



# COLLEGE CATALOG



2007-2008

**Central  
Arizona  
College**



## GREETINGS FROM THE PRESIDENT

Dear Student,

Welcome to the 2007-08 academic year at Central Arizona College. Thank you for making us your choice in higher education. Central is a top academic institution, and here are reasons why you have chosen wisely.

Central is a national leader in learning outcomes. That means as a student, you know what you will have gained and mastered with each class taken. The system that the college developed is being used by other schools all over the state and country.

Over the last few years, Central has earned recognition from the Bellwether Assembly, which annually honors outstanding and innovative programs and practices that successfully lead community colleges into the future, and the League for Innovation in the Community College, which honors capstone achievements and the continuing renewal of the spirit of innovation and experimentation upon which the League was founded.

Our work in learning outcomes has strengthened our relationships with the state universities. While all Central associate degree graduates can transfer without loss of credit, we also have developed programs that allow students to earn university degrees on the Central campuses. In addition to the state universities, we also have articulation agreements with 450 public and private educational institutions throughout the United States. For more information about specific programs or opportunities, please visit or call the Career and College Transfer Center.

Pinal County is one of the fastest growing counties in the country. In an effort to improve service to our community, the college has increased class offerings beyond our three campuses. We now have centers in Coolidge, Florence, Maricopa, San Tan/Johnson Ranch and Oracle. As part of our commitment to local economic development, Central will be offering classes and corporate training in the Central Arizona Corporate Training Institute at Interstate 10 and Florence Boulevard in Casa Grande.

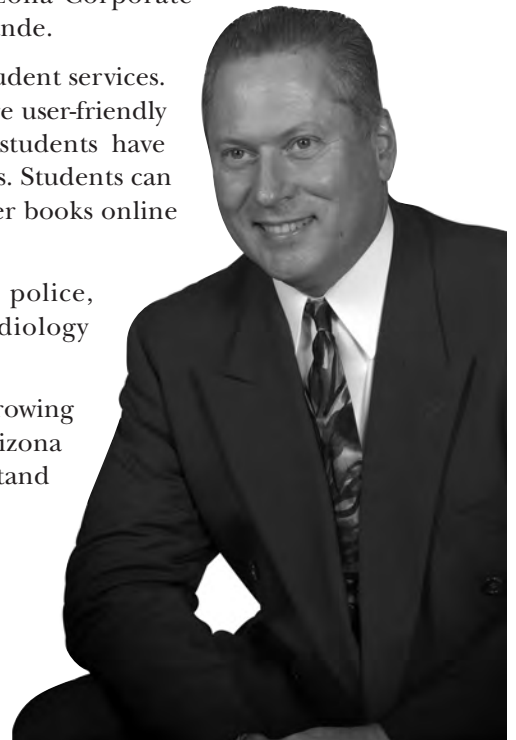
We have continued to enhance our webpage and expand our online student services. This year, we have worked on a redesign of the webpage to make it more user-friendly for students and included features requested by students. Central students have online accounts to check their schedule, financial aid status and grades. Students can see class schedule offerings, which are updated every 20 minutes, order books online and benefit from our continuously expanding services.

We have received grants over the last year to help us expand our police, fire and nursing programs and begin creating coursework for a radiology technician program.

We are excited about the future of our institution and the rapidly growing county we serve. On behalf of everyone who works at Central Arizona College, we are honored that you are creating your future here. We stand ready to help you reach your career and educational goals.

Sincerely,

Terry A. Calaway, Ed.D.





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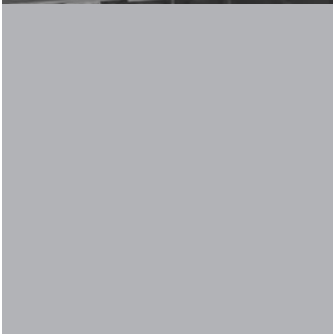
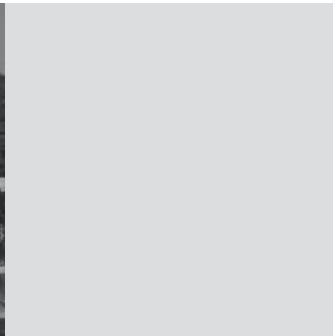
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# COLLEGE MISSION





## MEMBERSHIPS

The College is a member of:

- Academy of Criminal Justice
- American Alliance for Health, Physical Education, Recreation and Dance
- American Association for Women in Community Colleges
- American Association of Massage Therapists
- American College Personnel
- American Culinary Federation
- American Dietetic Association
- American Association of Collegiate Registrars and Admission Officers
- American Association of Community Colleges
- American Association for Higher Education
- American Association of Professional Coders
- American Mathematical Association of Two-Year Colleges
- American Society of Composers, Authors and Publishers
- American Society of Law Enforcement Trainers
- American Society of Quality Control
- Apache Junction Chamber of Commerce
- Arizona Association for Economic Development
- Arizona Association of Chiefs of Police
- Arizona Association of Institutional Research
- Arizona Association of Life Long Learning
- Arizona Association of Student Financial Aid Administrators
- Arizona City Chamber of Commerce
- Arizona Community College Association
- Arizona Community College Athletic Conference – Men’s Division
- Arizona Community College Athletic Conference – Women’s Division
- Arizona Community College Public Relations Council
- Arizona Fire Chiefs Association/Pinal County
- Arizona High School & College Relations Council
- Arizona Newspaper Association
- Arizona Occupational Administrators
- Arizona Presenters Alliance
- Arizona Quality Alliance
- Arizona Town Hall
- Association of Collegiate Business Schools and Programs
- Association of Community College Trustees
- Association of Governing Board of Universities and Colleges
- Association on Higher Education and Disability (AHEAD)
- Association for Quality and Participation
- Association of College Administration Professionals
- Association of Institutional Research
- Association of Rocky Mountain College and Universities Mail Services
- Casa Grande Main Street
- Central Arizona Human Resource Management Association
- Central Arizona Valley Institute of Technology
- College and University Personnel Association
- Community College Survey of Student Engagement
- Community College Business Officers
- Coolidge Chamber of Commerce
- Copper Basin Chamber of Commerce
- Council of North Central Two-Year Community Colleges
- Dietary Managers Association
- East Valley Think Tank
- Gold Canyon Business Association
- Greater Casa Grande Chamber of Commerce
- Greater Casa Grande Economic Development Foundation
- Greater Florence Chamber of Commerce
- Hispanic Association of Colleges and Universities
- International Association of Chiefs of Police
- International Association of College Law Enforcement Administrators
- International Council on Hotel, Restaurant, and Institutional Education
- League for Innovation in the Community College
- Mountain States Association of Community College, Inc.
- National Alliance – Two-Year College Athletic Administration
- National Association Educational Buyers
- National Association of College Admissions Counseling
- National Association of College Stores
- National Association of College and University Business Officers
- National Association of Collegiate Directors of Athletics
- National Association of Student Personnel Administrators
- National Association of Student Financial Aid Administrators
- National Association of Veterans’ Program Administrators
- National Athletic Trainers Association
- National Collegiate Honors Council
- National Community College Hispanic Council
- National Council of Instructional Administrators
- National Council for Marketing and Public Relations
- National Council on Student Development
- National Fastpitch Coaches Association
- National Institute for Staff & Organizational Development
- National Intercollegiate Rodeo Association
- National Junior College Athletic Association
- National League for Nursing
- National Network/Health Careers
- National Orientation Directors Association
- National FBLA/Phi Beta Lambda
- National Research Center for College and University Admissions
- Pinal County Governmental Alliance
- Pinal County Law Enforcement Association
- Pinal Partnership
- Phi Theta Kappa
- Queen Creek Chamber of Commerce
- Recording for the Blind
- Rocky Mountain Association of Institutional Research
- Saludos Hispanic
- SMOR Chamber of Commerce
- Society of Human Resource Management
- Superior Chamber of Commerce
- Western Regional Honors Council
- Women’s Basketball Coaches Association



## OUR VISION

A dynamic partner...enriching your future through learning.

## OUR MISSION

Central Arizona College provides a vibrant environment centered on learning and learner success.

Our diverse college community values the power of innovation, continuous quality improvement and the contribution of the individual.

Our commitment is to act as a catalyst for economic and cultural vibrancy and to inspire individuals to pursue their unique goals.

## OUR VALUES

To assist in fulfilling the Central Arizona College Vision and Mission, we commit ourselves to the following values:

- **Student Centered** planning and decision making.
- **High Academic Standards** that drive a quality educational experience.
- **Diversity** of the community we serve.
- **Effective Communication** to ensure quality learning and development.
- **Continuous Quality Improvement** to enhance programs and services.
- **A Prepared Workforce** that promotes economic development.
- **Accountability** for our actions.
- **Entrepreneurship** that encourages initiative and innovation.
- **Individual** contributions and aspirations.
- **Mutual Respect** for all individuals.
- **Excellence** in all programs and services.
- **Student Development** through life-long learning.

## DECLARATION OF CIVILITY FOR A LEARNING COLLEGE

We affirm that all of the 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 Central Arizona College 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:

1. Integrity
2. Fidelity
3. Charity
4. Responsibility
5. Self-discipline

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.



For information about Central Arizona College's accreditation, you can contact the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, 312-263-0456, or online at [ncahlc.org](http://ncahlc.org).

You also can contact Central Arizona College, 8470 North Overfield Road, Coolidge, AZ 85228 or call 520-494-5444.



**2007-2008 TUITION AND FEES**

**SPECIAL FEES**

| Credits    | Arizona Resident | Out of State Resident | WUE Program  |
|------------|------------------|-----------------------|--|
| 1          | \$57             | \$114                 | Must be a full-time student with classes in Arizona to qualify |
| 2          | \$114            | \$228                 |  |
| 3          | \$171            | \$342                 |  |
| 4          | \$228            | \$456                 |  |
| 5          | \$285            | \$570                 |  |
| 6          | \$342            | \$684                 |  |
| 7          | \$399            | \$1778                |  |
| 8          | \$456            | \$2032                |  |
| 9          | \$513            | \$2286                |  |
| 10         | \$570            | \$2540                |  |
| 11         | \$627            | \$2794                |  |
| 12         | \$684            | \$3048                | \$1026   |
| 13         | \$741            | \$3302                | \$1112   |
| 14-20      | \$798            | \$3556                | \$1197   |
| 21 or more | \$57 per credit  | \$254 per credit      | \$86 per credit  |

- Students are responsible for making payment arrangements of tuition and fees at the time of registration
- The Western Undergraduate Education Program is open to full-time students from 13 other states who are studying in Arizona. States include Alaska, California, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

**TUITION & FEES SUBJECT TO CHANGE WITHOUT PRIOR NOTICE**

*Some credit courses have a lab or special fee that is required. Fees for non-credit special interest courses are determined on a course by course individual basis.*

|  |                                   |
|--|-----------------------------------|
| Malpractice insurance fee for nursing, DEP, athletic training and massage therapy. . . . .                             | \$25                              |
| Malpractice insurance fee for EMT, IEMT, and Paramedic First Responder . . . . .                                       | \$65                              |
| Graduation and graduation in absentia (cap and gown extra) . .   | \$20                              |
| Transcript / Electronic transcript . . . . .   | \$4 / \$10                        |
| Fax at student's request, such as transcript, letter of acceptance, enrollment verification, other materials . . . . . | \$2 per page                      |
| Federal Express at student's request . . . . .   | \$20                              |
| Certified Mail Fee . . . . .   | \$5                               |
| GED, Adult Basic Education, English as Second Language courses . . . . .   | \$25 per hour                     |
| GED test . . . . .   | \$75 per test                     |
| GED test retake . . . . .  | \$15 per test                     |
| CLEP test and Proctoring Fee (non-Central tests) . . . . .   | \$12                              |
| Nursing Testing Fee . . . . .  | \$25                              |
| Check non-sufficient funds. . . . .  | \$15                              |
| Identification replacement. . . . .  | \$10                              |
| Out-of-State instruction (non-FITSE) . . . . .   | \$300 per hour                    |
| CARLOTA/other than academy . . . . .   | \$57 per hour with residence life |
| CARLOTA-POST sponsored with residence life . . . . .   | \$1,810                           |
| Aviation Program Lab Fees . . . . .  | \$2,400                           |
| Private music lessons . . . . .  | actual cost                       |
| Credit by examination . . . . .  | \$115                             |
| Diploma replacement . . . . .  | \$65 per hour                     |
| Diploma cover replacement . . . . .  | \$18                              |
| Certificate replacement . . . . .  | \$7                               |
| Copy of public/police records . . . . .  | \$5                               |
| Parking fines . . . . .  | 30¢ per page                      |
| Moving violations (stop sign, speeding) . . . . .  | \$15                              |
| Arizona State Prison inmate self-pay . . . . .   | \$25                              |
| Travel courses and labs . . . . .  | \$70 per hour                     |
| Massage Fees: 45 minutes / 20 minutes . . . . .  | actual cost                       |
|  | \$20 / \$10                       |

**College for Kids**

|  |                 |
|--|-----------------|
| Signal Peak Campus . . . . .             | \$260 per child |
| Additional Children same family. . . . . | \$205 per child |
| Aravaipa Campus . . . . .                | \$210 per child |
| Superstition Mountain Campus. . . . .    | \$150 per child |

**Residence Life Fees**

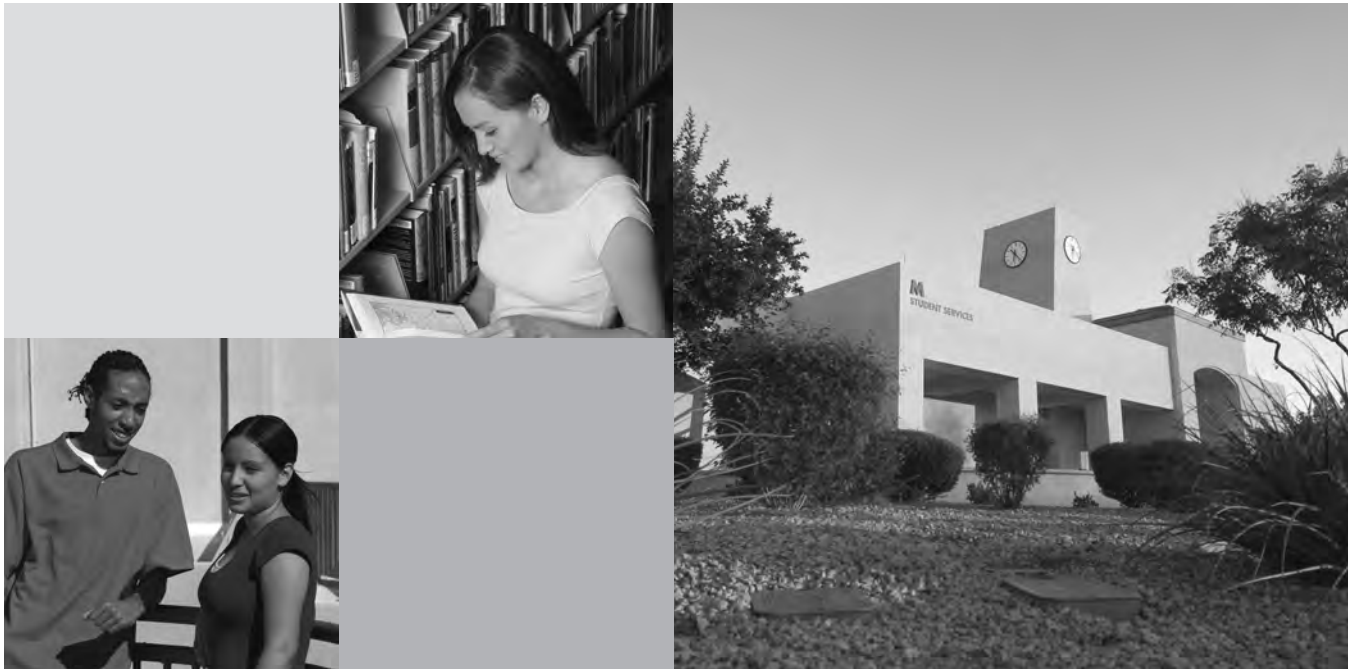
|   |         |
|---|---------|
| Room deposit. . . . .                       | \$100   |
| Room per semester . . . . .                 | \$790   |
| Tower . . . . .                             | \$900   |
| Summer Room only (weekly) . . . . .         | \$60    |
| Board per semester . . . . .                | \$1,310 |
| Cleaning fee . . . . .                      | \$75    |
| Room lock replacement simple fee . . . . .  | \$50    |
| Room lock replacement complex fee . . . . . | \$75    |

**Courses with additional fees (per course)**

|   |               |
|---|---------------|
| Nutrition/Dietetics Courses<br>NTR125B, NTR125C, NTR125D, NTR132C and NTR272. . . . . | \$12          |
| Internship/Seminar Fees<br>NTR229, NTR230 and NTR272 . . . . .                        | \$38 per hour |
| EMS and Fire Science . . . . .  | see schedule  |



# STUDENT SERVICES





## ADMISSION INFORMATION

Students should complete the admission and placement process to receive proper advisement and course selection prior to college registration and orientation.

### Admission Requirements Regular Standing

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

- Is a graduate of a high school that is accredited by a regional accrediting association as defined by the United States Office of Education or any other appropriate state educational agency.
- Has a high school certificate of equivalency (GED).
- Is 18 years of age or older and demonstrates evidence of potential success in the community college.
- Is a transfer student in good 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, or who are currently in dual enrollment course(s) in both their high school and Central. A student admitted under this criteria 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 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);
- Consultation with a member of the college academic advising staff and/or;
- Consultation with the Dean of Students.

### 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 as well as a letter stating the reason for the special admission request.

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

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

- Completion of Admission Form;
- Graduation from a high school equivalent to the 12th grade level in the United States. It is recommended that students have graduated in the upper 50 percent of their secondary school (high school or equivalent) in order to ensure success in academic classes at this college. Official high school transcripts must be mailed directly to the Records Office.
- Completion of Test of English as a Foreign Language (TOEFL) with a score of at least 450 paper test or 133 on the computer test. The score must be submitted directly from the testing agency to the Records Office. Questions about the TOEFL should be directed to the Educational Testing Services at the following address: TOEFL Services, PO Box 6155, Princeton, NJ, 08541-6155;
- Evidence of financial support or deposit of tuition. The college has no provision for scholarships for international students, therefore, students must be prepared to meet the necessary financial obligations for the entire time they will be in the United States. It is estimated that each student will need at least \$10,000 per academic year in order to meet all expenses, exclusive of travel;
- Proof of health insurance that will cover medical expenses in the United States or purchase of health/accident insurance after arriving at Central;
- Translation of documents into English, if required.

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

- Completion of Admission 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), if required for the courses in which the student plans to enroll;
- Consultation with a member of the college academic advising staff and/or;
- Consultation with the Dean of Students.



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

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

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

- Completion of Admission Form.

## Residency Guidelines

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

- Resident
- Non-resident (includes out-of-state and F-1 nonimmigrant students)

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 federal or state income tax purposes and the parent or guardians are residents of a state other than Arizona;
- Most 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 here for more than one year, are still considered out-of-state;
- 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 Admissions and 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, which 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 students 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 Associate Vice President of Student Development. 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 file properly a request for review within the prescribed



time limit constitutes a waiver of review for the current enrollment period. The decision of the Associate Vice President of Student Development shall be final.

## Definitions

- “Armed Forces of the United States” means the Army, the Navy, the National Guard, the Air Force, the Marine Corps, the Coast Guard, the Commissioned Corps of the United States Public Health Services and the National Oceanographic and Atmospheric Association.
- “Continuous attendance” means full-time student enrollment at an Arizona educational institution, as such term is defined by the institution’s governing body, for a normal academic year since the beginning for which continuous attendance is claimed. Such person need not attend summer sessions or other such intersessions 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), then a guardian of an unemancipated person if there are not 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 Admissions and Records Office;
- Submission of evidence of the following to be used in determining a student’s domicile in Arizona:
  - a. Arizona income tax return

- b. Arizona voter registration
- c. Arizona automobile registration
- d. Arizona driver’s license
- e. Place of high school graduation
- f. Source of financial support
- g. Dependency as indicated on federal income tax return
- h. Ownership of real property
- i. Notarized statement from landlord or employer
- j. Bank accounts
- k. Other relevant information
- l. Birth Certificate

## 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.

## Servicemembers Opportunity Colleges (SOC)

This is a national higher education association with more than 1,800 institutional members. SOC functions in cooperation with the Department of Defense (DOD), Military Services, including the National Guard and Coast Guard, to help meet the voluntary higher education needs of servicemembers.

## Western Undergraduate Education Program

Students from 14 Western states are eligible to participate in the Western Undergraduate Education 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, 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 may qualify to be assessed in-state tuition. There is a limited number of waivers available. Contact the Records 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 the Registrar with an official transcript of all college credits. The college reserves the right to determine, through the Associate Vice President of Student Development, how much credit 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, have been away from the college for a semester or more, and wish to be considered for readmission must seek approval from the Dean of Academic Services. 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 Dean of Academic Services 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.

### **Admission Catalog**

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, that is they are 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, 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 rather than staying with 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 admission or graduation, regulations, or any other information contained herein.

### **Program Requirements**

There are a number of programs at Central, including the nursing program, that have very 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.



## PLACEMENT AND ADVISING

### Advising and Testing

To gain the most benefit from their college experience, students should understand the nature and purpose of higher education and be familiar with resources, services and activities available at Central Arizona College. Central provides many opportunities for students to participate in programs, classes and activities that help students develop a sense of community and identity with the college.

- Orientation to College is a program designed to introduce all students to the campus environment to help make the transition to college life.
- 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.
- Students can find details about academic programs and student life in the college catalog. In addition, it is important that students read and understand the Student Code of Conduct.

### 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 Advising and Testing Center to make an appointment for placement testing.

### Basic Skills

It is important to understand that students cannot “fail” their placements tests. Rather, results of writing, mathematics and reading tests are indicators of current student skill levels and are used to help students select appropriate courses. Prior to enrolling in courses in their program of study, students may be advised to enroll in basic skills courses to help develop the academic skills necessary for success at the college level.

### Course Sequence and Prerequisite Courses

In general, students can determine the level of a course by its number. Courses numbered 100 to 199 are usually first-year courses; courses numbered 200-299 are usually second-year courses. Because courses with lower numbers may be prerequisites for courses with higher numbers, students should complete lower numbers

first. All prerequisite courses must be completed with a grade of “C” or higher to make the student eligible for the next course.

### Academic Advising for New Students

New degree- and certificate-seeking students are encouraged to meet with a professional academic advisor or faculty advisor prior to registering the first time. The student and advisor will discuss the student’s life and academic goals, review high school transcripts and placement test scores, and select a program and courses consistent with the student’s interests and level of preparation. Students should visit their academic advisor frequently to track their progress.

