/Technology, SPC

Elson, Ellen, 1989-2000

Professor of Office Administration, SMC

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

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

Menke, Larry 1996-2009

Facilities Technician III, SPC

Mills, Gerald, 1984-2005

Professor of English, SPC

Mitchell, Marian, 1990-2006

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Munoz, Maria Elda, 1979 – 2009

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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

Shirley, Al, 1999 - 2013

Student Services Generalist, SPC

Soliz, Arle, 1982 - 2012

Purchasing Assistant, District/SPC

Soliz, Josie, 1980 - 2010

Academic Division Assistant, SPC

Soliz, Manuel, 1979 – 2009

Facilities Foreman, SPC

Sowers, John, 1976-2002

Professor of Journalism, SPC

Spillman, Craig, 1989-2003

Program Manager, Continuing Education, AVC

Stinard, Sharon, 1990-2011

Community Outreach Coordinator, SMC

Strang, Eleanor, 1989-2001

Director of Nursing, SPC

Taylor, Beverly, 1986-1996

Professor of Psychology, SPC

Thielsen, Clarence, 1986-1996

Professor of Cement, ASP

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 2013**

### **SPRING 2014**

Faculty on Campus	August 13-16	T-F	Faculty on Campus	January 13–16	M-Th
Faculty Development Day	August 13	T	Weekend College Begins	January 17	F after 4:30
Weekend College Begins	August 16	F after 4:30	Last Day of Spring Registration	January 18	Sat 9-1pm
Last Day of Fall Registration	August 17	Sat 9-1pm	Martin Luther King, Jr. Day	January 20	M
Regular Classes Begin	August 19	M	College Closed	T 01	T
Class Changes/Drop-Add	August 19-24	M-Sat	Regular Classes Begin	January 21	T
Labor Day - College Closed	September 2	M	Class Changes/Drop-Add	January 21-27	T-M
All College Day	September 3	T	President's Day College Closed	February 17	M
(No classes prior to 4:30 pm) (No services all day)			Development Day (No classes prior to 4:30 pm)	February 18	T
45 Day Census	October 3	Th	Last Day to Apply for May	March 3	M
Spring Registration Begins (Continues through January 18)	October 7	M	Graduation Graduation	Water 3	141
Mid-Term Week	October 7–11	M-F	45 Day Census	March 6	Th
			Mid-Term Week	March 7-13	F-Th
Last Day to Apply for December Graduation	October 14	M	Spring Break - College Closed	March 17-22	M-Sat
Last Day to Withdraw from Semester Length Classes	October 26	Sat.	Summer/Fall Registration Begins (Continues through August 16)	March 31	M
Veteran's Day - College Closed	November 11	M	Last Day to Withdraw from	April 5	Sat
Thanksgiving Break (No evening classes or college services after 6 pm on Nov. 27 <sup>th</sup> )	November 28-30	Th-Sat	Semester Length Classes	M 0 15	D TIL
			Final Exams	May 9–15	F-Th
Final Exams	December 6-13	F-F	Semester Ends	May 15	Th
Semester Ends	December 14	Sat	Grades due in Registrar's Office	May 19	M
			Commenc	omont	
Grades due in Registrar's Office	December 16	M			
Winter Break - College Closed	Dec 23 – Jan 2	M-Th	Signal Peak Campus (7:00 pm)	May 16	F

### **SUMMER 2014**

Memorial Day - College Closed	May 26	M
Last Day of Summer Registration	May 29	Th
First Summer Session Begins	June 2	M
Class Changes/Add-Drop	June 2-3	M-T
Last Day to Apply for Summer Graduation	June 5	Th
First Five Week Session Ends	July 5	Th
Second Summer Session Begins	July 7	M
Class Changes/Add-Drop	July 7-8	M-T
Second Five Week Session Ends	August 9	Sat
Grades Due in Registrar's Office	August 11	M

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### **Campuses:**

#### Aravaipa Campus

80440 E. Aravaipa Rd. Winkelman, AZ 85192 520-357-2800 or 866-869-6507

#### Maricopa Campus

17945 N. Regent Drive Maricopa, AZ 85138 520-494-6400

#### San Tan Campus

3736 E. Bella Vista Rd. San Tan Valley, AZ 85143 480-677-7825 or 520-494-6725

#### Signal Peak Campus

8470 N. Overfield Road, Coolidge, AZ 85128 520-494-5444 or 800-237-9814

#### Superstition Mountain Campus

273 E. Old West Hwy. Apache Junction, AZ 85119 480-677-7700

#### Centers:

#### Casa Grande Center

1015 E. Florence Blvd. Casa Grande, AZ 85122 520-494-6050

#### Corporate Center

540 N. Camino Mercado Casa Grande, AZ 85122 520-494-6600

#### Florence Center

P.O. Box 707 800 E. Butte Avenue Florence, AZ 85132 520-494-6801

#### SaddleBrooke Center

63675 E. SaddleBrooke Blvd., Suite T SaddleBrooke, AZ 85739 520-825-4493

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