### Academic Advising for Returning Students

Continuing students should see an advisor for assistance in developing a Master Education Plan to track their progress toward completion of their degree or certificate. Advisors can help students locate and use tools to facilitate transfer to a four-year institution and get the most benefit from their coursework at Central. Students who plan to transfer to one of Arizona’s three public universities should consult the Arizona Course Applicability System (CAS) online for information about transfer at <http://az.transfer.org/cas/students/index.html>.

### Reading Requirement

Demonstrated proficiency in reading is a requirement for all degrees awarded by Central Arizona College. Students must achieve an appropriate score on their placement test or complete RDG100A or RDG100B 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 at Central. 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 the Campus Dean of Academic Services or designee.

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



## 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.org/cas](http://az.transfer.org/cas)) 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. College advisors refer to this guide when helping future transfer students choose their courses.

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 Central

To transfer credits, students may request that an official transcript be sent from Central to the Records Office at the transfer institution. Students must submit a written request to the Records Office including complete name, social security number, complete address of where the transcript is to be sent and a \$4 fee for each copy. Transcripts will not be released if students have any outstanding financial obligations. The normal process time is three weeks.

### Transferring Credits to Central

Transfer courses must have been acquired through an 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, if it is applicable toward the student's degree objective. Courses in which a grade of less than "C" was earned will not be accepted except under unusual circumstances. Official transcripts must be submitted to the Records Office for evaluation.

Students who have transferred to the university without completing the Arizona General Education Curriculum may transfer back to Central a maximum of two courses or eight credits to satisfy the Arizona General Education Curriculum.

## REGISTRATION INFORMATION

Registration is regarded as a commitment by the student to comply with all regulations of the college. In addition to the regular registration period, the college offers the continuing student an opportunity to register at an earlier date to allow extra time for effective use of advising services and to permit access to classes that fill early in the regular registration period.

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.

### Telephone Registration

Telephone registration is designed for non-degree and part-time students. Please note that some classes require prerequisites or placement testing, and students must meet those requirements before registration.

In order to register by telephone, call the Records Office during regular office hours between the dates listed in each semester's Schedule of Classes.

### Online Registration

Continuing students may register via the internet at [www.centralaz.edu](http://www.centralaz.edu) by accessing online student services.

### 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 by filling out a Drop/Add or Withdrawal Form, obtaining the necessary signatures, and submitting the form to the Records Office for processing. Students may add classes to their schedule after the Drop/Add Week only with the approval of the faculty member involved.

### Dropping Classes

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

### Withdrawing from Classes/College

After the first week of the semester, students may withdraw from a class they no longer want to attend; students will receive a grade of W on their transcript. To withdraw from a class, visit the Academic Advising Office and speak with an advisor. Advisors will provide a Withdrawal form



that must be taken to the instructor for signature before submission to the Records Office for processing. After the 10th week of the semester, the student must meet with the instructor to initiate a course withdrawal. The instructor will assign a grade of WP (Withdraw Passing) or WF (Withdraw Failing) for the course. Submit the form to the Records Office for processing.

### **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 may only 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.

Please complete a "Course Repeat" form at the Records Office if taking the course to improve a grade.

### **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 June.

### **Numbering System**

All courses carry a three digit number. Levels of instruction are designated by the first digit.

070-079 Special Interest (non-degree)

080-099 Developmental

100-199 First Year Level

200-299 Sophomore Level

### **Refunds**

Any student officially withdrawing before the first class meeting will be entitled to a 100 percent refund. Students must apply for a tuition refund by completing a Refund Request Form. The refund period begins the first day of the semester and extends to the last day of the official add/drop period. Add/drop period is the first week of the semester. Ninety percent of tuition and registration fees will be refunded if official withdrawal is made during the add/drop period and students submit a Refund Request Form to the college Business Office. There is no add/drop period for classes beginning after the first week of the semester. There are no refunds after the add/drop period.

An exception may be approved for a student withdrawing for medical reasons, if adequate documentation is submitted. All refunds and deposits that may be due to a student will first be 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.

### **New Student Orientation**

Orientation provides students and their families the opportunity to connect with other students, the college campus, faculty and staff. One-day orientations include information on how to successfully complete the enrollment process, while learning about college degree, certificate, and academic programs. Students participate in informational sessions about college resources and programs available to help students succeed.

Call 520-494-5260 for dates and times.



## FINANCIAL AID

### Financial Aid and Scholarships

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

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

### 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 only offered to students with a very low 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

#### Federal Program Grants

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant

#### Work-study

- Federal Work-study

#### Loans

- Federal Stafford Student Loan
- Federal PLUS Loan

#### State Programs

- Leveraging Educational Assistance Partnership

### Student Eligibility for Federal Financial Aid Programs

To be eligible for federal financial aid the student must:

- Have financial need, except for some loan programs;
- Have a high school diploma, General Education Development (GED) Certificate, or pass a test approved by the U.S. Department of Education,

(See the Financial Aid Office for details on current tests);

- Be a U.S. citizen or eligible noncitizen;
- Have a valid social security number;
- Make satisfactory academic progress;
- Sign a statement of educational purpose and a certificate statement on overpayment and default (on the Free Application for Federal Student Aid);
- Register with the Selective Service, if required.

### How to Apply for Federal Financial Aid

The first step in applying for federal financial aid is completing the Free Application for Federal Student Aid (FAFSA). Students who applied in the previous year should receive the renewal application in the mail. This application may be used in lieu of the FAFSA. Be sure your application is complete and accurate. Incomplete or incorrect information will delay your application and your financial aid. List Central Arizona College in Step 6 of the application. (Central's Title IV School Code is 007283). Students must apply each academic year.

### Satisfactory Academic Progress for Federal Financial Aid Recipients

In accordance with federal regulations, Central 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 Progress

#### Qualitative Measure

- Cumulative Grade Point Average (GPA). Students must maintain at least a 2.0 cumulative GPA.

#### Quantitative Measure

- Maximum Time Frame

All hours attempted are considered when determining financial aid eligibility, whether or not financial aid was received. Regardless of where the hours were attempted, Central Arizona College 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 then figure by 1.5.



### **Incremental Assessment**

Satisfactory academic progress is determined at least once a year. For programs one year or less in length, satisfactory academic progress is determined each semester. Earned credit hours must be at least 67 percent of attempted credit hours each academic year or semester, as applicable.

### **Financial Aid for Seeking Additional Degrees**

Students seeking additional degrees are limited as follows; Associate degree – 30 credit hours beyond first Associate degree. Certificate limited to two (2) certificates. Students seeking a third associate degree or a third certificate are not eligible for federal financial aid.

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

If a student withdraws completely, Central Arizona College is required to follow specific guidelines as directed by the U.S. Department of Education. The guidelines are used to calculate how much of a student's federal aid will be returned to the various financial aid programs, how much can be applied to student's institutional charges and how much, if any, to the student.

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

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

Contact the Financial Aid Office for details on Central'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).

#### **Course Withdrawal**

Courses with grade of W, WP or WF will increase attempted credit hours but not earned credit hours. Only the grade of WF will have an impact on cumulative GPA.

#### **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**

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 progress, a student may appeal that decision based on mitigating circumstances. Procedures and forms for the appeal process and the reinstatement of federal financial aid are available through the Financial Aid Office.

### **Institutional Scholarship Programs**

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

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

- Must complete the Free Application for Federal Student Aid;
- Must be pursuing a degree or certificate;
- Must be enrolled in an on-campus program;
- New students are first priority;
- All scholarships must be coordinated with federal financial aid, and the total of all awards may not exceed need;
- All scholarships have minimum academic progress requirements. Students may not appeal these requirements.

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

### **GED Scholarship**

**Target:** Students who score an average of 58 or higher on the GED examination taken through the Central Arizona College GED testing program.

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



**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 equivalent to in-state tuition up to 20 credit hours.

### CAC Incentive Scholarship

**Target:** Primarily first generation college, first time recent high school students.

**Enrollment Requirements:** Must enroll in a minimum of 6 credit hours per semester.

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

**Value:** The amount covers a portion of in-state tuition and is based on financial need. Amount is prorated for three-quarter-time at 75 percent of full-time and 50 percent of full-time for half-time.

### Non-Traditional Student Scholarship

**Target:** Primarily re-entry students 23 years of age or older.

**Enrollment Requirements:** Must enroll in a minimum of 6 credit hours per semester.

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

**Value:** The amount covers a portion of in-state tuition and is based on financial need. Amount is prorated for three-quarter-time at 75 percent of full-time and 50 percent of full-time or half-time.

### Faculty Scholarship

**Target:** New and returning students.

**Enrollment Requirements:** Must enroll in a minimum of 1 credit hour per semester.

**Renewal Requirements:** Must complete an application form each year. Must complete a minimum of 1 credit hour each semester. Must earn and maintain a 2.5 cumulative grade point average. Limited to four semesters. Contingent upon faculty recommendation.

**Value:** The amount varies depending on faculty member. Maximum amount is not to exceed the cost of in-state tuition and fees.

### 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.

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

**Renewal Requirements:** Must complete application form each year. 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:** Amount varies.

### Athletic Scholarship

(Signal Peak Campus Only)

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

**Enrollment 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 certain college activities.

**Enrollment 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 and campus. Maximum amount for a full-time student is \$800 per academic year or \$400 per semester.



### Performing Arts Scholarship

(Signal Peak Campus Only)

**Target:** Students participating in band, drama or choir at Central Arizona College.

**Enrollment Requirements:** Must enroll in a minimum of 12 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 and/or instrumental music ensemble director.

### Central Arizona College Foundation Scholarships

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

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

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

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

### Central Arizona College Foundation Promise for the Future Scholarship

**Target:** High school graduates of Pinal County or of qualifying high schools that have signed and submitted a Promise for the Future contract to the Central Arizona College Foundation during their 8th grade year.

**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 equivalent to in-state tuition and registration fees.

### Dr. R. F. Schoen Scholarship

**Eligibility Requirements:** Outstanding sophomore student awarded "Freshman of the Year" at the Signal Peak Campus.

**Renewal Requirements:** Not applicable.

**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:** \$300

### Kathleen Van Cleft Indian Scholarship Fund

**Eligibility Requirements:** Must be Native American

**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:** \$200 - \$400.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Committee. The committee will select and approve recipient(s) by May 15.

### 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 Central Arizona College Scholarship Application packet.

**Scholarship Amount:** \$300-\$600.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Committee. The committee will select and approve recipient(s) by May 15.

### 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:** Please submit a personal statement outlining your career goals and/or your financial need. Personal statements that include recommendations by former instructors will be given special consideration.

**Scholarship Amount:** To be determined by James Lee.

**Application Deadline:** The personal statement and letter(s) of recommendation is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds. Please submit to the Financial Aid Office.

**Selection Process:** James Lee will choose the recipient(s).

### Central Arizona College Foundation Scholarship – Aravaipa Campus

**Eligibility Requirements:** Recipient of the “Freshman of the Year” award at the Aravaipa Campus.

**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:** \$300.

### 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:** Please submit: A completed Central Arizona College Scholarship Application packet.

**Scholarship Amount:** \$500.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** The Central Arizona College Financial Aid Office will select recipient.

### 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.

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

**Scholarship Amount:** \$500-\$1,500.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** Central Arizona College Financial Aid Office will present qualified applicants to the Hospitality and Restaurant Management and Culinary Arts Programs who will make the final selection.

### Tom Kunz Vaquero Scholarship

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

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

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

**Scholarship Amount:** \$400-\$1,600.

**Application Deadline:** Award to be made by May 1 for the next fall semester.

**Selection Process:** The athletic director and president of the Vaquero Foundation will select recipient.



**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.

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

**Scholarship Amount:** \$250

**Application Deadline:** The scholarship may be awarded throughout the academic year at the discretion of the head rodeo coach.

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

**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 Central Arizona College Scholarship Application packet.

**Scholarship Amount:** \$500-\$1,000.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** Central Arizona College nursing faculty will choose the recipient(s).

**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 Central Arizona College Scholarship Application packet.

**Scholarship Amount:** Up to \$600.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the

fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** Central Arizona College nursing faculty will choose the recipient(s).

**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 Central Arizona College Scholarship Application packet.

**Scholarship Amount:** \$500.

**Application Deadline:** The Scholarship Application and personal statement are due May 1 before the fall semester.

**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.

**N.E. "Pete" & Josephine King Scholarship**

**Eligibility Requirements:** Must be a Health Occupations 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 Central Arizona College Scholarship Application packet.

**Scholarship Amount:** Up to \$350

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Information received after May 1 will be reviewed for awarding based upon availability of funds.

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



### Tepi Maddock Scholarship

#### Eligibility Requirements:

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

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

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

**Scholarship Amount:** \$200

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Committee. The committee will select and approve recipient(s) by May 15.

### C.A. & Nellie Pope Scholarship

**Eligibility Requirements:** Program of study in art.

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

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

**Scholarship Amount:** \$140

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** The Central Arizona College Financial Aid Office will select and present applicant(s) to the Financial Aid Committee. The committee will select and approve recipient(s) by May 15.

### 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.

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

**Scholarship Amount:** \$400-\$600

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

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

### 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.

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

**Scholarship Amount:** \$300-\$1,000.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** Central Arizona College agricultural faculty will choose the 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:** \$300.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

**Selection Process:** The Casa Grande Union High School faculty will choose the recipient(s).



**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:** \$300.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

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

**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 Central Arizona College Scholarship Application and a letter from high school representative verifying participation in high school activities.

**Scholarship Amount:** \$400-\$1,000.

**Application Deadline:** The Central Arizona College Scholarship Application packet is due May 1 before the fall semester. Applications received after May 1 will be reviewed for awarding based upon availability of funds.

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

**Financial Aid Contact Information**

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

**Aravaipa Campus**  
Building A, Room 8 – By appointment  
520-357-2810

**Superstition Mountain Campus**

TLC, Room 214 – By appointment  
480-677-7734

**Signal Peak Campus**

Student Services Center  
520-494-5425  
Fax: 520-494-5091

**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

**The Student Guide**

Available through the Federal Student Aid Information Center or the Financial Aid Office.

**Information on the World Wide Web**

For more information on federal financial aid programs:

- [www.centralaz.edu](http://www.centralaz.edu) – Central Arizona College
- [www.fafsa.ed.gov](http://www.fafsa.ed.gov) – FAFSA on the Web
- [www.ed.gov](http://www.ed.gov) – Department of Education
- [www.finaid.org](http://www.finaid.org) – The Financial Aid Information Page
- [www.students.gov](http://www.students.gov) – Student gateway to the U.S. Government
- [www.studentaid.ed.gov](http://www.studentaid.ed.gov) – Federal Student Aid for students

**Veterans Educational Benefits**

Central Arizona College is approved for the enrollment of veterans, survivors and dependents. Veterans services are provided by the Admissions and Records 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 Admissions and Records Office to be evaluated and applied to the students' programs of study.

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) was designed to protect the privacy of educational records and to give 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), 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 85228.

### Student Right to Know

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

### Transcripts

Transcripts are issued upon students written requests only. Requests must include student's name, social security number and complete address of where the transcript is to be sent. Requests must include a \$4 fee for each transcript requested. Transcripts will not be issued to or for students having outstanding debts to the college. The normal process time is three weeks.

### Application for Graduation

All candidates for graduation must file an Application for Graduation with the Records Office. Each application should be signed by an Academic Advisor. There is a required \$20 fee for each degree awarded.

- by October 19 for December graduation;
- by March 5 for May graduation;
- by June 1 for summer graduation.

To ensure that students satisfy their graduation requirements, it is recommended that students file their applications at least two months **prior** to the start of their final semester. See Degree and Certificate section of this catalog for specific degree requirements.

### 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.

### 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.

**General Examinations:** These exams may be completed in English composition, humanities, mathematics, natural sciences, and social sciences. A standard score of 500 or better is required.

**Subject Examinations:** These exams cover material typical of college level courses in approximately 40 subject areas. A listing of available examinations, possible credits and passing scores is available in the Office of Advising and Testing.

### Credit by Evaluation

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

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



## Tech Prep

High school students may complete Tech Prep study in a variety of courses. Upon graduation from high school and enrollment at Central Arizona College, Tech Prep credits, certified by the student's high school teacher(s), will be placed on the student's Central Arizona College transcript. If a student enrolls at Central more than two years after 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 advanced placement credit for such coursework provided the following guidelines are fulfilled:

- Student enrolls at Central within two years after high school graduation; and
- Certified competency forms from the participating high school are submitted to the college Records Office.

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](http://www.pinaltechprep.org).

## Awarding a Second Degree from Central

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.
- Exceptions to the above must be reviewed by the Academic Dean/Campus Executive Officer with final approval by the Chief Academic Officer.

## ACADEMIC STANDARDS

### Plagiarism Statement

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 Dean of Academic Services.

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 Dean of Academic Services.



## 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 each of their classes meetings. 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 Dean of Academic Services 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
- WP** Withdrew Passing (after 10th week)
- WF** Withdrew Failing (after 10th week)
- CR** Credit
- NC** No Credit
- S** Satisfactory
- U** Unsatisfactory

## 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.

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 is 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.

## Withdraw Passing/Withdraw Failing

After the 10th week of the semester, students must meet with their instructors prior to initiating course withdrawal. Grades of WP (withdraw passing) or WF (withdraw failing) are assigned. A grade of WP does not count in the grade point average calculation. A grade of WF counts as an F in the grade point average calculation.

## Credit/No Credit

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

## Satisfactory/Unsatisfactory

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

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



If a course description in the College Catalog indicates a course may be taken for an Satisfactory/Unsatisfactory grade, the student may elect the Satisfactory/Unsatisfactory option. This must be done in writing in the Records Office no later than the deadline to add classes as published in the appropriate Schedule of Classes. The deadline to add classes is also the deadline to change from an 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 corequisites; a grade of Unsatisfactory does not fulfill prerequisites and corequisites.
- 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 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 | C = 2 points | F = 0 points  |
| B = 3 points | D = 1 point  | WF = 0 points |

*Note: WP and W do not compute into GPA.*

### The Formula

| 1. No. of Hours for Each Class  | No. of Points for Each Class | Total by Class         |
|---------------------------------|------------------------------|------------------------|
| _____                           | x _____                      | = _____                |
| _____                           | x _____                      | = _____                |
| _____                           | x _____                      | = _____                |
| _____                           | x _____                      | = _____                |
| _____                           | x _____                      | = _____                |
| <b>2. Total Number of Hours</b> |                              | <b>3. Total Points</b> |
| _____                           | :                            | = _____                |
| <b>4. Total Points</b>          | <b>Total Number of Hours</b> | <b>GPA</b>             |

### Grade Change

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. Students on academic probation, whose following semester grade point average is 2.0 or above, but whose cumulative grade point average is below 2.0, will remain on academic probation. Students placed on academic probation status must comply with the recommendations of a college academic advisor.



## Academic Suspension

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

Students who have been suspended may petition the Dean of Academic Services to request reconsideration and reinstatement. A petition 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. Petition forms are available at each campus from the Dean of Academic Services.

## 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, and WF 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 transferable credit hours at Central. 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 students awareness in a variety of areas. The scholarly inquiry begun in this program will provide a strong base for a lifelong quest for knowledge and excellence.

### Goals of the Program

The following goals have been established for the Honors Program:

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

### Scholarships

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

### Admission to the Honors Program

Applicants should meet any one of the following criteria:

- 3.5 grade point average at high school graduation;
- Top 5 percent of high school graduating class;
- 27 on ACT;
- 1250 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.

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

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

#### **Bookstore**

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

#### **Bookstore Refund Policy**

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

## **SERVICES**

### **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.

### **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 by using the numerous printed resource materials available. Access to one-on-one career counseling is also 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. For a list of available internship opportunities, check with the College Career and Transition Center.

#### **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 for students 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.

Additionally, students can attend one of the workshops that will assist with the creation of cover letters, resumes and assistance with interview skills.

#### **Employment Eligibility Requirements**

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

To view available jobs, on- or off-campus student must register. Registration for the web-based job board is simple, just select "students" and the software is under Career and Student Employment Services. For more information or assistance, send an email to [studentjob@centralaz.edu](mailto:studentjob@centralaz.edu) or call 520-494-5424 or 1-800-237-9814, ext. 5424.



## 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 6 credits to apply.

## College Transitions

Central's Transfer Resource Specialist is available to guide students through the transfer process by providing assistance with selecting transferable course work, transfer applications, essays,

financial aid and scholarship applications, and the many areas involved in preparing to complete a bachelor's degree. Additionally, the CCTC provides a library of university promotional materials so that you can select just the right university for you. For more information, call 520-494-5448 or see the CAC website under University Transfer.

## Title V Hispanic-Serving Institutions Grant

The Title V Hispanic-Serving Institutions Grant seeks to improve access to education for both the low-income and Hispanic communities by reducing barriers to a college education. The goals of Title V is to enhance Central students' long-term success in their chosen career by facilitating the completion of bachelor's degrees. As part of these efforts, Title V has a cooperative agreement with Arizona State University in the Polytechnic Campus (formerly ASU-East) for students interested in completing a degree in education. Title V targets:

- first generation college students.
- low-income individuals.
- students from the Hispanic community.
- students interested in pursuing an education degree.

For more information on Title V, call 520-494-5448.

In conjunction with TRiO, Title V sponsors the Central Arizona College Summer Bridge Program – an exciting and valuable orientation to college that lasts one week. Students participate in group discussions, join in many activities, and explore college life. For more information on Summer Bridge, call 520-494-5060.

## Central Arizona College Help Desk

The Central Arizona College Help Desk provides a central location for front line Customer Services and IT support to students. As the first point of contact for IT questions, the help desk offers a wide variety of technical assistance, which includes resetting passwords, use of Online Student Services, and Blackboard

troubleshooting. Also, whether you need to find out how to register for classes or where to go for tutoring, the help desk can point you to the right college department. There are several methods that provide assistance.

- Central Website: Web Questions and Answers provides a list of frequently asked questions. See the front page of the Central website.
- Phone: 520-494-5111
- Walk-up assistance: Located in the Signal Peak Campus

Student Services Building, the Help Desk is staffed by student ambassadors and a customer and technical services representative from 8 a.m.-9 p.m. Monday through Thursday and Friday 8 a.m.- 4:30 p.m.

## Child Development Centers

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

## Food Services

The Signal Peak and Aravaipa campuses offer on-campus food service. Meals are served seven days per week on the Signal Peak Campus for residence hall students. The snack bar and Vaquero Lounge at Signal Peak and the cafeteria at Aravaipa offer food service for students, staff and guests. Catering service may be arranged by contacting the Food Service Director at the Signal Peak Campus.

## General Educational Development (GED) Classes

Central Arizona College offers GED (the High School Equivalency Examination) classes and pre-GED courses. The classes include instruction in the five areas tested on the GED: writing skills, social studies, science, literature and the arts, and mathematics.

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 when beginning the class.

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 \$75. Retests are \$15 per subject. Call 520-494-5410 to schedule an appointment.

### Requirements to take GED Test

An under 18-year-old 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.

An 18-year-old or older 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, cross country and rodeo.

Men's sports at the Signal Peak Campus include basketball, baseball, track, 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 33 national championship teams and numerous second- and third-place finishes over the past 29 years.

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: Associate Vice President, Student Development/Chief Student Development Officer, or the Athletic Department.

The college has policies relative to nondiscrimination on the bases of sex, sexual orientation, religion, color, national origin, age, veteran's status and/or disability. Such policies apply to all educational programs, services, activities and facilities.

### Athletic Records

National Championship teams and year:

- Baseball: 1976, 2002
- Softball: 1985, 1986, 1988, 1989, 1990, 1991, 1992, 1994, 1995, 1997, 1999, 2003, 2005
- Women's Basketball: 1989, 1998, 2005
- Volleyball: 1983
- Men's Cross Country: 1988, 2002, 2003, 2005
- Women's Cross Country: 2005
- Men's Track & Field: 1996, 2003, 2005, 2006
- Women's Track & Field: 1998, 1999, 2006
- Women's Rodeo: 1978, 1979

The George Young Activity Center is used for all home basketball games. Outdoor athletic facilities include: an eight-lane all-weather track & field, baseball and softball fields, rodeo arena, tennis courts, and a 50-meter swimming pool.

For more information, contact the athletic department at 520-494-5300, or 800-237-9814, ext. 5300.

### Learning Center

Central Arizona College provides free tutoring for students in most academic areas of study through Learning Centers. Student tutors, para-professionals, faculty and staff work with students individually on line, and/or in small groups to meet the various learning needs of students and assist in their educational efforts. The Learning Centers also have computerized tutorials for many Central 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 is composed of facilities located at the Signal Peak, Superstition Mountain and Aravaipa campuses. Contained in the libraries is a collection of more than 70,000 volumes and 200 current periodical titles, in addition to state and federal government publications, maps, microforms, college catalogs, and a current reference section. The online book catalog available in the library is part of a shared system available at each campus. Through the interlibrary loan system, patrons can be provided with books, articles and microforms from libraries throughout the United States.



## Disability Services

### Qualifications

Disability services are extended to students in any program of study who have a documented disability:

- Specific learning disabilities
- Physical disabilities
- Development disabilities
- Vision, speech and hearing impairment
- Mental health disabilities

### Included Services

Services may include, but are not limited to:

- Sign language interpreters
- Books on tape
- Adaptive equipment and materials
- Specific accommodations
- One-to-one advising
- Referral to and coordination with other appropriate agencies

### Contact Information

Students interested in receiving disability services must contact John Luer, Coordinator of Special Needs, Signal Peak Campus Student Services Center, 520-494-5409, or 800-237-9814, ext. 5409.

## TRIO Student Success Program

The TRIO Student Success Program, located at 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 four-year university. Services include academic advising, peer mentoring, monitored academic tutoring, and activities supporting transfer to a university. The goal of the program is to increase the student retention, graduation and transfer rates of TRIO students.

## Residence Life

The Signal Peak Campus offers residence hall living and a learning environment with space for 414 men and women. Academic and developmental programming are provided to enhance the students' college experience. Residence Life Staff, (director, assistant directors and resident assistants) provide activities that promote personal growth and development, cultural diversity and community responsibility. For more information and housing applications, contact Residence Life, at 520-494-5470. Applications will receive priority for assignments if received by February 1 for fall semester and October 1 for spring semester.

## STUDENT ACTIVITIES

Students who want to be involved in student groups are encouraged to do so. 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](http://www.centralaz.edu).

### Academic

- Phi Beta Lambda
- Phi Theta Kappa
- Central Arizona Student Nurses Association (CASNA)

### Social and Service

- Working in New Directions (W.I.N.D.)

### The Arts

- Art Club
- Jazz Band
- Jazz Choir
- Playmasters

### Cultural

- International Club
- Native American Club
- Movimiento Estudiantil Chicano de Aztlan (M.E.Ch.A.)

### Religious

- Campus Crusade for Christ

### Athletics and Recreation

- Dance Club
- Rodeo Club

### Other Activities

- Alumnos Peer Mentor
- Ambassadors
- Astronomy Club
- CACTus (School Newspaper)
- Ceramics Club
- College Republicans
- Gaming Guild
- KHET
- Student Activities (Residence Life)
- Student Government
- T-plus Club (tutoring)
- Orientation Leader
- "We Can Do It" Club
- Young Democrats



# STUDENT HANDBOOK



**COLLEGE POLICY –  
STUDENT CODE OF CONDUCT**

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

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

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

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

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

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

**4.** Violating the terms of any disciplinary action imposed for an earlier violation of the student code of conduct or other governing board or College rules.

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

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

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

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

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

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

**11.** Unauthorized access to, disclosure of, or use of any College document, record, or identification, including but not limited to, electronic software, data, and records.

Misuse of College computing facilities, telecommunications, networking systems, associated facilities, resources or equipment as outlined by College Policies.

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

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

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

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

**16.** Violation of College Policy governing alcohol, including consumption, distribution and/or unauthorized sale or possession of alcoholic beverages. Alcohol is any fermented and/or distilled liquor or substance reasonably believed to be or portrayed by the student as fermented and/or distilled liquor.

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

**17.** Unauthorized use, transfer or possession of any controlled substance. A controlled substance is:

- a. Alcohol;
- b. Any narcotic or dangerous drug;
- c. Glue, paint, or any intoxicating substance that may excite or stupefy an individual or diminish the individual's physical or mental capacity when possessed for such purpose;
- d. Any other potential mind-altering substance, including marijuana;
- e. Drug paraphernalia, as defined by A.R.S. 13-3415;
- f. Any other substance enumerated in A.R.S.13-3401, as well as any imitation controlled substance listed in A.R.S. 13-3451. Medication shall not



be considered a controlled substance so long as the medication is either (1) prescribed by a physician and used in accordance with the prescription, or (2) a nonprescription drug as defined in A.R.S. 32-1901(49) when used in the manner intended by the medication.

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

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

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

Hazing means any intentional, knowing or reckless act committed by a student, whether individually or in concert with other persons, against another student, and in which both of the following apply:

- a. The act was committed in connection with an initiation into, an affiliation with, or the maintenance of membership in any organization that is affiliated with an educational institution.
- b. The act contributes to a substantial risk of potential physical injury, mental harm or degradation, or causes physical injury, mental harm or personal degradation. See A.R.S. 15-2301.

Hazing also includes any action undertaken or situations created by any individual, group of individuals, or organization, in which a student is voluntarily or involuntarily subjected to activities that have the potential to harass, intimidate, impart pain, humiliate, invite ridicule, cause undue mental or physical fatigue or distress, or cause mutilation, laceration or bodily injury.

It is no defense to a violation of this policy if the victim consented or acquiesced to hazing.

**21.** Engaging in harassment or repeated unwanted conduct. Harassment is conduct toward an individual that would disturb or annoy a reasonable person under similar circumstances. This conduct includes, but is not limited to, stalking, and all forms of verbal, physical and/or racial harassment.

**22.** Engaging in conduct intended to, or that results in discrimination based on age, ethnicity, gender, disability, color, national origin, race, religion and/or sexual orientation.

**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. Engaging in sexual harassment. 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.

**COLLEGE PROCEDURE –  
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.

**Authorized Sanctions**

The Associate Vice President of Student Development 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 Associate Vice President of Student Development/designee, a suspended student will not participate in any College-sponsored activity and will be barred from the College campus.

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

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

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

**Administrative Hold:** A status documented in the registrar's official file which precludes the student from registering, from receiving transcripts, or from graduating until clearance has been received from the Associate Vice President of Student Development/designee in accordance with College rules.

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

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

**Parental Notification:** Parents or legal guardians of dependent students (as defined under Section 99.31



(a) (8) of the Family Educational Rights and Privacy Act of 1974) may be notified for violation of the alcohol and other drug policy.

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

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

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

**Classroom Conduct:** Each campus may adopt procedures regarding student conduct that takes place while participating in academic activities. These procedures may outline sanctions including, but not limited to, lower-level warnings, administrative drop from a particular class, or other sanctions as appropriate.

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

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

A student who has been suspended at one College 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 Associate Vice-President, Student Development.

Each campus may adopt rules and procedures to consider a request for re-admission from a student who has been previously expelled, that shall include criteria to be used in evaluating a request for re-admission, and shall provide that a decision to readmit must be approved by the Associate Vice-President, Student Development.

### 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, religion, sexual orientation, ethnicity, national origin, disability, socioeconomic status or appearance.

- 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 Central student or staff member may file a Campus Incident Report Form to any Dean, Director of Residence Life, or Campus Police Officer when it appears that a Code of Conduct violation has occurred. The Campus Incident Report Form should, to the extent reasonably possible state facts, including specific names, dates, locations, and descriptions of the allegation to enable the Dean/Designee to determine the nature of the Code of Conduct violation. The referral must be signed by the complainant.

### Removal From Class

An instructor may remove a student from class meetings for disruption of the educational environment or Code of Conduct violations. In such cases, a Campus Incident Report form must be filed with the appropriate Dean.

If an instructor removes a student for more than one (1) class period, the instructor shall notify their immediate supervisor and the Dean of Academic Services 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 Associate Vice President of Student Development may suspend a student for an interim period prior to resolution of the disciplinary proceeding if the Associate Vice President of Student Development believes that the information that supports the allegations of misconduct is reliable, and determines that the continued presence of the student on the College campus 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 Dean 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 Associate Vice President of Student Development/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 by Associate Vice President of Student Development**

The Associate Vice President of Student Development/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 Dean may decide to interview the complainant and/or other witnesses or to request additional information from the complainant.

If the Associate Vice President of Student Development determines that there is a sufficient basis to believe that a violation of the Student Code of Conduct may have occurred, then the Associate Vice President of Student Development 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 Associate Vice President of Student Development 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 Associate Vice President of Student Development/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 Associate Vice President of Student Development 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 Associate Vice President of Student Development/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 Associate Vice President of Student Development/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 Associate Vice President of Student Development/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 Associate Vice President of Student Development 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.

#### Composition

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.

Each campus will establish its own rules to govern the selection process for Hearing Board members. A campus Dean/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 Associate Vice President of Student Development/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;
- Notice of right to legal representation only in cases of on-going civil litigation or criminal prosecution;
- A copy of this Student Code of Conduct;
- A list of the names of all Hearing Board members;
- The name of a College administrator who will be presenting evidence in favor of sustaining the discipline that has been imposed. This may or may not be the Associate Vice President of Student Development. This administrator 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 Hearing Board chairperson in writing. The chairperson will determine whether to approve or deny the request to re-schedule the hearing.

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

- A list of the names and addresses of the witnesses who may be called to speak at the hearing;
- A concise summary of the anticipated statements of each witness;
- Copies of all documents or notarized statements to be presented at the hearing; and,

The name and title of the person who will present the evidence on behalf of the College, and the name of the adviser, if any, who will be present to assist or represent the student.

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 College President/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 may also 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 Associate Vice President of Student Development/designee for oral presentation and examination of witnesses.

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

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

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

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

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

The chairperson/designee 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 Associate Vice President of Student Development/designee 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 or his/her legal representative, at which time leading questions are permitted.

Following the questioning by the student or his/her legal representative, the Associate Vice President of Student Development/designee and the members of the Hearing Board may ask further questions of each witness.

Following the testimony of all witnesses called by the Associate Vice President of Student Development/designee, 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 Associate Vice President of Student Development/designee 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, "Chairperson'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 chairperson/designee 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 President. At least three votes are necessary to make any recommendation. The Associate Vice President of Student Development/designee will prepare a written summary of any prior misconduct to be considered when imposing the appropriate sanction. A copy will be given to the student. The student and the Associate Vice President of Student Development/designee 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 the recommendation to the student, the Associate Vice President of Student Development /designee, the Vice President and to the President in writing no later than two (2) business days following the conclusion of the hearing. The written recommendation will include basic findings of fact and a statement of the reasons for the recommendation, and will be signed by the chairperson. The decision of the President is final.

## IV. Miscellaneous

### 1. Searches

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

### 2. Seizures

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

### 3. Warrants

- a. If a search warrant is served, every reasonable effort should be made to cooperate with law enforcement officers.
- b. A student who has been suspended is encouraged to continue his/her education outside of the regular College environment. A student who has been placed on long-term suspension may, upon submission of a written request to the College, be provided with course outlines, course goals and objectives, and an opportunity to take comprehensive examinations after the suspension period has expired.

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.

- c. 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.



## 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 Aravaipa and Superstition Mountain Campuses. 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 Casa Grande, Florence, Maricopa 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 serve 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 us at our 24-hour number, 520-836-9655.

### Reporting Crimes and Emergencies

Central Arizona College encourages students, employees and others to report 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 College 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 1992, and most recently in 2000, 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 Central Arizona College Police Department issues an annual report to provide its students and employees with an overview of the college's security resources, policies and procedures, as well as crime statistics.

The report is updated annually and can be located on the college website at: <http://www.centralaz.edu/x398.xml>, or a copy can be obtained at the police department.



## Student Life

### Student Leadership & On-Campus Housing

#### Mission Statement

The Mission of Student Life is to provide a living and learning environment in a way that promotes self awareness and community responsibility so that student involvement at Central Arizona College promotes academic success and personal development.

#### Room/Hall Changes

Room transfers and assignment changes are not permitted during the first two weeks of the semester. Room/Hall changes are limited to one room or hall change request per year.

Unauthorized room changes are not permitted and will result in disciplinary and financial sanctions.

#### Room Entry

Room entry will occur for the following reasons:

- By civil law enforcement officers in the performance of statutory duties and in accord with legally defined procedures governing search and seizure.
- Emergency inspection advance notice is not required for incidents of suspected personal injury, reported concern of a missing student, unhealthy living environment or valid complaint of serious policy violations (including suspected drug use).
- Student Life staff will enter a room (with the support of Campus Police) without notification to provide assistance to an individual who is suspected to be a victim or perpetrator of violent acts such as domestic violence or sexual assault.
- By authorized college personnel during academic breaks or announced room inspection periods with 24-hour notice of such entry to ensure that maintenance, health, fire and safety regulations are maintained.
- By authorized college personnel or agents to make improvements and repairs and to provide routine maintenance services.
- When a student completes a maintenance request at the front desk for needed room repairs.
- When there is reasonable cause or suspicion to believe there is noncompliance with a college policy or regulation, the Assistant Director of Student Life will enter student rooms with no notification.

Students are responsible for their living area and expected to maintain a clean and healthy environment. Repeated complaints from roommates, suitemates or

RA's regarding cleanliness of their room, common area or bathroom will result in disciplinary action.

**Note:** All rooms will be inspected, without individual notice, 30 days prior to spring semester check out to assess potential damage fees and inform students of repairs and cleaning necessary for a proper end of the year check-out.

#### Room Consolidation

Any student who becomes the sole occupant of a room will receive a written notice from the Office of Student Life indicating that the student must do one of the following:

1. Find a new roommate;
2. Be assigned a new roommate;
3. Be assigned a new room.

#### Roommate Conflicts

Students who demonstrate a difficulty with community living, requests repeated roommate changes or creates an environment in which other students find intolerable for the sole purpose of gaining a single occupancy living space will not be able to return to Student Life the following semester.

#### Emergency Closings

The College reserves the right to close any or all rooms and to discontinue food service for the duration of a catastrophic emergency caused by weather, power failure, fires, disasters, or other conditions beyond the control of the college. The college shall be under no obligation to abate fees or charges or to pay damages of any nature, as a result of any emergency closing for a period of one week or less. Every effort is made to accommodate the needs of all students within reason and ability during times of crisis or emergency. Student safety takes priority in these situations, ahead of convenience and comfort.

#### Safety, Security and Campus Police

Student Life provides residents with a safe and secure environment through a combination of security checks, hall staffing, key policies, and guest/visitation policies.

The college operates a 24-hour emergency phone line 9-836-9655 to permit direct emergency contact the Campus Police Department. In a life threatening emergency you also may dial 9- 9-1-1 to access the off-campus local authorities. The "Blue Light Phone" at the south entrance of the Lobby building is activated by pushing a button and immediately connects you to the Pinal County 911 dispatch. It is unlawful to push this button if it is not an emergency.



### Additional Safety Measures

- Do not prop open locked doors.
- Do not permit entrance to non-residents and/or unescorted guests.
- Do not loan keys to others.
- Keep windows closed and locked with screens in place.
- Keep room doors locked at all times.
- Report any suspicious person, solicitors (people selling merchandise, handing out flyers, or advertising service) or suspicious activity to hall staff immediately.

### CODE OF CONDUCT & STUDENT DISCIPLINE

#### Three-Tier System

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

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

1. Student Life – code of conduct violation discipline process
2. Campus Police – county court system
3. Associate Vice President of Student Development – academic standing discipline process.

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

#### Parental Notification

The Director of Student Life, within the parameters of FERPA Federal Education Right to Privacy Act), will provide written documentation to parent or guardians of students who are found responsible of the following:

- Underage (under the legal drinking age of 21) students who participate in possession or consumption of alcohol on campus.
- Illegal drug possession, use or distribution.

A student may sign a FERPA waiver giving Student Life or the Associate Vice President of Student Development the ability to discuss student discipline and academic records. Without a waiver, college staff is not permitted to give any information regarding the student to anyone except said student.

### STUDENT LIFE RULES & POLICIES

#### Controlled Substances

Arizona State Law and College policy prohibit student involvement in the use, possession, distribution or sale of illegal drugs and/or paraphernalia. Judicial and/or criminal action will result from non-compliance with this policy affects your License Agreement and your status as a student. Possession or use of marijuana is, at minimum, a Class 6 felony in the state of Arizona. Students documented or referred for being in the presence of illegal drugs or paraphernalia are also responsible for violating the Code of Conduct. Repeated referrals for the odor of marijuana or other observable, documented suspicion of illegal drug use on campus will result in license agreement termination and/or given 48 hours to vacate their room assignment. Students arrested for possession will have their license agreement terminated and will have 48 hours to vacate their assigned room. Students arrested for distribution of illegal drugs will be immediately removed from their room assignment and administratively suspended from the campus.

#### Alcohol

All Central students are prohibited from possessing or consuming alcohol, hosting or being in the presence of others consuming alcohol in any residence hall room or campus grounds. In addition, all provisions of the Arizona state law regarding minor in consumption or possession (MIP) will be enforced by Campus Police officers. Students who are involved in escalated incidents or violent/harassing behavior while intoxicated on campus will be removed from their housing assignment with 48 hours notice. Behavior resulting from extreme intoxication, requiring response from Campus Police, Regional Fire & Rescue or transport to a hospital will also be removed from their housing assignment.

#### Combustion Engines

Internal combustion engines (motorcycles, scooters, mopeds, etc.) are not allowed inside residence hall public areas or student rooms.

#### Non Motorized Scooters, Skateboards, Bicycles

Scooters cannot be driven in any college building or hallway. The tires leave marks and damage the flooring. Students found riding any type of wheeled mode of transportation inside a building will be billed a \$50 cleaning fee.

#### Computing

Information Technology regards the following use of the computing site resources as computer abuse. Anyone



found abusing Information Technology computing resources will be subject to immediate suspension of computing privileges and any appropriate sanctions.

- Illegal copying of copyrighted software or media (including music & motion pictures).
- Games (except those that are being used as part of a class assignment).
- Computer fraud.
- Unwelcomed emails.
- Use of computer resources for commercial purposes.
- Use of computer resources for social functions and events that are not related to Central sponsored groups, clubs or individuals.
- Use of college network to view pornographic material. Definition of pornographic material can be obtained within the college policies at the Human Resources office.

### Technical Resource Guidelines

Central owns and operates a variety of technical resources which are provided to Central students in support of the academics of the college, and are to be used for education, research and academic development. All students are responsible for using these resources in effective, efficient, ethical and lawful manners. Unacceptable use is prohibited and is grounds for loss of computing privileges, as well as discipline under Student Code of Conduct or legal sanctions under federal, state and local laws.

Comply with all applicable local, state and federal laws and regulations, and with Central Policies.

1. Respect academic freedom and free speech rights.
2. Be truthful and accurate in personal and computer identification.
3. Maintain the security of account passwords and any other security-related procedure or file.
4. Be willing to use College-issued email account to share confidential information with College representatives, including advisors, tutors and instructors.
5. Respect the rights and privacy of others by not intercepting communications not intended for their viewing; or using computing resources, programs or data which are not authorized to the user's account.
6. Respect intellectual and personal property rights by following laws and ethics pertaining to the reproduction of copyrighted material or intellectual property in any form.

7. Never access or copy technical resources or programs without proper authorization.
8. Respect and avoid damage to technical resources, infrastructure, programs and data.
9. Respect the integrity of Central's electronic networks by avoiding restricted areas and avoiding activities that may strain any technology resources including email and network. These activities include, but are not limited to, sending chain letters or spam, the widespread dissemination of unsolicited e-mail, accessing interactive gaming websites, accessing social networking websites, downloading materials such as music and video files, or anything else that heavily utilizes technology resources and may render them sluggish or inoperative.
10. Undergo a restriction, inspection, or monitoring of the Central email account if reasonable suspicion exists that there might be a violation of law, regulation or policy; or if a restriction is required to protect the integrity of the Central technology resources.
11. Use technology resources for academic purposes and not to abuse, defame, harass or threaten another individual or group; commit fraud; or to distribute unlawful, frivolous political, commercial or pornographic messages.

### Cooking

Cooking is only permitted in the Student Kitchen or when a student uses a concealed coil hot pot. Hot plates, George Foreman grills, barbecues, toasters and toaster ovens are not permitted. Designated barbecues are provided for student use and should never be left unattended. Hot coals should be monitored until they are cool enough to properly discard them.

### Courtesy and Quiet Hours

**Courtesy Hours:** Noise in common areas must be kept to a minimum and noise made inside your room should not be audible outside of your room. Courtesy Hours are in place 24-hours a day, 7 days a week in the residence halls. All residents have the right to ask others to refrain from making noise when that noise interferes with a resident's study, sleep or otherwise use of his/her room. If a resident requests another to lower the volume or reduce the amount of noise, the expectation is for the resident in question to accommodate their request and reduce the amount of noise.

**Quiet Hours:** Are enforced in the residence hall as a supplement to the 24-hour Courtesy Hours. Quiet hours are in effect from 10 p.m. - 8 a.m. Sunday through Thursday and from midnight - 8 a.m. on Friday and Saturday.



## Damage and Vandalism: Community Billing

As members of a community, residents share both individual and collective responsibility. Residents are expected to notify the hall staff or front desk immediately to confront individuals damaging, stealing and/or vandalizing residence hall facilities and property. Each resident will be held accountable for any damages, thefts or vandalism for which they are personally responsible and will be billed accordingly. In the event that individual(s) do not take responsibility for damages, thefts or vandalism that occurs on a specific community, the repair amount will be divided among all residents residing on the floor/neighborhood as per the Student Life Billing policy. This amount will be billed to each student's account.

## Fire/Emergency Safety

Residents and their guests are expected to promptly evacuate the building whenever a fire alarm sounds and to observe all fire/emergency guidelines. Tampering with or disabling fire equipment is a felony in the state of Arizona.

## Student Life Has a Zero Tolerance Policy for Abuse of a Fire Extinguisher

Unauthorized discharge of a fire extinguisher will result in a \$75 recharge fee, \$500 fire code violation fine, removal from housing and possible expulsion from the institution.

## Assembly Areas

In the event that it becomes necessary to evacuate the halls, the designated assembly areas are located at the east end of the residence hall parking lots. Emergency evacuation procedures will be provided at your first community meeting. Longterm evacuation staging will take place in the gymnasium.

## Smoke Detectors

Notify the Resident Assistant or the Office of Student Life if the smoke alarm is beeping or "chirping" for battery replacement. Do not take down, disassemble, or remove the battery of a smoke detector, students will be charged \$35 for re-installation.

## Decorating Your Room

- Fire Safety Policy prohibits candle and incense burning in student rooms.
- Students are not permitted to paint their rooms.
- Decorations for holidays and celebrations should be of noncombustible material.
- Live Christmas trees are not permitted in individual student rooms.

- Electrical lighting sets must bear the label of Underwriters Laboratories, Inc., free of frayed wires, loose connections and broken sockets.
- Lights may not be strung across the ceiling.
- Religious candles are not allowed in student rooms.

## Environment and Facilities

The residence hall common areas and facilities are cleaned and serviced regularly by college custodial and maintenance teams. Every student is responsible for ensuring that their garbage is disposed of properly. Maintenance repair requests are the responsibility of the resident and are available at the front desk.

## Firearms/Ammunition/Weapons

The Student Code of Conduct prohibits explosives (including fireworks), firearms, black or smokeless powder ammunition and/or weapons of any type in the residence halls, resident rooms or campus grounds. Possession of firearms, weapons and/or ammunition in the residence halls is a felony and grounds for the immediate revocation of the residence hall license agreement. The definition of "weapon" for Student Life policy include, but are not limited to: knives, paint guns, air guns, CO2 guns, stun guns, martial arts weapons, mace, laser pointers, water balloons, tear gas and sling shots.

## Flammable Materials

No flammable materials (e.g. gasoline, motor fuel, volatile materials, etc.) or open flames (e.g. candles or incense) are permitted in residence halls or residence hall rooms. Halogen lamps and barbecue/hibachi grills are strictly prohibited inside residence halls.

## Furnishing Identification

Every resident and visitor to the residence halls, when requested by hall staff or Campus Police, must present identification. Failure to do so will result in temporary and/or permanent guest removal from the residence halls. All residents, as well as students are required by college policy to be in possession of identification at all times.

## Hall Recreation

Rollerblading, roller-skating or biking inside the residence halls is not permitted. Playing with, throwing, kicking or rolling any ball or using any sports equipment inside the residence halls also is prohibited.

## Harassment/Disturbance/Chronic Misbehavior

Interfering with college operations or college-sponsored activities, or endangering, threatening, causing harm to any person, causing reasonable apprehension of



such harm and/or engaging in harassment or discriminatory activities as defined by the Code of Conduct is strictly prohibited.

Central will immediately terminate the license agreement if the student threatens to harm her or himself or threatens to harm another person.

In addition, a resident establishes an unacceptable pattern of misconduct when he or she is frequently in trouble, though individual offenses might be minor. A pattern of violations, irresponsible conduct or demonstrated inability to live within a community environment may be interpreted as a significant disciplinary problem and result in non-renewal of subsequent semesters in the license agreement and/or removal from on-campus housing assignments.

### **Keys**

Students are responsible for the security of their room. Each resident is issued a room key upon check-in and is responsible for returning the key upon check-out. Lock change fees for lost keys and excessive lock outs are assessed to student accounts.

### **Pets**

No pets, except fish and specially approved service animals, are permitted in the residence halls or on any residence hall grounds. Fish tanks larger than 5 gallons are not permitted in the halls. Guests are not permitted to bring pets into the residence hall at anytime.

Trained and certified service animals for use by a person with a disability must provide documentation to the Disability Resources office.

### **Roofs and Ledges**

For safety and maintenance reasons, no student is allowed on any residence hall roof or ledge for any purpose.

### **Screens and Windows**

Individuality, political views and personal convictions are an important part of self identity. Students are encouraged to express themselves and decorate their rooms. The community environment challenges individuals to be sensitive to others, therefore, controversial signs, flags or objects that create a hostile environment are not permitted to be displayed facing common areas.

Aluminum foil, plastic sheeting, foam insulation, windshield shades and garbage bags CANNOT be used cover interior or exterior of any window.

### **Smoking**

Smoking is not permitted in or within 50 feet of any Residence Hall. All smoking refuse (butts and matches) must be properly extinguished and discarded immediately.

### **Visitation**

All overnight guests must be signed in at the front desk between 8:00 a.m.- 4:30 p.m. Monday-Friday. Guests must carry Guest Passes, issued by Residence Hall staff, at all times and furnish ID when requested by staff or Campus Police. Residents are responsible for the actions of their guests while in the residence halls and on campus property. Visitors are welcome after consideration is given to the roommates' needs and rights. Guests must be escorted to and from student rooms by their host. Overnight guests of the same gender may visit for no more than three days and only after consideration is given to the roommates' needs and rights.

### **Visitation Policy Violations**

Although there is not a specific time constraint on opposite sex or significant other visitation in a student room, be advised of the following:

- Co-habitation is strictly prohibited at ALL times within residence hall spaces. Co-habitation includes sexual relations, sleeping overnight and/or a complaint from roommates or suitemates regarding the excessive presence of a significant other (opposite or same gender). Observed patterns of possible visitation violations will be documented by staff and addressed, even if the roommate does not come forward with a complaint.
- Residents documented for alcohol, quiet hours or any other policy violation IN ADDITION to hosting a guest of the opposite sex or significant other ALSO will be documented for visitation violation.
- Repeated violation of the visitation policy will result in relocation or termination of license agreement and removal from housing.



# CENTRAL'S ARIZONA ALL-ACADEMIC TEAM



**Henry Marquis**  
Signal Peak

**Jennifer Prze**  
Signal Peak

**Sean Krauss**  
Superstition  
Mountain

**Mark Cordero**  
Aravaipa

**Enrique Padilla**  
Aravaipa

**Lindsey Mau**  
Superstition  
Mountain

Six of Central Arizona College's outstanding students have etched their names on the Phi Theta Kappa International Honor Society All-Arizona Academic Team.

**Henry Marquis** and **Jennifer Prze** of Central's Signal Peak Campus, and **Sean Krauss** from the Superstition Mountain Campus, each earned Second Team accolades. Third Team honors belonged to **Mark Cordero** and **Enrique Padilla** of the Aravaipa Campus, and **Lindsey Mau** from Superstition Mountain.

All-Arizona Team members receive special recognition, including medallions, certificates, and cash stipends and state university scholarships. At Central, two students from each campus are nominated for the honor.

A native of Africa who is currently living in Casa Grande, Marquis will graduate with an associate of arts degree. He is planning to eventually earn his master's degree and his career goal is to become an international lawyer and writer. Marquis has maintained a 4.00 GPA while serving as the editor of the *Cactus*, the student newspaper for Central Arizona College. He has garnered a Mass Communication Activity Scholarship and a Peer Mentor Scholarship for being a Summer Bridge peer mentor. Marquis was also named the Print Media Student of the Year 2006.

Prze is a native of Toltec and has her sights set on becoming a registered pharmacist. She is currently in the pre-pharmacy program and eventually hopes to graduate with a pharmacy degree. With a 3.98 GPA, Prze has earned a trio of scholarships while at Central and will graduate with an associate of applied science. Her activities include participating in the Pinal County Town Hall meeting in April of 2004 and Breast Cancer Awareness in October of 2005. At Central, Prze has served as an executive officer (treasurer) of student government (2004) and chapter president of Phi Theta Kappa (2005-06). She received The Spirit Award in 2006 for her support of school activities.

With a 4.00 GPA, Krauss is studying civil engineering with the goal of building bridges someday. He hopes to earn his master's degree in the future and will attend Arizona State University to complete his undergraduate degree. He is

finishing his associate's degree while also working a full-time job as a plumber. In 2005-06, Krauss shared the honor of Most Helpful Student presented by Phi Theta Kappa at the Superstition Mountain Campus. He is currently serving as the Phi Theta Kappa president, and has volunteered his time with the Angel Tree Christmas program that purchases presents for underprivileged children.

The Aravaipa Campus received a pair of Third Team selections in Cordero and Padilla. Cordero hails from Mammoth and Padilla calls Winkelman home.

Cordero has attained a 3.70 GPA in the liberal arts program. He hopes to eventually earn a doctorate degree and would like to become an engineer and writer. He has earned a multitude of honors, including the Robert Cherepy Memorial Scholarship (2006), the Academic Plus Award (2001-02), the Outstanding Science Student Award (2003-04) and an AcES Honors Scholarship (2005) to study in China for a semester. He has served as the Phi Theta Kappa: Alpha Theta Delta Chapter vice president and the vice president of scholarship.

Padilla also is in the liberal arts program at Aravaipa and is targeting an advanced degree in kinesiology in the future. He has a 3.50 GPA. While attending class, Padilla has continued to work for Ace Hardware in Kearny. He has balanced work, academics and extra-curricular activities well enough to receive the Academics Plus Award for maintaining a high grade point average. He has earned induction into Phi Theta Kappa, served as the local chapter's vice president, and has claimed a spot on the National Dean's List. In April of 2006, Padilla was named the Outstanding Business and Technology Student.

Mau selected Central's Superstition Mountain Campus after choosing to stay close to home after her father became ill. The Apache Junction native was originally accepted to attend the University of Auckland in New Zealand, but her hometown college has allowed the aspiring international lawyer to attain a 3.5 GPA. Mau is currently studying political science and is a member of the honors program at Central. She was elected to the student government last fall and voted into Phi Theta Kappa in 2006.



# DEGREES AND CERTIFICATES





## Degrees and Certificates Information

Central Arizona College offers a variety of one- and two-year programs to meet the diverse interests and goals of our students, including degrees and certificates in many fields of study. Central Arizona College offers four associates degrees – 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.) that are appropriate for transfer to all in state public universities.

These Associate Degrees are 60-64 semester credits and have four basic “blocks” upon which they are built. These blocks include the Arizona General Education Curriculum (AGEC), Common Courses, Special Requirements, and Electives, in addition to specific Central Arizona College degree requirements. The associate degrees will transfer to Arizona’s public universities. If you complete the degree, you will be guaranteed admission to the university with junior status. Completion of an associate degree does not necessarily guarantee admission to a particular program of study.

Students who have not yet decided on an academic program should meet with an academic advisor for assistance in exploring career and life goals.

## Transfer Degree Information for Arizona

For more detailed information on the Arizona Transfer Model, please go to <http://az.transfer.org/cas/atass/student/modpath.html>.

The public universities and community colleges in Arizona have worked collaboratively to provide policies and procedures that will allow you, the student, to easily transfer credits earned at the community college to the universities. These policies and procedures are the basic components of what is referred to as “transfer articulation agreements.” These agreements apply to all Arizona public community colleges and universities.

## Arizona General Education Curriculum (AGEC)

Each of the transfer associate degrees (A.A., A. Bus., and A.S.) include 35 semester credits of general education studies known as the AGEC. The AGEC fulfills lower-division general education requirements for students planning to transfer to an Arizona public community college or university. The AGEC transfers as a block without loss of credit.

The goal is to create clear and secure transfer pathways for community college students parallel to the pathways followed by students who begin at the university. These pathways allow community college students to maximize their experience at the community college, to incorporate community college credits and degrees efficiently into university graduation requirements, and to complete baccalaureate majors in the minimum number of required credits.

Completion of the AGEC will fulfill lower division general education requirements at all Arizona public community colleges and universities and will be fully applicable to the baccalaureate degree, but may not apply to degrees articulated with the Transfer Guide Pathway – TG-XR. Students completing the AGEC will still be required to fulfill lower division program requirements and prerequisites within their college and major they intend to pursue upon transfer. Majors in certain professional fields (e.g. architecture, engineering, business, fine/creative arts, or health professions and sciences) have significant prerequisites and/or program requirements that must be completed before a student may be admitted to upper division course work. Community college students who are undecided about which of the Arizona public universities they plan to attend or what program of study they intend to pursue are advised to explore educational options while they complete the AGEC.

In order for a course to be included in a community college’s AGEC, it must be accepted for transfer credit in any of the following categories: equivalent course, departmental elective credit, or general elective credit, at all Arizona public universities according to the Course Applicability System for the academic year in which the course was taken. Go to <http://az.transfer.org/cas>, *Course Equivalency Guide*.

The certified AGEC is transferable from one Arizona public community college to another Arizona public community college as well as from an Arizona public community college to an Arizona public university.

All courses must be transferable to all three Arizona public universities with a grade of “C” or better. The list of approved Transfer Elective courses changes on an annual basis. Please contact an advisor for a current list of courses.



## ASSOCIATE OF ARTS (A.A.)

This degree is designed for students who plan to transfer to the university and earn a bachelor's degree in areas such as Liberal Arts, Social Sciences, Fine Arts, Public Programs, and Communication. For a list of Common Courses associated with your major, refer to <http://az.transfer.org/cgi-bin/WebObjects/ATF.woa/wa/matrix>.

**AGEC-A (Associate of Arts)** is designed to satisfy requirements in many liberal arts programs and other programs that articulate with the A.A. degree. AGECA requires a minimum of College Mathematics (MAT141).

### 35 Credits

#### Composition (6 Credits)

ENG101 English Composition III  
ENG102 English Composition IV

#### Oral Communications (3 Credits)

COM100 Fundamentals of Human Communication  
COM101 Interpersonal Communication  
COM202 Group Discussion  
COM206 Public Speaking  
COM263 Intercultural Communication

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

A minimum of 3 credit hours must be taken from the Arts and 3 from the Humanities. Refer to page 56 in the catalog for the approved list of courses.

#### Social/Behavioral Science (6-9 Credits)

Courses to fulfill this requirement must be chosen from at least two different disciplines.

#### Biological and Physical Lab Science (8 Credits)

#### Mathematics (3 Credits)

Minimum MAT141 College Mathematics (3)

#### Special Requirements (0-9 Credits)

A minimum of 3 credit hours must be taken from Global/International Awareness or Historical Awareness.

- Intensive Writing/Critical Inquiry (3)
- Ethnic/Race/Gender Awareness (3)
- Global/International Awareness (3)

**Majors that will follow the AGECA includes, but is not limited to:** Agri-Business, Agriculture, Advertising, Economics, Hotel/Restaurant Management, Public Relations, Communication, Broadcasting, Creative Writing, English, Journalism, Languages, Media Arts, Art, Art History, Dramatic Theory, Interdisciplinary Arts/Performance, Music, Theater, Liberal Arts,

Mathematics, Administration of Justice, American Studies, Anthropology, Early Childhood Education (A.A.E.E.), Geography, History, Interdisciplinary Studies/Liberal Arts, Philosophy, Political Science, Psychology, Religious Studies, Social and Behavioral, Social Work, Sociology, Special Education, Exercise Science, Physical Education, Recreation and Tourism.

### Central Arizona College Degree Requirements for A.A. Degree

- Reading Competency
  - RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3)
  - Select from AGB124 OR CIS 120
- A grade of "C" or better in each course fulfilling A.A. degree requirements
- A minimum of 20 credits completed at Central Arizona College
- A minimum of 15 credits in the AGECA completed at Central Arizona College

### Other Degree Requirements

Some A.A. Degrees require up to 16 credits of a Second Language proficiency. Many four-year degrees require either a second semester or fourth semester level of proficiency and strongly encourage students to complete this requirement at the community college level prior to transfer.

Check your university catalog, transfer guide or see your academic advisor regarding your major's language requirement. Proficiency may be demonstrated by completion of course work or proficiency testing.

If you are undecided about your major, it is strongly recommended that you complete a fourth semester proficiency since most of the shared university majors that articulate with the A.A. degree have a graduation requirement of fourth semester proficiency. Central Arizona College offers Spanish, French and Sign Language. Refer to <http://az.transfer.org/cgi-bin/WebObjects/ATF.woa/wa/DegreePathwayQuery>.



## ASSOCIATE OF BUSINESS (A. BUS.)

This degree is designed for students who plan to transfer to the university and earn a bachelor's degree in Business and Business-related areas such as Computer Information Systems or Economics. For a list of Common Courses associated with your major, refer to: <http://az.transfer.org/cgi-bin/WebObjects/ATF.woa/wa/matrix>.

**AGEC-B (Associate of Business)** is designed to satisfy requirements in business programs that articulate with the A. Bus. Degree.

All courses must be transferable to all three Arizona public universities with a grade of "C" or better. The list of approved Transfer Elective courses changes on an annual basis. Please contact an advisor for a current list of courses.

### 35 Credits

#### Composition (6 Credits)

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

#### Mathematics (3 Credits)

MAT211 Brief Calculus or higher

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

A minimum of 3 credits must be taken from the Arts and 3 credits hours from the Humanities. Refer to page 56 in the catalog for the approved list of courses.

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

Courses to fulfill this requirement must be taken from two different disciplines.

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

#### Computer Information Systems (3 Credits)

CIS120 Survey of Computer Information Systems  
OR  
AGB124 Microcomputers in Agriculture

#### Special Requirements (0-9 Credits)

A minimum of 3 credits must be taken from Global/Ethnic/Gender Awareness or Historical Awareness.

- Intensive Writing/Critical Inquiry (3)
- Ethnic/Race/Gender Awareness (3)
- Global/International – Historical Awareness (3)

**Majors that follow the AGECE-B include, but may not be limited to:** Administration, Business Administration, Computer Information Systems, Economics, Finance, Human Resources, Public Administration.

## Central Arizona College Degree Requirements for A. Bus. Degree

- Reading Competency
  - RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3)
  - Select from AGB124 or CIS 120
- A grade of "C" or better in each course fulfilling A.Bus. degree requirements
- A minimum of 20 credits completed at Central Arizona College
- A minimum of 15 credits in the AGECE completed at Central Arizona College



## ASSOCIATE OF SCIENCE (A.S.)

This degree is designed for students who plan to transfer to the university and earn a bachelor's degree in areas such as the Physical and Biological Sciences. For a list of Common Courses associated with your major, refer to: <http://az.transfer.org/cgi-bin/WebObjects/ATF.woa/wa/matrix>.

**AGEC-S (Associate of Science)** is designed to satisfy requirements in programs with more specific mathematics and science requirements.

All courses must be transferable to all three Arizona public universities with a grade of "C" or better. The list of approved Transfer Elective courses changes on an annual basis. Please contact an advisor for a current list of courses.

### 35-37 Credits

#### English Composition (6 Credits)

- ENG101 English Composition IV (3)  
ENG102 English Composition V (3)

#### Mathematics (3 Credits)

- UA and NAU Life Sciences: Calculus or higher
- ASU Life Sciences: Math for Life Sciences or Calculus or higher
- ASU, NAU and UA Physical Sciences: Calculus or higher

#### Sciences (8 Credits)

- Physical Sciences Majors: CHM151 and CHM152 or PHY261 and PHY262
- Life Sciences Majors: CHM151 and CHM152 or BIO181 and BIO182

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

#### Social Behavioral Sciences (6 Credits)

#### Subject Options (6-8 Credits)

- Subject options are based on Major
- Using a transfer guide, select Mathematics courses above
- Calculus and/or Sciences courses from: Astronomy, Biology, Botany, Environmental Science, Chemistry, Geology, Physics, Physical Geography or Zoology

#### Special Requirements

- Complete Intensive Writing & Critical Inquiry, Cultural Diversity, Global Awareness, or Historical Awareness requirements with courses from categories above

**Majors that will follow the AGEC-S include but are not limited to:** Agricultural Science, Animal Science, Plant and Soil Science, Veterinary Science, Computer Science, Astronomy, Biology, Botany, Chemistry, Engineering, Microbiology, Physics, Plant Science, Allied Health, Athletic Training, Engineering

#### Central Arizona College Degree Requirements for A.S. Degree

- Reading Competency
  - RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3)
  - Select from AGB124 or CIS120
- A grade of "C" or better in each course fulfilling A.S. degree requirements
- A minimum of 20 credits completed at Central Arizona College
- A minimum of 15 credits in the AGEC completed at Central Arizona College

## ASSOCIATE OF ARTS IN ELEMENTARY EDUCATION (A.A.E.E.)

This degree is designed for students who plan to transfer to a university and earn a bachelor's degree in Elementary or Special Education. While this degree follows the structure of the A.A. degree, course choices are more structured. Please review degree requirements for Elementary Education on page 82 of the catalog.



**ARIZONA GENERAL  
EDUCATION CURRICULUM**

**AGEC Course List**

**35 Credits**

**Composition (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 Group Discussion (3)
- COM206 Public Speaking (3)
- COM263 Intercultural Communication (3)

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

A minimum of 3 credit hours must be taken from the Arts, 3 credit hours from the Humanities.

**Arts**

- ART100 Art Appreciation (3)
- ART207 Art of the Western World I (3)
- ART208 Art of the Western World II (3)
- MHL100 Music Appreciation (3)
- MHL207 Survey of Jazz/Popular Music (3)
- THE100 Theater Appreciation (3)
- THE115 Introduction to Cinema (3)
- THE116 Contemporary Cinema (3)

**Humanities**

- HIS101 U.S. History I (3)
- HIS102 U.S. History II (3)
- HIS103 History of Western Civilization I (3)  
*May be taken for either Humanities or Social/Behavioral Science credit, but not both.*
- HIS104 History of Western Civilization II (3)  
*May be taken for either Humanities or Social/Behavioral Science credit, but not both.*
- HIS106 Mexican-American History (3)
- HIS107 African-American History (3)
- HIS108 Eastern Civilization – Beginnings to 1850 (3)
- HIS201 Women in U.S. History (3)
- HIS208 Eastern Civilization – 1850 to Modern Times (3)
- HNR204 Honors Colloquium I (3)
- HNR205 Honors Colloquium II (3)
- 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)
- LIT205 World Literature I (3)
- LIT206 World Literature II (3)
- LIT233 American Ethnic Literature (3)
- LIT254A Literature and Film (3)
- PHI101 Introduction to Philosophy (3)
- PHI103 Introduction to Logic (3)
- PHI105 Introduction to Ethics (3)
- PHI112 World Religions (3)

**Social/Behavioral Science (6-9 Credits)**

Courses to fulfill this requirement must be chosen from at least two disciplines.

- ARH200 Principles of Archaeology (3)
- ASB101 Physical Anthropology (3)
- ASB102 Cultural Anthropology (3)
- ASB201 Indians of the Southwest (3)
- ECN201 Principles of Macroeconomics (3)
- ECN202 Principles of Microeconomics (3)
- ECE276 Child Development II (3) OR
- EDU276 Child Development II (3)
- EDU221 Introduction to Education
- 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)  
*May be taken for either Humanities or Social/Behavioral Science credit, but not both*
- HIS104 History of Western Civilization II (3)  
*May be taken for either Humanities or Social/Behavioral Science credit, but not both*
- HIS106 Mexican-American History (3)
- HIS107 African-American History I (3)
- HIS108 Eastern Civilization – Beginnings to 1850 (3)
- HIS201 Women in U.S. History (3)
- POS101 American Politics (3)
- POS104 Contemporary Issues in World Politics (3)
- PSY101 Introduction to Psychology (3)
- PSY200 Social Psychology (3)
- PSY203 Developmental Psychology (3)
- PSY205 Personality and Social Adjustment (3)
- SOC100 Introduction to Sociology (3)
- SOC102 Contemporary Issues in Society (3)
- SOC200 Racial and Ethnic Minorities (3)
- SOC203 Marriage and the Family (3)
- SOC212 Gender in Society (3)



### Biological and Physical Lab Science (8 Credits)

|        |  |
|--------|--|
| AGS101 | World of Plants (4)                              |
| AGS104 | Agricultural Environmental Science (4)           |
| AGS106 | Entomology (4)                                   |
| AGS130 | Plant Science (4)                                |
| AGS221 | Soil Science (4)                                 |
| AST101 | Survey of Astronomy (4)                          |
| BIO100 | Biology Concepts (4)                             |
| BIO156 | Human Biology for Allied Health (4)              |
| BIO160 | Introduction to Human Anatomy and Physiology (4) |
| BIO181 | General Biology I (4)                            |
| BIO182 | General Biology II (4)                           |
| BIO201 | Human Anatomy – Physiology I (4)                 |
| BIO202 | Human Anatomy – Physiology II (4)                |
| BIO205 | Microbiology (4)                                 |
| CHM130 | Fundamental Chemistry (4)                        |
| CHM151 | General Chemistry I (4)                          |
| CHM152 | General Chemistry II (4)                         |
| CHM230 | Fundamental Organic Chemistry (4)                |
| CHM235 | General Organic Chemistry I (4)                  |
| CHM236 | General Organic Chemistry II (4)                 |
| ENV101 | Environmental Science (4)                        |
| GLG101 | Physical Geology (4)                             |
| GLG102 | Historical Geology (4)                           |
| GLG110 | Environmental Geology (4)                        |
| NTR141 | Nutrition and Wellness (4)                       |
| PHY100 | Physical Universe (4)                            |
| PHY201 | College Physics I (4)                            |
| PHY202 | College Physics II (4)                           |
| PHY261 | University Physics I (4)                         |
| PHY262 | University Physics II (4)                        |

**A.S. Degrees have unique Physical or Life Science requirements. If you are in an A.S. Degree program, talk with your advisor or follow the transfer guide for your major. Refer to page 55 for the AGEC-S requirements.**

### Mathematics (3 Credits)

|        |                                     |
|--------|-------------------------------------|
| MAT140 | College Mathematics with Review (5) |
| MAT141 | College Mathematics, Standard (4)   |
| MAT150 | College Algebra with Review (5)     |
| MAT151 | College Algebra Standard (4)        |
| MAT152 | College Algebra Accelerated (3)     |
| MAT171 | Finite Mathematics, Standard (4)    |
| MAT172 | Finite Mathematics, Accelerated (3) |
| MAT182 | Trigonometry, Accelerated (3)       |
| 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 (3)                       |
| MAT221 | Analytical Geometry and Calculus I (4)   |
| MAT231 | Calculus with Analytic Geometry II (4)   |
| MAT241 | Analytical Geometry and Calculus III (4) |
| MAT262 | Ordinary Differential Equations (3)      |

**A.Bus and A.S Degrees have unique Mathematics requirements depending on the major. Please contact your advisor or follow the transfer guide for your major to determine the appropriate Mathematics sequence requirements. Refer to page 54 for AGEC-B requirements and page 55 for AGEC-S requirements.**

### Special Requirements (0-9 Credits)

#### Intensive Writing/Critical Thinking (3 Credits)

|         |  |
|---------|--|
| COM101  | Interpersonal Communication (3)                                    |
| ENG203  | Advanced Composition (3)   |
| HIS108  | Eastern Civilization – Beginning to 1850 (3)                       |
| HIS208  | Eastern Civilization – 1850 to Modern Times (3)                    |
| HNR204  | Honors Colloquium I (3)  |
| HNR205  | Honors Colloquium II (3)<br><i>Must complete HNR204 and HNR205</i> |
| LIT201  | American Literature I (3)  |
| LIT202  | American Literature II (3)   |
| LIT203  | English Literature I (3)   |
| LIT204  | English Literature II (3)  |
| LIT233  | American Ethnic Literature (3)                                     |
| LIT254A | Literature and Film (3)  |
| LIT291  | Children's Literature for Educators (3)                            |
| PHI103  | Introduction to Logic (3)  |
| PHI105  | Introduction to Ethics (3)   |
| PSY203  | Developmental Psychology (3)                                       |
| PSY205  | Personality and Social Adjustment (3)                              |
| SOC200  | Racial and Ethnic Minorities (3)                                   |

#### Ethnic/Race/Gender Awareness (3 Credits)

|        |   |
|--------|---|
| ASB102 | Cultural Anthropology (3)                         |
| ASB201 | Indians of the Southwest (3)                      |
| COM263 | Intercultural Communication (3)                   |
| EDU205 | Introduction to the Study of Language (3)<br>OR   |
| EDU230 | Cultural Values in Education (3)                  |
| ENG205 | Introduction to the Study of Language (3)         |
| GEO101 | Introduction to Cultural/Historical Geography (3) |



## DEGREES AND CERTIFICATES

- HIS106 Mexican-American History (3)  
*May be taken for either Ethnic/Race/Gender Awareness or Historical Awareness credit, but not both.*
- HIS107 African-American History I (3)  
*May be taken for either Ethnic/Race/Gender Awareness or Historical Awareness credit, but not both.*
- HIS208 Eastern Civilization – 1850 to Modern Times (3)
- LIT201 American Literature I (3)
- LIT202 American Literature II (3)
- LIT207 Food in Literature and Film (3)
- LIT233 American Ethnic Literature (3)
- MHL207 Survey of Jazz/Popular Music (3)
- SOC200 Racial and Ethnic Minorities (3)
- SOC212 Gender in Society (3)

**A minimum of 3 credit hours must be taken from Global/International Awareness or Historical Awareness.**

### Global/International Awareness

- AGS122 Natural Resources and Conservation (3)
- ASB102 Cultural Anthropology (3)
- ASB201 Indians of the Southwest (3)
- HIS104 History of Western Civilization II (3)
- HIS108 Eastern Civilization – Beginning to 1850 (3)
- HIS208 Eastern Civilization – 1850 to Modern Times (3)
- GEO101 Introduction to Cultural and Historical Geography (3)

- LIT206 World Literature II (3)
- PHI112 World Religions (3)
- POS104 Contemporary Issues in World Politics (3)

### Historical Awareness

- ART207 Art of the Western World I (3)
- ART208 Art of the Western World II (3)
- ASB201 Indians of the Southwest (3)
- GEO101 Introduction to Cultural and Historical Geography (3)
- HIS101 U.S. History I (3)
- HIS102 U.S. History II (3)
- HIS103 History of Western Civilization I (3)
- HIS104 History of Western Civilization II (3)
- HIS106 Mexican-American History (3)  
*May be taken for either Ethnic/Race/Gender Awareness or Historical Awareness credit, but not both.*
- HIS107 African-American History I (3)  
*May be taken for either Ethnic/Race/Gender Awareness or Historical Awareness credit, but not both.*
- HIS108 Eastern Civilization – Beginning to 1850 (3)
- HIS201 Women in U.S. History (3)
- HIS208 Eastern Civilization – 1850 to Modern Times (3)
- MHL100 Music Appreciation (3)
- THE100 Theater Appreciation (3)



## ASSOCIATE OF APPLIED SCIENCE (A.A.S.) DEGREE REQUIREMENTS

Most Associate of Applied Science degree programs are designed to prepare students for employment directly into the workforce of their chosen degree. Some state universities have responded to needs in particular technical fields with provisions for programs so that students with an A.A.S. degree may transfer to a university without loss of credit. Consult your Central Arizona College advisor and the transfer guides for Arizona State University Polytechnic, Arizona State University West, Arizona State University (Tempe), University of Arizona and Northern Arizona University in the major field for the bachelor of applied science degree <http://az.transfer.org/cas/students/whatstransferguide.html>.

### General Education

#### 19 Credits

#### Written Communications (3 Credits)

ENG101 English Composition III (3)  
OR

ENG121 Applied Technical Writing (3)

#### Oral Communications (3 Credits)

COM100 Fundamentals of Human Communication (3)  
OR

COM206 Public Speaking (3)

#### Art and Humanities (3 Credits)

Select from courses numbered 100 or above in the following areas: Philosophy, Art, Music, Literature, World Religions, and Theater.

#### Social and Behavioral Science (3 Credits)

Select from courses numbered 100 or above from the following areas: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, or Ethnic Studies.

#### Biological or Physical Lab Science (4 Credits)

Select from courses numbered 100 or above from biological science or physical science OR

AGS221 Soil Science (4)  
OR

NTR141 Nutrition and Wellness (4)

#### Mathematics (3 Credits)

MAT courses numbered 101 or above OR  
BUS101 Business Mathematics (3)

#### Major Courses (41+ Credits)

The number of credits will depend on what major you choose. See the specific A.A.S. degree programs on the following pages.

#### Central Arizona College Degree Requirements

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B (3) or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120
- Cumulative grade point average of at least 2.0 on a 4.0 scale
- A minimum of 20 credits completed at Central Arizona College

#### TOTAL DEGREE REQUIREMENTS 64+ Credits



## ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS (A.G.S. DEGREE)

The associate of general studies degree is an option for students wanting more flexibility in selecting courses and who do not plan to transfer. However, choosing the A.G.S. and fulfilling the A.G.E.C. (Arizona General Education Curriculum) requirements will maintain an open door for attending a state public university at a later time. A.G.S. students planning to transfer should consult the catalog of the institution to which they plan to transfer and follow a similar program at Central Arizona College.

### General Education

#### 32 Credits

#### Written Communications (3 Credits)

ENG100 or higher (3)

#### Oral Communications (3 Credits)

COM100 or higher (3)

#### Art and Humanities (6 Credits)

Select from courses numbered 100 or above in the following areas: Philosophy, Art, Music, Literature, World Religions, and Theater.

#### Social and Behavioral Science (6 Credits)

Select from courses numbered 100 or above from the following areas: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, or Ethnic Studies.

#### Biological or Physical Lab Science (8 Credits)

Select from courses numbered 100 or above from life science or physical science OR

AGS221 Soil Science (4)

OR

NTR141 Nutrition and Wellness (4)

#### Mathematics (3-6 Credits)

Math requirements may be met by completing one of the following options: A minimum of 6 credits selected from MAT courses numbered 100 or above OR

BUS101 Business Mathematics (3)

OR

A minimum of 3 credits selected from MAT140 or higher

### Central Arizona College Degree Requirements

- Electives numbered 100 or above to meet 64-hour requirement
- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B (3) or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120
- Cumulative grade point average of at least 2.0 on a 4.0 scale
- A minimum of 20 credits completed at Central Arizona College

### TOTAL DEGREE REQUIREMENTS 64+ Credits

## CERTIFICATES

Certificates are designed to prepare students for entry-level employment opportunities; some certificates offer advanced training or are a step toward completing an A.A.S. or A.G.S. degree. Full-time students can complete most certificates in one or two semesters.

A minimum of one-third of the credits required for completion of a certificate must be completed at Central Arizona College. Students must earn a cumulative grade point average of 2.0 or higher on a 4.0 scale to earn a certificate at Central Arizona College.



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## ACCOUNTING

See *Transfer Programs* section if you intend to transfer to a university.

### ■ Accounting – A.A.S.

Districtwide

#### Total Credits: 65

This degree is designed for students seeking entry-level accounting positions. This degree is not designed for students planning to transfer to a university.

#### Recommended Proficiencies

Solid background in reading, math and analytical skills.

#### General Education Requirements (19 – See page 56)

#### Written Communications (3)

ENG 101 Composition

#### Oral Communications (3)

COM 100 Fundamentals of Human Communication  
OR

COM 206 Public Speaking

#### Arts and Humanities (3)

Select from courses numbered 100 or above from the following areas:

ART Art  
LIT Literature  
MUP Music  
PHI Philosophy  
THE Theater  
PHI112 World Religions

#### Social and Behavioral Science (3)

ECN 202 Principles of Microeconomics (3)

#### Biological or Physical Lab Science (4)

#### Mathematics (3)

BUS 101 Business Math

#### Business Core Requirements (27)

ACC201 Financial Accounting (3)\*  
ACC202 Managerial Accounting (3)  
BUS100 Introduction to Business (3)  
BUS123 Human Relations (3)  
BUS201 Legal Environment of Business (3)  
BUS207 Business Communications (3)  
CBA133A Spreadsheet Applications – Excel (3)  
CBA133B Advanced Spreadsheet Applications – Excel (3)  
CIS120 Survey of Computer Information Systems (3)

\* Students may be advised to complete ACC100 prior to completing ACC201.

#### Accounting Requirements (12)

ACC121 Income Tax Fundamentals (3)  
ACC226 Accounting with QuickBooks Pro (3)  
ACC227 Accounting with Peachtree Complete (3)  
ACC222 Payroll Accounting (3)

#### Electives from the following areas to total 65 credits (6)

ACC Accounting  
AGB Agriculture Business  
BUS Business  
CBA Computer Business Applications  
CIS Computer Information Systems  
ECN Economics  
HNR Honors  
HRM Hospitality Management  
REA Real Estate

#### Other Degree Requirements (1)

- Physical Education activity (1) excluding varsity sports
- Computer Competency (3)
  - Fulfilled by CIS120 in Business Core Requirements
- RDG100A or RDG100B or equivalent reading assessment

### ■ Accounting – Certificate

Districtwide

#### Total Credits: 15

The learner is prepared for an entry-level position in accounting.

#### Recommended Proficiencies

Ability to identify and solve basic business problems in operations, finance and accounting, handling business data, and human relations.

#### Required Courses

CIS120 Survey of Computer Information Systems (3)  
ACC121 Income Tax Fundamentals (3)  
ACC201 Financial Accounting (3)\*  
ACC202 Managerial Accounting (3)  
Accounting Elective numbered 200 or higher (3)

\*Students may be advised to complete ACC100 prior to completing ACC201.



**AGRICULTURE**

**■ Agriculture – Transfer Pathway (AGEC-A)**

*Signal Peak Campus*

**Total Credits: 64**

A suggested plan for students transferring to a university to pursue a Bachelor’s of Arts in agriculture. Students should consult the catalog of the university they plan to transfer, an academic advisor, or transfer guides found at [www.az.transfer.org/cas](http://www.az.transfer.org/cas).

**General Education Requirements (35 – See page 56)**

Refer to page 53 in the catalog for the AGECA requirements.

**Common Core Courses (10)**

Recommended for all majors in agriculture and transferable to all state universities in Arizona.

- AGB124 Microcomputers in Agriculture (3)
- AGS130 Plant Science (4)
- ANS101 Animal Industry (3)

**Electives (19)**

Courses should be selected to focus on a specific transfer program of study at the university. Refer to

- ACC Accounting
- AGB Agriculture Business
- AGS Agriculture Science
- ANS Animal Science
- BIO Biology
- BUS Business
- CHM Chemistry
- MAT Mathematics
- PHY Physics

**Other Degree Requirements**

- RDG100A or RDG100B or equivalent reading assessment
- Computer competency met by completing AGB124 (a common core course)

**■ Agriculture – Transfer Pathway (AGEC-S)**

*Signal Peak Campus*

**Total Credits: 64**

A suggested plan for students transferring to a university to pursue a Bachelor’s of Science in agriculture. Students should consult the catalog of the university they plan to transfer, an academic advisor, or transfer guides found at [www.az.transfer.org/cas](http://www.az.transfer.org/cas).

**General Education Requirements (35 – See page 56)**

Refer to page 53 in the catalog for the AGECS requirements.

**Common Core Courses (10)**

Recommended for all majors in agriculture and transferable to all state universities in Arizona.

- AGB124 Microcomputers in Agriculture (3)
- AGS130 Plant Science (4)
- ANS101 Animal Industry (3)

**Electives (19)**

Courses should be selected to focus on a specific transfer program of study at the university. Refer to ACC, AGB, AGS, ANS, BIO, BUS, CHM, MAT, and PHY course options in this catalog.

**Other Degree Requirements**

- RDG100A or RDG100B or equivalent reading assessment
- Computer competency met by completing AGB124 (a common core course)

**■ Agriculture Business – Certificate**

*Signal Peak Campus*

**Total Credits: 27**

This certificate provides specialized agricultural workplace skills. Students can enter or return to entry-level agribusiness positions.

**Required Courses (21)**

**Choose from the following courses:**

- ACC100 Fundamentals of Accounting (3)
- AGB121 Resource and Environmental Economics (3)
- AGB123 Agriculture Accounting (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)
- BUS101 Business Mathematics (3)
- MAT101 Essential Mathematics (4)

**Choose one of the following courses (3)**

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

**Choose one of the following courses (3)**

- COM100 Fundamentals of Human Communication (3)
- COM206 Public Speaking (3)



## ■ Agriculture General – A.A.S.

Signal Peak Campus

**Total Credits: 64**

Prepares students for the dynamic areas of Agricultural Business, Agricultural Technology and Agricultural Science. Accelerated proficiencies are addressed through advanced courses. The A.A.S. Agricultural General Degree prepares students for entry-level positions in agriculture. For students interested in transferring to a university, please refer to catalog requirements and common courses under the A.A. and A.S. Degrees.

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

**Mathematics (3)**

Math numbered 101 or above or BUS101

**Biological or Physical Lab Science (4)**

AGS221 Soil Science (4)

**Required Courses (10)**

AGB124 Microcomputers in Agriculture (3)

AGS130 Plant Science (4)

ANS101 Animal Industry (3)

**Agriculture Electives (34)**

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)

AGS120 Principles of Horticulture (3)

AGS122 Natural Resources and Conservation (3)

AGS221 Soil Science (4)

ANS111 Horseshoeing I (3)

ANS172 Intro to Western Horsemanship (3)

ANS200 Introduction to Equine Science (3)

ANS211 Advanced Horseshoeing (3)

ANS213 Animal Genetics (3)

ANS215 Anatomy and Physiology of Domestic Animals (4)

ANS220 Artificial Insemination (3)

ANS226 Feeds and Feeding (3)

DIE132 Diesel Engines (12)

HEO100 Introduction to Heavy Equipment (5)

*Courses may also be selected from Agriculture, Technology, Business, Math or Science with Agriculture Department approval.*

**Electives numbered 100 or above to meet 64 credit requirement.**

**Other Degree Requirements (1)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency fulfilled with AGB124

## ■ Agriculture General – Certificate

Signal Peak Campus

**Total Credits: 32**

An introduction to agricultural science and technology. The program includes general academic experiences in agriculture. Prepares students for entry-level careers in agri-science and agri-business.

**Required Courses (10)**

AGB124 Microcomputers in Agriculture (3)

AGS130 Plant Science (4)

ANS101 Animal Industry (3)

**Choose one of the following courses (3)**

ENG100 English Composition II (3)

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3)

**Agriculture Electives (19)**

Choose from the following:

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)

AGS120 Principles of Horticulture (3)

AGS122 Natural Resources and Conservation (3)

AGS221 Soil Science (4)

ANS111 Horseshoeing I (3)

ANS172 Introduction to Western Horsemanship (3)

ANS200 Introduction to Equine Science (3)

ANS211 Advanced Horseshoeing (3)

ANS213 Animal Genetics (3)

ANS215 Anatomy and Physiology of Domestic Animals (4)

ANS220 Artificial Insemination (3)

ANS226 Feeds and Feeding (3)

*Courses may also be selected from Agriculture, Technology, Business, Math or Science with Agriculture Department approval.*



**■ Farm Business Management – Certificate**

*Signal Peak Campus*

**Total Credits: 30**

Education in farm business management is concerned with developing 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

**Prerequisites**

Own or operate a farm business

**Required Courses**

- 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)

**BUILDING CONSTRUCTION TRADES**

**■ Building Construction Technology – A.A.S.**

*Districtwide*

**Total Credits: 65**

Prepares students for career in the home building industry. The student will work on active, hands-on projects that combine carpentry, plumbing, and electrical skills. A full-time student can accomplish this degree in a minimum of two years. Completion of degree program prepares the student to take certification test from NCER (National Center for Construction Education and Research).

**Recommended Proficiencies**

Students must complete RDG100A or RDG100B or achieve equivalent assessment test scores prior to taking transfer courses. It is recommended they complete the reading requirement prior to or early in the program.

**General Education (19 – See page 56)**

**Written Communications (3)**

ENG101 or ENG121

**Oral Communications (3)**

COM100 or COM206

**Arts and Humanities (3)**

Courses numbered 100 or higher in the following areas: Philosophy, Art, Music, Literature, or World Religions

**Social and Behavioral Science (3)**

Select 3 credits from courses numbered 100 or higher in Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, or Ethnic Studies.

**Biological or Physical Lab Science (4)**

The following courses are recommended:

- AGS221 Soil Science (4)
- ENV101 Environmental Science (4)
- GLG101 Physical Geology (4)

**Mathematics (3)**

MAT101 or higher or BUS101 Business Math (3)

**Business Courses (at least 9 credits from the following)**

- ACC121 Income Tax Fundamentals (3)
- ACC230 Uses of Accounting Information I (3)
- BUS100 Introduction to Business (3)
- BUS120 Personal Money Management (3)
- BUS123 Human Relations (3)
- BUS201 Legal Environment of Business (3)
- BUS207 Business Communication (3)

**Required Building Construction Technology Courses (33)**

- BCT110 Introduction to Construction Industry (3)
- BCT120 Plumbing Fundamentals for Construction (4)
- BCT125 Electrical Fundamentals for Construction (4)
- BCT130 Carpentry Fundamentals for Construction (6)
- BCT135 Masonry Fundamentals for Construction (4)
- BCT140 Concrete Finishing Fundamentals for Construction (4)
- BCT152 Applied Construction Technology II (5)
- BCT155 Professional Development for Construction (3)

**Other Degree Requirements (4)**

- RDG100A or RDG100B or equivalent reading assessment
- Physical Education Activity (1) excluding varsity sports
- Computer Competency requirement (3) AGB124 or CIS120



## ■ Building Construction Technology – Certificate

Aravaipa Campus

**Total Credits: 34**

Prepares students for entry-level career in the home building industry and union apprenticeships. The student will work on active, hands-on projects that combine carpentry, plumbing, and electrical skills. A full-time student can accomplish this certificate in a minimum of two semesters.

### Recommended Proficiencies

Student should be proficient enough at reading to handle college-level textbooks in this occupational area. It is recommended that students complete RDG100A or RDG100B or equivalent reading assessment test scores prior to or early in the program.

### Corequisites

MAT081 or equivalent score on the math placement test

### Required Courses

|        |   |
|--------|---|
| BCT110 | Introduction to Construction Industry (3)     |
| BCT115 | Construction Math and Blueprints (3)          |
| BCT120 | Plumbing Fundamentals for Construction (4)    |
| BCT125 | Electrical Fundamentals for Construction (4)  |
| BCT130 | Carpentry Fundamentals for Construction (6)   |
| BCT151 | Applied Construction Technology I (6)         |
| BCT152 | Applied Construction Technology II (5)        |
| BCT155 | Professional Development for Construction (3) |

## BUSINESS

## ■ Business – A.A.S.

Districtwide

**Total Credits: 64**

The Business A.A.S. degree prepares individuals for entry-level positions in businesses and provides skills necessary for helping them begin their own business.

### General Education Requirements (19 – See page 56)

#### Written Communications (3)

ENG101 English Composition III

#### Oral Communications (3)

COM100 Fundamentals of Human Communication  
OR

COM206 Public Speaking

#### Arts and Humanities (3)

Select from courses numbered 100 or above from the following areas: Philosophy, Art, Music, Literature, World Religions, or Theater.

#### Social and Behavioral Science (3)

|        |                                  |
|--------|----------------------------------|
| ECN100 | Introduction to Economics (3)    |
| ECN201 | Principles of Macroeconomics (3) |
| ECN202 | Principles of Macroeconomics (3) |

#### Biological or Physical Lab Science (4)

#### Mathematics (3)

BUS101 Business Mathematics

#### Business Core Requirements (30)

|         |  |
|---------|--|
| ACC121  | Income Tax Fundamentals (3)                |
| ACC201  | Financial Accounting (3)*                  |
| ACC202  | Managerial Accounting (3)                  |
| BUS100  | Introduction to Business (3)               |
| BUS201  | Legal Environment of Business (3)*         |
| BUS207  | Business Communications (3)                |
| CIS120  | Survey of Computer Information Systems (3) |
| BUS123  | Human Relations (3)                        |
| BUS260  | Applied Business Seminar (3)               |
| CBA133A | Spreadsheet Applications – Excel (3)       |

\* Students may be advised to complete ACC 100 Fundamentals of Accounting prior to completing ACC 201 Financial Accounting.

#### Electives (14)

Choose electives 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 Degree Requirements (1)

- Computer Competency course is fulfilled by CIS120 in the required courses
- Physical Education excluding varsity sports (1)
- RDG100A or RDG100B (3) or equivalent reading assessment



**Business – Certificate**

*Districtwide*

**Total Credits: 24**

The Business certificate prepares individuals for entry-level positions in businesses, provides skills for helping them organize their own business and is an entry to the A.A.S. in Business.

**Required Courses (15)**

- ACC201 Financial Accounting  
OR
- ACC100 Fundamentals of Accounting (3)
- ACC226 QuickBooks Pro (3)
- BUS100 Introduction to Business (3)
- BUS101 Business Mathematics (3)
- CIS120 Survey of Computer Information Systems (3)

**Select at least one of the following courses (3)**

- ECN101 Introduction to Economics (3)
- ECN201 Principles of Macroeconomics (3)
- ECN202 Principles of Microeconomics (3)

Complete six hours from the following prefixes to total 24 credits:

- ACC Accounting
- BUS Business
- CBA Computer Business Applications
- CIS Computer Informational Systems
- ECN Economics
- HRM Hospitality Management
- REA Real Estate

**Hotel and Lodging Management – Certificate**

*Signal Peak Campus*

**Total Credits: 18**

Provides specialized workplace skill enhancing options for progressive or lateral career options in hotel and lodging management. Includes foundation computer concepts as well as knowledge and the theoretical framework of the hospitality industry, facilities management, guest services management, supervision, and hospitality law. Five courses are certified by either the Educational Institute of the American Hotel and Lodging Association or the Educational Foundation of the National Restaurant Association. All courses feed into the CAC-HRM A.A.S. degree, and most are eligible for transfer to universities offering bachelor’s degree programs in hotel and restaurant management.

**Required Courses**

- CIS120 Survey of Computer Information Systems (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)

**Hotel and Restaurant Management – A.A.S.**

*Signal Peak Campus*

**Total Credits: 65**

This degree includes hospitality industry certified courses, university-level business courses and the Arizona General Education curriculum. Transfer to Arizona State University or University of Arizona will be by AGECEC and on a course-by-course basis the remaining courses. Northern Arizona University School of Hotel and Restaurant Management will accept AGECEC and all HRM core, not to exceed 64 credits. (HRM103 and HRM105 or HRM103 and HRM205 are strongly suggested for NAU transfer students.)

**Prerequisite**

RDG100A or RDG100B or equivalent reading assessment

**AGECEC Requirements (35 Credits)**

**English (6)**

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

**Communications (and Ethics/Race/Gender Awareness) (3)**

COM263 Intercultural Communication (3)

**Arts (and Global International or Historical Awareness) (3)**

Choose one from list:

- ART208 Art of the Western World II (3)
- MHL100 Music Appreciation (3)
- THE100 Theater Appreciation (3)

**Humanities (and Intensive Writing/Critical Inquiry) (3)**

**Choose one from list:**

- LIT201 American Literature I (3)  
 LIT202 American Literature II (3)  
 LIT203 English Literature I (3)  
 LIT204 English Literature II (3)  
 LIT233 American Ethnic Literature (3)  
 LIT254A Literature and Film (3)  
 LIT291 Children's Literature for Educators (3)  
 PHI103 Introduction to Logic (3)  
 PHI105 Introduction to Ethics (3)

**Social and Behavioral Science (9)**

- ECN201 Principles of Macroeconomics (3)  
 ECN202 Principles of Microeconomics (3)

**Choose one from list:**

- GEO101 Introduction to Cultural/Historical Geography (3)  
 PSY101 Introduction to Psychology (3)  
 SOC100 Introduction to Sociology (3)

**Biological or Physical Lab Science (8)****Choose two from list:**

- BIO100 Biology Concepts (4)  
 CHM130 Fundamental Chemistry (4)  
 ENV101 Environmental Science (4)  
 PHY100 Physical Universe (4)

**Mathematics (3)**

MAT140 or higher

**Hospitality and Related Business Core Requirements (29)**

- ACC201 Financial Accounting (3)  
 CIS120 Survey of Computer Information Systems (3)  
 HRM100 Introduction to Hospitality (3)  
 HRM101 Facilities Management (3)  
 HRM102 Management of Guest Services (3)  
 HRM103 Managing Food Service Operations (2)  
 HRM105 Food Safety Foundations (1) OR  
 HRM205 HACCP Manager Certified Course (1)  
 HRM106 Supervision in the Hospitality Industry (3)  
 HRM150 Dining and Beverage Service (2)  
 HRM203 Introduction to Culinary Arts (3)  
 HRM208 Hospitality Law (3)

**Other Degree Requirements (1)**

- Physical Education Activity (1) excluding varsity sports (PAC101A recommended)
- Computer Competency is fulfilled with CIS120 in required courses
- RDG100A or RDG100B or equivalent reading assessment

**■ Restaurant Management – Certificate**

*Signal Peak Campus*

**Total Credits: 18**

Provides specialized workplace skill-enhancing options for progressive or lateral career options in restaurant management. Includes foundation concepts and skills in the hospitality industry, culinary arts, safety and sanitation, restaurant management, supervision and hospitality law. All courses are certified by either the Educational Institute of the American Hotel and Lodging Association or the Educational Foundation of the National Restaurant Association. All courses feed into the CAC-HRM A.A.S. degree and most are eligible for transfer to universities offering bachelor degree programs in hotel and restaurant management.

**Prerequisite**

RDG100A or RDG100B as listed in each course description

**Required Courses**

- HRM100 Introduction to Hospitality (3)  
 HRM103 Managing Food Service Operations (2)  
 HRM105 Food Safety Foundations (1)  
 HRM205 HACCP Manager Certified Course (1)  
 HRM106 Supervision the Hospitality Industry (3)  
 HRM150 Dining and Beverage Service (2)  
 HRM203 Introduction to Culinary Arts (3)  
 HRM208 Hospitality Law (3)



**■ School Business Administration – A.A.S.**

*Districtwide*

**Total Credits: 64**

The degree provides specialized workplace skill-enhancing options for progressive or lateral career options in school business administration.

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

ENG101 or ENG121

**Oral Communications (3)**

COM100 or COM206

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

**Biological or Physical Lab Science (4)**

**Mathematics (3)**

MAT course numbered 141 or higher

**Required Courses (33)**

BUS123 Human Relations (3)  
AND

**Group A:**

- SBO124A SBO Budget and Finance (3)
- SBO125A SBO Purchasing (3)
- SBO126A SBO Food Service Operations (3)
- SBO127A SBO Risk Management (3)
- SBO128A SBO Management (3)
- SBO130A SBO Accounting (3)
- SBO131A SBO Maintenance and Operations (3)
- SBO132A SBO Personnel (3)
- SBO133A SBO Information Technology (3)
- SBO134A SBO Transportation (3)

**OR**

**Group B:**

- SBO124 Budget and Finance for SBO (2)
- SBO125 Purchasing for SBO (2)
- SBO126 Introduction to School Food Service (2)
- SBO127 Risk Management for SBO (2)
- SBO128 School Business Management for SBO (2)
- SBO130 Accounting for SBO (2)
- SBO131 Maintenance and Operations for SBO (2)
- SBO132 Personnel for SBO (2)
- SBO133 Information Systems for SBO (2)
- SBO134 Transportation for SBO (2)

*PLUS a one credit lab (SBO190) for each course in Group B.*

**Must complete 200 level SBO courses (8)**

**Other Degree Requirements (4)**

- Physical Education activity (1) excluding varsity sports
- Computer competency (3): CIS120
- RDG100A or RDG100B or equivalent reading assessment

**■ School Business Administration – Certificate**

*Districtwide*

**Total Credits: 33**

This certificate provides specialized workplace skill-enhancing options for progressive or lateral career options in school business administration.

**Required Courses (33)**

BUS123 Human Relations (3)  
AND

**Group A:**

- SBO124A SBO Budget and Finance (3)
- SBO125A SBO Purchasing (3)
- SBO126A SBO Food Service Operations (3)
- SBO127A SBO Risk Management (3)
- SBO128A SBO Management (3)
- SBO130A SBO Accounting (3)
- SBO131A SBO Maintenance and Operations (3)
- SBO132A SBO Personnel (3)
- SBO133A SBO Information Technology (3)
- SBO134A SBO Transportation (3)

**OR**

**Group B:**

- SBO124 Budget and Finance for SBO (2)
- SBO125 Purchasing for SBO (2)
- SBO126 Introduction to School Food Service (2)
- SBO127 Risk Management for SBO (2)
- SBO128 School Business Management for SBO (2)
- SBO130 Accounting for SBO (2)
- SBO131 Maintenance and Operations for SBO (2)
- SBO132 Personnel for SBO (2)
- SBO133 Information Systems for SBO (2)
- SBO134 Transportation for SBO (2)

*PLUS a one-credit lab (SBO190) for each course.*



## COMPUTER

### ■ Application Development & Web Design – Certificate

*Districtwide*

**Total Credits: 32**

This certificate prepares students for an entry-level position in application and web development.

#### Recommended Proficiencies

RDG100A or RDG100B or equivalent reading assessment or higher.

#### Required Courses

|         |  |
|---------|--|
| CIS111  | Introduction to the Internet (2)               |
| CIS112  | Web Page Design Fundamentals (3)               |
| CIS120  | Survey of Computer Information Systems (3)     |
| CIS151  | FrontPage and HTML Application Development (3) |
| CIS214  | Application Development in Excel (3)           |
| CIS217  | Application Development in Access (3)          |
| CBA210  | Web Development Tools (3)                      |
| CBA211  | JavaScript Programming (3)                     |
| CBA212  | Layout and Design (3)                          |
| CBA133A | Spreadsheet Applications – Excel (3)           |
| CBA134A | Database Management – Access (3)               |

### ■ Database Management – Certificate

*Districtwide*

**Total Credits: 21**

This certificate prepares students for entry-level positions as a database administrator. Oracle database administration and SQL programming language is used throughout this program.

#### Recommended Proficiencies

RDG100A or RDG100B

#### Required Courses

|         |   |
|---------|---|
| CIS 120 | Survey of Computer Information Systems (3)      |
| CIS 121 | Microcomputer Operating System Fundamentals (3) |
| CIS 129 | Database Fundamentals (3)                       |
| CIS 150 | Windows 2003 Server (3)                         |
| CIS 235 | Oracle Forms and Reports (3)                    |
| CIS 236 | SQL Programming (3)                             |
| CIS 237 | Oracle 10g Administration (3)                   |

### ■ Microcomputer Business Applications – A.A.S.

*Districtwide*

**Total Credits: 66**

**General Education Requirements (19 – See page 56)**

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Science (3)

Biological or Physical Lab Science (4)

Mathematics (3)

BUS101 Business Math (3)

**Business Core Requirements (18)**

ACC100 Fundamentals of Accounting (3)

BUS100 Introduction to Business (3)

BUS123 Human Relations (3)

BUS207 Business Communications (3)

BUS260 Applied Business Seminar (3)

CIS120 Survey of Computer Information Systems (3)

**Microcomputer Business Application**

**Core Requirements (28)**

CIS111 Introduction to the Internet (2)

CIS112 Web Page Design Fundamentals (3)

CBA122A MS Word – Module 1 (2)

CBA133A Spreadsheet Applications – Excel (3)

CBA133B Advanced Spreadsheet Applications – Excel (3)

CBA134A Database Management – Access (3)

CIS121 Microcomputer Operating System Fundamentals (3)

CIS151 FrontPage and HTML Application Development (3)

CIS214 Application Development in Excel (3)

CIS217 Application Development in Access (3)

**Electives numbered 100 or above to meet 64-hour requirements if needed.**

**Other Degree Requirements (1)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency requirement fulfilled by CIS120 in the required courses



**■ Microcomputer Business Applications Specialist – Certificate**

*Districtwide*

**Total Credits: 20**

Provides students with skills in business application software required for entry-level employment in an office environment.

**Required Courses (18)**

- BUS101 Business Math (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 – Excel (3)
- CBA134A Database Management – Access (3)
- CIS121 Microcomputer Operating System Fundamentals (3)

**Any two of the following (2)**

- OAS101 Keyboard – Alphabetical (1)
- OAS103 Keyboard – Speed/Accuracy (1)
- OAS104 Ten-Key Pad (1)

**■ Network Administration – Certificate**

*Districtwide*

**Total Credits: 24**

This certificate prepares students for an entry-level position as a network administrator.

**Recommended Proficiencies**

RDG100A or RDG100B or equivalent reading assessment or higher

**Required Courses**

- CIS120 Survey of Computer Information Systems (3)
- CIS121 Microcomputer Operating System Fundamentals (3)
- CIS150 Windows 2003 Server (3)
- CIS152 Network Infrastructure (3)
- CIS153 Network Security (3)
- CIS213 Fundamentals of Internetworking (3)
- CIS215 CISCO Routers (3)
- CIS219 Exchange Server 2003 (3)

**■ Programming – A.A.S.**

*Districtwide*

**Total Credits: 65-66**

Prepares students for an entry-level position in computer programming.

**Recommended Proficiencies**

RDG100A or RDG100B or equivalent reading assessment or higher

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

- ECN201 Principles of Macroeconomics (3)
- ECN202 Principles of Microeconomics (3)

**Biological or Physical Lab Science (4)**

**Mathematics (3)**

- MAT122 Intermediate Algebra, Accelerated (3)  
OR
- MAT121 Intermediate Algebra, Standard (4)

**Computer Programming Core Requirements (36)**

- CIS120 Survey of Computer Information Systems (3)
- CIS121 Microcomputer Operating System Fundamentals (3)
- CIS123 Introduction to Programming (3)
- CIS150 Windows 2003 Server (3)
- CIS151 Front Page & HTML Application Development (3)
- 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 ASP (3)
- CIS234 Visual Basic Programming (4)

**Business Core Requirements (9)**

- BUS100 Introduction to Business (3)
- BUS101 Business Math (3)
- BUS207 Business Communications (3)

**Other Degree Requirements (1)**

- Physical Education Activity (1) excluding varsity sports
- Computer Competency requirement fulfilled with CIS120 in required courses.



## ■ Programming – Certificate

*Signal Peak Campus*

*Superstition Mountain Campus*

**Total Credits: 24**

Prepares students for entry-level positions in computer programming.

### Recommended Proficiencies

RDG100A or RDG100B or equivalent reading assessment or higher

### Required Courses

|        |   |
|--------|---|
| CIS120 | Survey of Computer Information Systems (3)      |
| CIS121 | Microcomputer Operating System Fundamentals (3) |
| CIS123 | Introduction to Programming (3)                 |
| CIS150 | Windows 2003 Server (3)                         |
| CIS216 | JAVA Programming (4)                            |
| CIS218 | C++ Programming (4)                             |
| CIS234 | Visual Basic Programming (4)                    |

### Required Courses (44)

|        |  |
|--------|--|
| DIE132 | Diesel Engines (12)  |
| DIE133 | Heavy Equipment Chassis and Drives (12)                                |
| DIE234 | Diesel and Heavy Equipment Electricity/Electronics and Hydraulics (12) |
| DIE235 | Heavy Equipment Reconditioning and Operations (8)                      |

### Choose three of the following courses (8)

|        |                            |
|--------|----------------------------|
| DIE222 | Mobile Refrigeration (3)   |
| DIE197 | Career Advancement (3) AND |
| DIE297 | Career Advancement (3)     |
| DIE225 | Preventive Maintenance (2) |
| WLD    | Welding course (3)         |

### Other Degree Requirements (4)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3): AGB124 or CIS120

## ■ Diesel and Heavy Equipment Technology Level 2 – Certificate

*Signal Peak Campus*

**Total Credits: 55-56**

Prepares students for employment as diesel and heavy equipment technicians.

### Required Courses (44)

|        |  |
|--------|--|
| DIE132 | Diesel Engines (12)  |
| DIE133 | Heavy Equipment Chassis and Drives (12)                                |
| DIE234 | Diesel and Heavy Equipment Electricity/Electronics and Hydraulics (12) |
| DIE235 | Heavy Equipment Reconditioning and Operations (8)                      |

### Choose four of the following courses (11-12)

|        |                            |
|--------|----------------------------|
| CIS    | Computer course (3)        |
| DIE222 | Mobile Refrigeration (3)   |
| DIE225 | Preventive Maintenance (2) |
| DIE197 | Career Advancement (3) AND |
| DIE297 | Career Advancement (3)     |
| WLD    | Welding course (3)         |

## DIESEL/HEAVY EQUIPMENT

## ■ Diesel and Heavy Equipment Technology – A.A.S.

*Signal Peak Campus*

**Total Credits: 75**

Prepares students for employment as diesel and heavy equipment technicians. The program is a Caterpillar Center for Excellence; however, students receive training applicable for all types of diesel equipment.

### General Education Requirements (19 – See page 56)

Written Communications (3)

Oral Communications (3)

Arts and Humanities (3)

Social and Behavioral Science (3)

Biological or Physical Lab Science (4)

Mathematics (3)

Math numbered 101 or above or BUS101



**■ Heavy Equipment Operator – A.A.S.**

*Signal Peak Campus*

**Total Credits: 68**

Provides the basis for a career in the field of heavy equipment operations. The student learns to operate, maintain, and service heavy equipment. Training received in this program will enable the student to understand grade staking, grade checking, project layout, and supervisory duties. A full-time student can accomplish this degree in a minimum of four semesters.

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

**Biological or Physical Lab Science (4)**

- AGS221 Soil Science (4)
- GLG Geology course (4)
- PHY100 Physical Universe (4)

**Mathematics (3)**

MAT101 or above (3)

**Required Courses (37)**

- CET121 Basic Surveying and Grade Staking (4)
- CET125 Construction and Mining Equipment (3)
- DIE225 Preventative 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)

**Choose 8 Credits from the following courses:**

- BUS Business/Management course (3)
- PEH102 First Aid/CPR (2)
- WLD Welding course (3)
- DIE222 Mobile Refrigeration (3)
- COM202 Introduction to Group Communication (3)
- DIE197 OR DIE297 Career Advancement (3)

**Other Degree Requirements (4)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120

**■ Heavy Equipment Operator – Certificate**

*Signal Peak Campus*

**Total Credits: 37**

Provides training that will enable the student to develop skills to operate, maintain and service heavy equipment. The student will be introduced to information and instruments necessary for basic grade checking and layout procedures. A full-time student can accomplish this certificate in a minimum of two full-time semesters.

**Required Courses (19)**

- CET121 Basic Surveying and Grade Staking (4)
- CET125 Construction and Mining Equipment (3)
- DIE225 Preventative 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)

**Choose one of the following courses (3)**

- COM100 Fundamentals of Human Communication (3)
- COM206 Public Speaking (3)
- ENG101 English Composition III (3)
- ENG121 Applied Technical Writing (3)

**Choose 11 Credits from the following courses**

- AGS221 Soil Science (4)
- GLG Geology course (4)
- 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)
- MAT101 or any Mathematics course 101 or above (3)
- PHY100 Physical Universe (4)
- BUS Business course (3)
- PEH102 First Aid/CPR (2)
- TEC129 Computer Skills for Technicians (3) OR
- CIS Computer competency course (3)
- WLD Welding course (3)
- DIE222 Mobile Refrigeration (3)
- COM202 Introduction to Group Communication (3)
- DIE197 OR DIE297 Career Advancement (3)
- Any additional general education requirements (3)

**Other Requirements**

- RDG100A or RDG100B or equivalent reading assessment



## ■ John Deere Construction and Forestry Equipment Technology – A.A.S.

*Signal Peak Campus*

**Total Credits: 78**

Prepares students for employment as a diesel and heavy equipment technician at a John Deere dealership. A John Deere dealer must sponsor the student in order for the student to attend class. Dealers are located in Arizona, Nevada and California.

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

**Mathematics (3)**

Math numbered 101 or above or BUS101

**Biological or Physical Lab Science (4)**

**Required Courses (55)**

|        |   |
|--------|---|
| CFE101 | John Deere Diesel Engines and Fuel Systems (12)               |
| CFE102 | John Deere Hydraulic and Electrical/Electronics Systems (12)  |
| CFE201 | John Deere Chassis and Drives (10)                            |
| CFE202 | John Deere Heavy Equipment Reconditioning and Operations (10) |
| DIE197 | Career Advancement (3)  |
| DIE222 | Mobile Refrigeration (3)                                      |
| DIE225 | Preventative Maintenance (2)                                  |
| WLD    | Welding course (3)  |

**Other Degree Requirements (4)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120

## ■ Operating Engineer/Equipment Operator – A.A.S.

**Contact Program Director at 520-494-5329**

**Total Credits: 64**

Students participating in this program must be members of Local 428.

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3)

**Oral Communications (3)**

COM100 Fundamentals of Human Communication (3)

COM206 Public Speaking (3)

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

**Biological or Physical Lab Science (4)**

PHY100 Physical Universe (4)

**Mathematics (3)**

MAT101 or above (3)

**Required Courses (30)**

OEC121 Introduction to Construction (5)

OEC122 Equipment Structure and Function I (5)

OEC123 Equipment Structure and Function II (5)

OEC221 Construction Material Processes (5)

OEC222 Grade Planing and Earthwork I (5)

OEC223 Grade Planing and Earthwork II (5)

**Choose one of the following courses (5)**

OEC133 Paving (5)

OEC134 Introduction to Crane and Rigging (5)

**Electives numbered 100 or above to meet 64-hour requirement (6)**

**Other Degree Requirements (4)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120



## ■ Operating Engineer/Heavy Duty Mechanic – A.A.S.

Contact Program Director at 520-494-5329

**Total Credits: 64**

Students participating in this program must be members of Local 428.

### General Education Requirements (19 – See page 56)

#### Written Communications (3)

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

#### Oral Communications (3)

- COM100 Fundamentals of Human Communication (3)  
COM206 Public Speaking (3)

#### Arts and Humanities (3)

#### Social and Behavioral Science (3)

#### Biological or Physical Lab Science (4)

- PHY100 Physical Universe (4)

#### Mathematics (3)

- MAT101 or above (3)

#### Required Courses (35)

- OEC121 Introduction to Construction (5)  
OEC125 Diesel Engines I (5)  
OEC126 Diesel Engines II (5)  
OEC129 Transmissions and Hydraulics (5)  
OEC130 Auto Electric (5)  
OEC131 Welding I (5)  
OEC132 Welding II (5)

#### Electives numbered 100 or above to meet 64-hour requirement (6)

#### Other Degree Requirements (4)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120

## ■ Operator's Apprenticeship Program – Certificate

(Associated General Contractors)

Signal Peak Campus

**Total Credits: 30.5**

Heavy equipment operators apprenticeship training sponsored by the Associated General Contractors for operation of heavy equipment to journeyman standards. The student must be sponsored by an AGC contractor to enroll in this program.

#### Required Courses

- AGC101 Orientation – Associated Arizona General Contractors and Trade (0.5)  
AGC102 Introduction to Construction Math (1)  
AGC103 Basic Safety (0.5)  
AGC104 Soils I (1)  
AGC105 Grades I (1)  
AGC106 Machine Orientation I (0.5)  
AGC107 Machine Operation I (1)  
AGC121 Equipment Preventative Maintenance (1)  
AGC122 Introduction to Earth Moving (1)  
AGC123 Machine Orientation II (0.5)  
AGC124 Machine Operation II (2.5)  
AGC131 Safety Part II (1)  
AGC132 Rigging and Hoisting (1)  
AGC133 Machine 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 Machine Theory III (0.5)  
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)



## EDUCATION

See *Transfer Programs* section if you intend to transfer to a university.

### ■ Early Care and Education Program

The Early Care and Education Program is highly individualized and taught primarily on-site where students are working with children. Courses also are offered at all three campuses, online, and through interactive television. The courses fulfill the education/training requirements for the Council for Professional Recognition Child Development Associate (CDA) Credential. For more information contact the Early Care and Education Program at 520-494-5477, 520-494-5031, 520-494-5040 or 1-800-237-9814, ext 5477.

### ■ Early Care and Education – Transfer Pathway

Districtwide

#### Total Credits: 65

The Early Care and Education Program's transfer pathway is a suggested plan for students transferring to a university to pursue a Bachelor's of Interdisciplinary Studies (BIS) degree in Early Childhood Education and Family Studies. Students should consult the catalog of the university they plan to transfer, an academic advisor, or transfer guides found at [www.transfer.org/cas](http://www.transfer.org/cas).

#### General Education Requirements (35 – See page 56)

##### Composition

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

##### Oral Communications

- COM263 Intercultural Communication (3)

##### Arts

One of the following courses suggested for Arts requirement:

- ART207 Art of the Western World I (3)  
ART208 Art of the Western World II (3)  
MHL100 Music Appreciation (3)

##### Humanities

- PHI112 World Religions (3)

##### Social/Behavioral Science

- PSY203 Developmental Psychology (3)  
*Also meets Literacy requirement*  
SOC100 Introduction to Sociology (3)

### Biological and Physical Lab Science

Eight semester hours of courses designated S.Q. (Quantitative Science) or S.G. (General Science) must be selected. Of these, at least four semester hours must be taken from the S.Q. category. Students can take two courses from Group A or one course from Group A and one course from Group B.

#### Group A:

- AGS101 World of Plants (4)  
AGS130 Plant Science (4)  
BIO100 Biology Concepts (4)  
BIO181 General Biology I (4)  
BIO205 Microbiology (4)  
CHM130 Fundamental Chemistry (4)  
OR  
CHM151 General Chemistry I (4)  
*Note: Students may transfer either CHM130 or CHM151, but not both.*  
CHM152 General Chemistry II (4)  
CHM230 Fundamental Organic Chemistry (4)  
CHM236 General Organic Chemistry II (4)  
ENV101 Environmental Science (4)  
GLG101 Physical Geology (4)  
PHY100 Physical Universe (4)  
PHY201 College Physics I (4)  
PHY202 College Physics II (4)  
PHY261 University Physics I: Mechanics (4)  
PHY262 University Physics II: Electricity and Magnetism (4)

#### Group B:

- BIO182 General Biology II (4)  
BIO201 Human Anatomy – Physiology I (4)  
BIO205 Microbiology (4)  
GLG102 Historical Geology (4)  
GLG110 Environmental Geology (4)

#### Mathematics (3)

- MAT140 or higher (3)

*Note: MAT201 and/or MAT202 will not satisfy math requirement.*

#### Special Requirements

- EDU221 Introduction to Education (3)  
*Intensive Writing/Critical Inquiry*  
COM263 Intercultural Communication (3)  
*Ethnic/Race/Gender Awareness*  
PHI112 World Religions (3)  
*Global/International*  
PSY203 Developmental Psychology (3)  
*Intensive Writing/Critical Inquiry*

#### Choose one of the following courses (3)

- ART207 Art of the Western World I (3)  
*Historical Awareness*  
ART208 Art of the Western World II (3)  
*Historical Awareness*  
MHL100 Music Appreciation (3)  
*Historical Awareness*



**Core Courses (27)**

- ECE116 Guiding and Observing Children (3)
- ECE120B Providing a Healthy Environment (1)
- ECE120D Ensuring a Safe Environment (1)
- ECE176 Child Development (3)
- ECE250 Professionalism (1)
- ECE271 Creating Early Childhood Environments (3)
- ECE278 Effective Curriculum Design for Teachers of Young Children (3)
- ECE280 Inclusion of Children with Special Needs (3)
- ECE283 Valuing Families and Diversity (3)
- PSY101 Introduction to Psychology (3)
- CIS120 Survey of Computer Information Systems (3)

**Other Degree Requirements (3)**

- Computer Competency (3) CIS120
- RDG100A or RDG100B or equivalent reading assessment

**■ Early Childhood Education  
Family Child Care – A.A.S.**

*Districtwide*

**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 Child Care specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. The Degree program will prepare individuals to operate a child care business in their home.

**General Education (19 – See page 56)**

**Written Communications (3)**

ENG101 or ENG121

**Oral Communications (3)**

COM100 Fundamentals of Human Communication (3)

**Arts and Humanities (3)**

Select from courses numbered 100 or higher from the following areas: Philosophy, Art, Music, Literature (LIT291 Children’s Literature recommended), World Religions, and Theater.

**Social and Behavioral Science (3)**

Select from courses numbers 100 or above from the following areas: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, or Ethnic Studies.

**Biological or Physical Lab Science (4)**

Select from courses numbered 100 or above from biological or physical sciences.

**Mathematics (3)**

MAT101 or higher or BUS101 (3)

**Core Courses (24)**

- ECE117 Guidance for Family Child Care (3)
- ECE121 Health for Family Child Care (1)
- ECE122 Safety for Family Child Care (1)
- ECE123 Nutrition for Family Child Care (1)
- ECE177 Ages and Stages of Children 0-12 (3)
- ECE229 Professional Portfolio Preparation (3)
- ECE255 Communications for Family Child Care (3)
- ECE257 Business of Family Child Care (3)
- ECE272 Family Child Care Environments (3)
- ECE279 Curriculum for Family Child Care (3)

**Electives – Numbered 100 or above to meet  
64-hour requirement (18)**

**Other Degree Requirements (3)**

- RDG100A or RDG100B or equivalent reading assessment score
- Computer Competency (3): CIS 120
- Physical Education excluding varsity sport (1)

**■ Early Childhood Education  
Family Child Care – Certificate**

*Districtwide*

**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 Child Care specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. The certificate program will prepare individuals to operate a child care business in their home.

**Requirements**

- ECE117 Guidance for Family Child Care (3)
- ECE121 Health for Family Child Care (1)
- ECE122 Safety for Family Child Care (1)
- ECE123 Nutrition for Family Child Care (1)
- ECE177 Ages and Stages for Children 0-12 (3)
- ECE229 Professional Portfolio Preparation (3)
- ECE255 Communications for Family Child Care (3)
- ECE257 Business of Family Child Care (3)
- ECE272 Family Child Care Environments (3)
- ECE279 Curriculum for Family Child Care (3)



## ■ Early Childhood Education Infant-Toddler – A.A.S.

*Districtwide*

**Total Credits: 64**

The Early Care and Education Program's Associate of Applied Science Degree A.A.S. provide solid foundational knowledge, field experiences, and common skills and strategies that prepare students for roles in the Infant-Toddler field. For more information contact the department at 520-494-5477, 520-494-5031, 520-494-5040 or 1-800-237-9814, ext. 5477.

### General Education Requirements (19 – See page 56)

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social Behavior Science**

ECE276 Child Development II (3)

**Biological or Physical Lab Science (4)**

**Mathematics (3)**

Math numbered 100 or above or BUS101

### Core Requirements (10)

ECE120B Providing a Healthy Environment (1)

ECE120D Ensuring a Safe Environment (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-Toddler Programs (1)

ECE129C Recordkeeping Skills: Infant-Toddler Programs (1)

ECE176 Child Development I (3)

ECE183 Curriculum and Learning Materials for Infants (1)

ECE184 Curriculum and Learning Materials for Toddlers (1)

ECE226A Cognitive Development of Infants-Toddlers (1)

ECE226C Language Development of Infants-Toddlers (1)

ECE227B Guidance and Discipline of Infants-Toddlers (1)

ECE227C Enhancing Social Competency of Infants-Toddlers (1)

ECE228B Physical Development in Infancys-Toddlerhood (1)

ECE271 Creating Early Childhood Environments (3)

**Electives numbered 100 or above to meet 64-hour requirement (15)**

### Other Degree Requirements (4)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) CIS120

## ■ Early Childhood Education Infant-Toddler – Certificate

*Districtwide*

**Total Credits: 29**

### Core Requirements (13)

ECE120B Providing a Healthy Environment (1)

ECE120D Ensuring a Safe Environment (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-Toddlers (1)

ECE129B Observation Skills in the Infant-Toddler Program (1)

ECE129C Recordkeeping Skills: Infant-Toddler Programs (1)

ECE176 Child Development I (3)

ECE183 Curriculum and Learning Materials for Infants (1)

ECE184 Curriculum and Learning Materials for Toddlers (1)

ECE226A Cognitive Development of Infants-Toddlers (1)

ECE226C Language Development of Infants-Toddlers (1)

ECE227B Guidance and Discipline of Infants-Toddlers (1)

ECE227C Enhancing Social Competency of Infants-Toddlers (1)

ECE228B Physical Development in Infancy-Toddlerhood (1)

ECE271 Creating Early Childhood Environments (3)



**■ Early Childhood Management – A.A.S.**

*Districtwide*

**Total Credits: 64**

The A.A.S. degree program provides for the development of skills and competencies in operating a child care program. The degree program will prepare individuals to supervise, market and manage a child care program.

**General Education (19 – See page 56)**

**Written Communications (3)**

ENG101 or ENG121

**Oral Communications (3)**

COM100 Fundamentals of Human Communication (3)

**Arts and Humanities (3)**

Select from courses numbered 100 or higher from the following areas: Philosophy, Art, Music, Literature (LIT 291 Children’s Literature recommended), World Religions, and Theater.

**Social and Behavioral Science (3)**

Select from courses numbers 100 or above from the following areas: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, or Ethnic Studies.

**Biological or Physical Lab Science (4)**

Select from courses numbered 100 or above from biological or physical sciences.

**Mathematics (3)**

MAT101 or higher or BUS101

**Core Courses (28)**

- ECE220 Managing Food, Health and Safety in Child Care Programs (3)
- ECE221 Financial Management of an Early Childhood Program (3)
- ECE222 Managing and Evaluating an Early Childhood Program (3)
- ECE223 Planning and Promoting an Early Childhood Program (3)
- ECE224 Supervision in Early Childhood Programs(3)
- ECE229 Professional Portfolio Preparation (3)
- ECE248 Early Childhood Philosophies (1)
- ECE276 Child Development II (3)
- ECE280 Inclusion of Children with Special Needs (3)
- ECE283 Valuing Families and Diversity (3)

**Electives numbered 100 or above to meet 64-hour requirement (13)**

**Other Degree Requirements (3)**

- Physical Education excluding varsity sport (1)
- RDG100A or RDG100B or equivalent reading assessment.
- Computer Competency (3) CIS120

**■ Early Childhood Education Management – Certificate**

*Districtwide*

**Total Credits: 34**

The certificate program provides for the development of skills and competencies in managing a child care program.

**Required Courses**

- ECE220 Managing Food, Health and Safety in Child Care Programs (3)
- ECE221 Financial Management of an Early Childhood Program (3)
- ECE222 Managing and Evaluating an Early Childhood Program (3)
- ECE223 Planning and Promoting an Early Childhood Program (3)
- ECE224 Supervision in Early Childhood Programs (3)
- ECE229 Professional Portfolio Preparation (3)
- ECE248 Early Childhood Program Philosophies (1)
- ECE276 Child Development II (3)
- ECE280 Inclusion of Children with Special Needs (3)
- ECE283 Valuing Families and Diversity (3)
- RDG100A or RDG100B or equivalent reading assessment (3)
- CIS 120 Survey of Computer Information Systems (3)

**■ Early Childhood Education Preschool – A.A.S.**

*Districtwide*

**Total Credits: 64**

The Early Care and Education Program provides coursework to fulfill the education/training requirements for an A.A.S. degree with a Preschool specialization and the Council for Professional Recognition Child Development Associate (CDA) Credential. Individuals will be prepared to function as a teacher or aide in a preschool setting.

**General Education (19 – See page 56)**

**Written Communications (3)**

ENG101 or ENG121

**Oral Communications (3)**

COM100 Fundamentals of Human Communication (3)

**Arts and Humanities (3)**

LIT291 Children’s Literature (3)

**Social and Behavioral Science (3)**

ECE276 Child Development II (3)

**Biological or Physical Lab Science (4)**

Select from courses numbered 100 or above from biological or physical sciences

**Mathematics (3)**

MAT101 or higher or BUS101 (3)

**Core Courses (35)**

- ECE116 Guiding and Observing Young Children (3)  
 ECE120B Providing a Healthy Environment (1)  
 ECE120D Ensuring a Safe Environment (1)  
 ECE124 Active Learning in Math & Science OR  
 ECE254 Emerging Literacy & Language (3)  
 ECE125A Nutrition (1)  
 ECE176 Child Development I (3)  
 ECE212 Creative Expressions for Young Children (3)  
 ECE229 Professional Portfolio Preparation (3)  
 ECE248 Program Philosophies (1)  
 ECE250 Professionalism (1)  
 ECE271 Creating Early Childhood Environments (3)  
 ECE276 Child Development II (3)  
 ECE278 Effective Curriculum Design (3)  
 ECE280 Inclusion Of Children With Special Needs (3)  
 ECE283 Valuing Families and Diversity (3)

**Electives numbered 100 or above to meet 64-hour requirement (6)****Other Degree Requirements (4)**

- Physical Education excluding varsity sports (1)
- Computer Competency (3) CIS120
- RDG100A or RDG100B or equivalent reading assessment

**■ Early Childhood Education Preschool – Certificate***Districtwide***Total Credits: 31**

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.

**Required Courses (25)**

- ECE116 Guiding and Observing Children (3)  
 ECE120B Providing a Healthy Environment (1)  
 ECE120D Ensuring a Safe Environment (1)  
 ECE125A Nutrition (1)  
 ECE176 Child Development (3)  
 ECE212 Creative Activities for Young Children (3)  
 ECE229 Professional Portfolio Preparation (3)  
 ECE250 Professionalism (1)  
 ECE271 Environments (3)  
 ECE276 Child Development II (3)  
 ECE283 Valuing Families and Diversity (3)

**Choose one from each category (6)**

Computer Literacy (3) AGB124 or CIS120. (CIS120 is recommended for students planning to transfer).

RDG100A or RDG100B (3) or equivalent reading assessment.

**■ Early Childhood Education School-Age – A.A.S.***Districtwide***Total Credits: 64****General Education Requirements (19 – See page 56)****Written Communications (3)****Oral Communications (3)****Arts and Humanities (3)****Social and Behavioral Science (3)**

ECE276 Child Development II (3)

**Biological or Physical Lab Science (4)****Mathematics (3)**

Math numbered 100 or above or BUS101

**Core Requirements (10)**

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

**Specialization Requirements (12)**

- ECE130A Learning Environment for School-Agers (1)  
 ECE176 Child Development I (3)  
 ECE212 Creative Expressions for Young Children (3)  
 ECE225A Guidance Principles School-Age (1)  
 ECE254 Emergent Language and Literacy (3)  
 ECE256 Math for School-Agers (1)

**Electives numbered 100 or above to meet 64-hour requirement (19)****Other Degree Requirements (4)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120 is recommended for students planning to transfer.



**■ Early Childhood Education School-Age – Certificate**

Districtwide

**Total Credits: 25**

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

**Core Requirements (13)**

- ECE120B Providing a Healthy Environment (1)
- ECE120D Ensuring a Safe Environment (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 (School-Age) (12)**

- ECE130A Learning Environment for School-Agers (1)
- ECE176 Child Development I (3)
- ECE212 Creative Expressions for Young Children (3)
- ECE225A Guidance Principles School-Age (1)
- ECE254 Emergent Language and Literacy (3)
- ECE256 Math for School-Agers (1)

**■ Elementary Education – Associate of Arts (A.A.E.E.)**

Districtwide

**Total Credits 60**

Provides practical and professional skills and knowledge that can lead to upper division programs in elementary and special education, and prepares students to be paraeducators.

**Prerequisites**

RDG100A or RDG100B

**Recommended Proficiencies**

Reading and math scores or courses that are needed for college level course work in math and English.

**General Education Requirements (35)**

**Written Communications (6)**

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

**Oral Communications (3)**

**Choose one of the following courses:**

- COM100 Fundamentals of Human Communication (3)
- COM101 Interpersonal Communication (3)\*
- COM202 Introduction to Group Communication (3)
- COM206 Public Speaking (3)
- COM263 Intercultural Communication (3)

*\*Fulfills Intensive Writing Requirement*

**Mathematics (3)**

- MAT140 College Mathematics or higher (4)

**Humanities (3)**

**Choose one of the following courses:**

- 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)\*
- LIT205 World Literature I (3)
- LIT206 World Literature II (3)
- LIT233 American Ethnic Literature (3)\*
- LIT254A Literature and Film (3)\*
- PHI101 Introduction to Philosophy (3)
- PHI103 Introduction to Logic (3)\*
- PHI105 Introduction to Ethics (3)\*
- PHI112 World Religions (3)

*\*Fulfills Intensive Writing Requirement*

**Arts (6)**

**Choose two courses from two different prefixes:**

- ART100 Art Appreciation (3)
- ART207 Art of the Western World I (3)
- ART208 Art of the Western World II (3)
- MHL100 Music Appreciation (3)
- MHL207 Survey of Jazz/Popular Music (3)
- THE100 Theater Appreciation (3)
- THE115 Introduction to Cinema (3)
- THE116 Contemporary Cinema (3)

**Social/Behavioral Science (6)**

**Choose one of the following courses:**

- HIS101 U.S. History I (3)
- HIS102 U.S. History II (3)
- AND

**Choose one of the following courses:**

- EDU/ECE276 Child Development II (3)  
*(Highly recommended.)*
- PSY101 Introduction to Psychology (3)

**Lab Sciences (8)**

**Life Science (4)**

**Select one of the following:**

- AGS101 World of Plants (4)
- AGS104 Agricultural Environmental Sciences (4)
- AGS130 Plant Science (4)
- AGS221 Soil Science (4)
- BIO100 Biology Concepts (4)
- BIO160 Introduction to Human Anatomy and Physiology (4)
- BIO181 General Biology I (4)
- BIO201 Human Anatomy – Physiology I (4)
- ENV101 Environmental Science (4)
- AND



### Physical Science (4)

#### Choose one of the following courses:

- AST101 Survey of Astronomy (4)  
 CHM130 Fundamental Chemistry (4)  
 CHM151 General Chemistry I (4)  
 GLG101 Physical Geology (4)  
 GLG102 Historical Geology (4)  
 GLG110 Environmental Geology (4)  
 PHY100 Physical Universe (4)  
 PHY201 College Physics I (4)

#### Degree Core Requirements (21)

- EDU221 Introduction to Education (3)  
 EDU222 Introduction to Special Education (3)  
 EDU230 Cultural Values in Education (3)  
 MAT201 Math for Elementary Teachers I (3)  
 MAT202 Math for Elementary Teachers II (3)  
 AND

#### Select two of the following courses for

##### Upper Elementary majors:

- EDU204 Electronic Multimedia Portfolio (3)  
 EDU/ENG205 Introduction to the Study of Language (3)  
 EDU223 Foundations of ESL & Bilingual Education (3)  
 EDU225 Relationships in the Classroom (3)  
 EDU228 Behavior Management (3)  
 EDU/ECE276 Child Development II (3)  
 EDU/LIT291 Children's Literature for Educators (3)  
 OR

##### Select two for Early Childhood K-3 Teaching majors:

- EDU/ECE276 Child Development II (3)  
*Must be taken here if it is not taken  
 as a Social Behavioral Science*  
 ECE176 Child Development I (3)  
 ECE271 Creating Early Childhood Environments (3)  
 EDU/ENG291 Children's Literature for Educators (3)  
 OR

##### Select two of the following for Special Education majors:

- EDU/ECE276 Child Development II (3)  
*Must be taken at CAC if not taken  
 as a social/behavioral science*  
 EDU225 Relationships in the Classroom (3)  
 EDU228 Behavior Management (3)

#### Special Requirements Areas

##### Ethnic/Race/Gender Awareness

Fulfilled by EDU230 Cultural Values in Education (3)

##### Global/International/Historical Awareness

Fulfilled by HIS101(3) or HIS102 (3)

### Intensive Writing/Critical Inquiry

#### Choose one of the following:

- COM101 Interpersonal Communications (3)  
 ENG203 Advanced Composition (3)  
 HIS108 Eastern Civilization – Beginnings to 1850 (3)  
 HIS208 Eastern Civilization – 1850 to Modern Times (3)  
 HNR204 Honors Colloquium I  
 AND  
 HNR205 Honors Colloquium II (*must take both*) (6)  
 LIT201 American Literature I (3)  
 LIT202 American Literature II (3)  
 LIT203 English Literature I (3)  
 LIT204 English Literature II (3)  
 LIT233 American Ethnic Literature (3)  
 LIT254A Literature and Film (3)  
 PHI103 Introduction to Logic (3)  
 PHI105 Introduction to Ethics (3)  
 PSY203 Developmental Psychology (3)  
 PSY205 Personality and Social Adjustment (3)  
 SOC200 Racial and Ethnic Minorities (3)

#### Any additional transferable electives to meet a total of 60 credit hours for the degree

#### Other Requirements

- Computer Competency Requirement (3): CIS120 or AGB124
- All courses must be completed with a grade of "C" or better
- 20 credits of the degree must be completed through CAC; 15 of the AGEC credits must be taken at CAC

### ■ Paraeducator – Certificate

*Districtwide*

#### Total Credits 21

Prepares students to become special education para-professionals and provides practical and professional skills and knowledge that can lead to programs in special education teacher certification.

#### Recommended Proficiencies

Score of 41 or better on Asset Reading

#### Prerequisites

RDG100A or RDG100B or equivalent reading assessment

#### Core Courses

- EDU222 Introduction to Special Education (3)  
 EDU224 The Role of the Paraeducator (3)  
 EDU226 Accommodations and Adaptations (3)  
 EDU228 Behavior Management (3)  
 EDU232 Classroom Practicum (6)

And at least 3 credits from either high incidence or low incidence special education courses: EDU284 (3) or ECE280 (3)

**ELECTRONICS****■ Industrial Electronics – A.A.S.***Signal Peak Campus***Total Credits: 64**

Prepares students to enter the electronics industry working with general electronics, communications, instrumentation, fabrication, and industrial electricity/electronics. The focus is upon the skills and knowledge necessary to plan, produce, inspect, maintain, and service electronic devices and circuits.

**General Education Requirements (19 – See page 56)****Written Communications (3)****Oral Communications (3)****Arts and Humanities (3)****Social and Behavioral Science (3)****Mathematics (3)**

Math numbered 100 or above or BUS101

**Physical Science (4)****Required Courses (6)**

ELC123 Direct Current Circuit Analysis (3)

ELC124 Alternating Current Circuit Analysis (3)

**Choose from the following courses (35)**

ELC125 Motors, Generators and Converters (6)

ELC126 Residential Wiring (3)

ELC127 Industrial Wiring (3)

ELC220 Active Circuits and Systems (3)

ELC221 Control Devices (6)

ELC223 Integrated Circuit Devices (3)

ELT128 Basic Logic Circuits (3)

MET132 Fluid Power (Hydraulics – Pneumatics) (3)

MET220 Industrial Robotics/Automation (3.5)

MET221 Electro-Mechanical Technology (3)

MET226 Electro-Mechanical Systems (3)

**Other Degree Requirements (4)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120

**■ Industrial Electronics – Certificate***Signal Peak Campus***Total Credits: 23**

Prepares students for employment in the electronic industry as entry-level technicians and provides upgrading of skills for persons presently employed.

**Required Courses (6)**

ELC123 Direct Current Circuit Analysis (3)

ELC124 Alternating Current Circuit Analysis (3)

**Choose one of the following courses (3)**

COM100 Fundamentals of Human Communication (3)

COM206 Public Speaking (3)

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3)

**Choose from the following courses (14)**

ELC125 Motors, Generators and Converters (6)

ELC126 Residential Wiring (3)

ELC127 Industrial Wiring (3)

ELC220 Active Circuits (3)

ELC221 Control Devices (6)

ELC223 Integrated Circuit Devices (3)

ELT128 Basic Logic Circuits (3)

MET132 Fluid Power (Hydraulics – Pneumatics) (3)

MET220 Industrial Robotics/Automation (3.5)

MET221 Electro-Mechanical Technology (3)

MET226 Electro-Mechanical Systems (3)



## EMERGENCY MEDICAL SERVICES

### ■ Paramedicine – A.A.S.

Signal Peak Campus

**Total Credits: 66.5-69.5**

Prepares students to work as paramedics with knowledge and skills required for emergency care, stabilization, and immobilization of victims of illness and injury.

#### Prerequisite

|        |  |
|--------|--|
| FSC129 | Hazardous Materials First Responder Operations (or equivalent) (3)   |
| EMS125 | Basic Emergency Medical Technician (certified in the State of Arizona) (8)   |
| EMS100 | CPR for Professionals (CPR at the Professional Rescuer level or Health Care Professional level or equivalency) (0.5) |

*The above three courses and their respective credits are not calculated into the total number of credits needed for the A.A.S Degree.*

#### Recommended Proficiencies

If student is enrolled at Central for the EMS272A, B, and C courses, the student must advance through each section (A, B, and C) successfully with a “C” or higher. Also, student must meet eligibility requirements established by Arizona Department of Health Services, Bureau of EMS.

#### General Educational Courses (19 – See page 56)

##### Written Communications (3)

(ENG121 recommended)

##### Oral Communications (3)

(COM100 or COM206 recommended)

##### Arts and Humanities (3)

##### Social and Behavioral Science (3)

PSY101 or SOC100 recommended

##### Biology/Physical Science (4)

BIO160 recommended

##### Mathematics (3)

BUS101 recommended

#### Required Courses (43.5)

|         |  |
|---------|--|
| EMS272A | Advanced Emergency Medical Technology/Paramedic, Module I (14.5)   |
| EMS272B | Advanced Emergency Medical Technology/Paramedic, Module II (14.5)  |
| EMS272C | Advanced Emergency Medical Technology/Paramedic, Module III (14.5) |

#### Other Degree Requirements (4)

- Physical Education activity (1) excluding varsity sports
- Computer Competency (3) AGB124 or CIS120
- RDG100A or RDG100B or equivalent reading assessment.

## FIRE SERVICES AND PARAMEDIC

*See Transfer Program section if you intend to transfer to a university.*

### ■ Basic Firefighter – Certificate

Districtwide

**Total Credits: 18**

**Contact Program Director (State of Arizona Fire Marshal will award the Firefighter I & II Certificate when course is successfully completed).**

#### Required Courses

|        |  |
|--------|--|
| FSC106 | Principles of Emergency Services (3)               |
| FSC140 | Firefighter I & II (11)                            |
| FSC180 | Wildland Fire, Module I (2)                        |
| FSC238 | Vehicular Extrication and Victim Stabilization (2) |

### ■ Fire Science Technology – A.A.S.

Districtwide

**Total Credits: 66**

The Fire Science Technology Associate in Applied Science (A.A.S.) is designed for students who need (1) advanced training as professional firefighters, (2) basic preparation courses for a career in fire services, and/or (3) more comprehensive information about fire hazard and prevention. Practical firefighting, hazardous materials, related operations, and fire service management are emphasized in this program with history and theory used where necessary to assist professionals to cope with current challenges in the field. The degree can be used by professional firefighters for promotions and salary advancement within the Fire Services. The unique feature of the degree is that the instructors will be professional firefighters and/or licensed emergency medical training personnel.

#### Recommended Proficiencies

Students must earn a grade of “C” or better in all courses within the program.

If pursuing bachelor’s degree program, contact department advisor.

Some courses require a prerequisite course/class.

Some courses require State of Arizona Fire Marshal certification(s).

Some courses require State of Arizona Department of Health Services certification(s).

Some courses require American Heart, Red Cross, or other certifying agency course completion in CPR.

Some courses require IFSAC (International Fire Service Accreditation Council) certification.



## Prerequisites

EMS125 Basic EMT or equivalent, IEMT or Paramedic\*

\* *Requirements for Basic EMT (EMS125), IEMT (EMS208) or Paramedic (EMS272) are regulated by the Arizona Dept of Health Services and are not negotiable*

## General Education (19 – See page 56)

### Written Communications (3)

ENG100 English Composition II (3)

ENG101 English Composition III (3)

ENG121 Applied Technical Writing (3)

### Oral Communications (3)

COM100 Fundamentals of Human Communication (3)

COM206 Public Speaking (3)

### Arts and Humanities (3)

Select course numbered 100 or above from: Philosophy, Art, Music, Literature, World Religions, or Theater.

### Social and Behavioral Science (3)

Select course numbered 100 or above from: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, or Ethnic Studies.

### Biological or Physical Lab Science (4)

Select course numbered 100 or above

### Mathematics (3)

MAT101 or above or BUS101

### Required Courses (36)

FSC106 Principles of Emergency Services (3)

FSC108 Fundamentals of Fire Prevention (3)

FSC117 Fire Apparatus and Equipment (3)

FSC118 Fire Hydraulics (3)

FSC129 Hazardous Materials First Responder Operations (3)

FSC140 Firefighter I & II (11)

FSC180 Wildland Fire, Module I (2)

FSC204 Firefighter Tactics and Strategy (3)

FSC208 Firefighter Safety/Building Construction (3)

FSC238 Vehicular Extrication/Victim Stabilization (2)

### Restricted Electives (7)

*Any CAC EMS/FSC Dept. approved Fire Science Course*

FSC134 Fitness Conditioning for Firefighters (3)\*\*

FSC202 Supervisory Training For Firefighters (3)

FSC205 Command Strategies for Major Emergencies (4)

FSC209 Fire Origin, Cause and Determination (3)

FSC111 Emergency Driver Operator (2)

FSC250 Ladder Company Officer (1)

FSC252 Engine Company Officer (1)

## Other Degree Requirements (4)

- Physical Education Activity (PAC100 or above) (1)\*\*\*

- RDG100A or RDG100B or equivalent reading assessment

- Computer Competency (3) CIS120

- Cumulative grade point average of at least 2.0 (C) on a 4.0 scale

- Minimum of 20 credits must be completed at Central Arizona College in combined Required Courses, Restricted Electives and General Education

\*\* *May substitute 1 credit hour of Fitness Conditioning for 1 credit hour of Physical Education Activity under General Education Core*

\*\*\* *May substitute one credit hour of FSC134 Fitness Conditioning For Firefighters towards the PAC requirement*

## ■ Fire Science Technology – Certificate

Districtwide

### Total Credits: 22

### Required Courses

FSC108 Fundamentals of Fire Prevention (3)

FSC117 Fire Apparatus and Equipment (3)

FSC118 Fire Hydraulics (3)

FSC202 Supervisory Training for Firefighters (3)

FSC204 Firefighting Tactics and Strategy (3)

FSC205 Command Strategies for Major Emergencies (4)

*Student may substitute FSC204A Regional Incident Command/Mutual Aid Training for this course.*

FSC209 Fire Origin, Cause and Determination (3)



## HEALTH CAREERS CENTER

### Health Information Technology – A.A.S.

*Districtwide*

**Total Credits: 67**

The Health Information Technology (HIT) A.A.S. degree program provides students the opportunity to gain knowledge and technical skills necessary for managing information within the healthcare delivery system.

#### Prerequisite

RDG100A or RDG100B (3) or equivalent reading assessment

MAT091 Introductory Algebra, Standard (4)

#### Recommended Proficiencies

HCC116 Medical Terminology Accelerated (3)

MS Word course(s) (2)

Keyboarding course(s) (2)

Ten-Key course (1)

#### General Education Requirements (23 – See page 56)

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

**Biological or Physical Lab Science (8)**

BIO201 Human Anatomy – Physiology I (4)

BIO202 Human Anatomy – Physiology II (4)

**Mathematics 101 or higher (3)**

#### Specialty Requirements (40)

HCC111 Health Care Law and Ethics (2)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM173 Pathophysiology (3)

HIM115 Health Information Technology I (4)

HIM117 Introduction to Health Information Systems (3)

HIM121 Legal Aspects of Health Information Technology (2)

HIM131 Electronic Medical Billing (3)

HIM138 Introduction to Medical Coding (3)

HIM158 Intermediate Procedural Coding (3)

HIM161 Introduction to Insurance and Insurance Billing (3)

HIM208 Hospital Coding (3)

HIM215 Health Information Technology II (4)

HIM275Q Practicum – Health Information Technology (4)  
(CPR Certification is required and must be current for at least 6 months after the start of HIM275Q.)

#### Other Requirements (4)

- Computer Competency course (3) AGB124 or CIS120
- Physical Education Activity excluding varsity sports (1)
- Reading Requirement fulfilled by prerequisites

### Massage Therapy – A.A.S.

*Districtwide*

**Total Credits: 64**

The Massage Therapy A.A.S. degree program prepares individuals for entry-level positions in medical settings performing therapeutic massage therapy. The massage therapist's responsibilities include administration of various methods of therapeutic massage therapy, draping, hygiene and safety. The massage therapist utilizes a thorough knowledge of medical terminology, anatomy and physiology, pathophysiology, proper body mechanics and legal and ethical issues.

#### General Education Requirements (15 – See page 56)

**Written Communications (3)**

ENG101 English Composition III (3)

**Oral Communications (3)**

COM100 Fundamentals of Human Communication (3)

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

PSY101 Introduction to Psychology (3)

**Biological or Physical Lab Science (4)**

Fulfilled by BIO160 in specialty courses

**Mathematics (3)**

MAT 101 or higher (3)

#### Core Requirements (8)

HCC100 Introduction to Health Care (3)

HCC111 Health Care Law and Ethics (2)

HCC116 Medical Terminology Accelerated (3)

#### Specialty Requirements (36)

BIO160 Introduction to Human Anatomy and Physiology (4)

HPM136 Business Skills for Massage Therapy (3)

HPM160 Applied Anatomy for Massage Therapy (3)

HPM173 Pathophysiology (3)

HPM180 Therapeutic Massage I (3)

HPM181 Therapeutic Massage II (3)

HPM280 Therapeutic Massage III (3)

HPM281 Therapeutic Massage IV (3)

HPM282 Therapeutic Massage V (3)

HPM175L Practicum – Relaxation Massage (1)



- HPM175M Practicum – Therapeutic Massage (1)
- HPM175N Practicum – Massage Therapy for Special Populations (1)
- HPM175O Practicum – Spa Treatment & Hydrotherapy (1)
- HPM150 Chiropractic Assistant Training (2)
- HPM152 Study of Physiotherapy for Chiropractic Assistants (1)
- HPM151 Study of Acupuncture for Chiropractic Assistants (1)

**Elective (1)****Other Degree Requirements (4)**

- Physical Education Activity excluding varsity sports (1)
- RDG100A or RDG100B or equivalent reading assessment and MAT091
- Computer competency course (3) AGB124 or CIS120
- A grade of “C” or better in each course is required to receive a program A.A.S. degree
- CPR certification must be current for at least six months after the start of the Practicums.

**■ Massage Therapy – Certificate**

*Signal Peak Campus*

*Superstition Mountain Campus*

**Total Credits: 37**

The Massage Therapy certificate program prepares individuals for entry-level positions in medical settings performing therapeutic massage therapy. The massage therapist’s responsibilities include administration of various methods of therapeutic massage therapy, draping, hygiene and safety. The massage therapist utilizes a thorough knowledge of medical terminology, anatomy and physiology, pathophysiology, proper body mechanics, and legal and ethical issues.

**Prerequisites**

RDG100A or RDG100B or equivalent reading assessment

**Core Requirements (5)**

- HCC111 Health Care Law and Ethics (2)
- HCC116 Medical Terminology Accelerated (3)

**Specialty Requirements (32)**

- BIO160 Introduction to Human Anatomy and Physiology (4)
- HPM136 Business Skills for Massage Therapy (3)
- HPM160 Applied Anatomy for Massage Therapy (3)
- HPM173 Pathophysiology (3)

- HPM180 Therapeutic Massage I (3)
- HPM181 Therapeutic Massage II (3)
- HPM280 Therapeutic Massage III (3)
- HPM281 Therapeutic Massage IV (3)
- HPM282 Therapeutic Massage V (3)
- HPM175L Practicum – Relaxation Massage (1)
- HPM175M Practicum – Therapeutic Massage (1)
- HPM175N Practicum – Massage Therapy for Special Populations (1)
- HPM175O Practicum – Spa Treatment and Hydrotherapy (1)

**Other Requirements**

- A grade of “C” or better in each course is required to receive a program certificate.
- CPR and First Aid certification must be current for at least six months after the start of practicums.

**■ Medical Administrative Assistant – Certificate**

*Signal Peak Campus*

*Superstition Mountain Campus*

**Total Credits 28-31**

The Medical Administrative Assistant certificate program prepares individuals for entry-level positions in medical offices and clinics. The medical office responsibilities consist of working effectively in a medical office including clerical, accounting, recordkeeping, and billing and collecting procedures. The medical administrative assistant has a broad knowledge of medical terminology, interpersonal skills, administrative medical procedures, computer and typing skills, insurance and insurance billing, and medical-legal principles. A variety of careers exist in the field: working in physicians’ offices, hospitals, outpatient diagnostic centers, and large medical practices.

**Prerequisites**

- RDG100A or RDG100B (3) or equivalent reading assessment
- MAT091 Introductory Algebra, Standard (4)

**Core Requirements (11-14)**

- HCC100 Introduction to Health Care (3)
  - HCC110A Medical Terminology A (3)
  - HCC110B Medical Terminology B (3)
- Students with prior medical knowledge may take HCC116 Medical Terminology Accelerated instead of HCC110A and HCC110B*



- HCC111 Health Care Law and Ethics (2)  
 HCC112 Interpersonal Skills (2)  
 HCC113 Math and Dosage Calculations (1)

### Specialty Requirements (17)

- HIM156 Introduction to Medical Transcription (3)  
 HIM159 Administrative Medical Procedures (3)  
 HIM161 Introduction to Insurance and Insurance Billing (3)  
 HIM175D Practicum – Medical Administrative Assistant (4)  
 CBA MS Word Course(s) (2)  
 OAS Keyboarding course(s) (2)

### Other Requirements

- A grade of “C” or better in each course is required to receive a program certificate.
- CPR certification must be current for at least six months after the start of HPM175D Practicum.

## ■ Medical Assistant – A.A.S.

Districtwide

### Total Credits: 66

The Medical Assistant A.A.S. degree program prepares individuals for entry-level positions in medical offices and clinics performing front office and back office responsibilities.

Front office responsibilities consist of working effectively in a medical office setting and includes clerical, accounting, recordkeeping and billing/collecting procedures. Back Office responsibilities include performing office laboratory testing and assisting the medical practitioner in patient treatment.

The medical assistant has broad knowledge of medical terminology, anatomy and physiology, surgical procedures, medications, diagnostic tests and curative procedures as well as medical-legal principles. A variety of careers exist in the field working in a variety of settings, including physician’s offices, hospitals, clinics, and outpatient diagnostic centers.

### Prerequisites

- CBA MS Word course(s) (2)  
 RDG100A or RDG100B (3) or equivalent reading assessment  
 MAT091 Introductory Algebra, Standard (4)

### General Education Requirements (19 – See page 56)

#### Written Communications (3)

- ENG101 English Composition III (3)

#### Oral Communications (3)

- COM100 Fundamentals of Human Communication (3)

#### Arts and Humanities (3)

#### Social and Behavioral Science (3)

- PSY101 Introduction to Psychology (3)

#### Biological and Physical Lab Science (4)

- BIO160 Introduction to Human Anatomy and Physiology (4)

#### Mathematics (3)

- Math numbered 101 or above

#### Core Requirements (11-14)

- HCC100 Introduction to Health Care (3)  
 HCC110A Medical Terminology A (3)  
 HCC110B Medical Terminology B (3)  
*Students with prior medical knowledge may take HCC116 instead of HCC110A and HCC110B*  
 HCC111 Health Care Law and Ethics (2)  
 HCC112 Interpersonal Skills (2)  
 HCC113 Math and Dosage Calculations for Health Occupations (1)

#### Specialty Requirements (29)

- HPM140 Medical Assisting Skills I (4)  
 HPM141 Medical Assisting Skills II (4)  
 HIM156 Introduction to Medical Transcription (3)  
 HPM159 Administrative Medical Procedures (3)  
 HIM161 Introduction to Insurance and Insurance Billing (3)  
 HPM162 Basic Pharmacology for Health Occupations (3)  
 HPM173 Pathophysiology (3)  
 HPM175C Practicum – Medical Assistant A.A.S. degree (4)  
 OAS Keyboarding course(s) (2)

#### Electives numbered 100 or above to meet 64-hour requirement (if HCC116 option is selected)

#### Other Degree Requirements

- Physical Education Activity (1) excluding varsity sports
- Computer Competency (3) AGB124 or CIS120
- A grade of “C” or better in each course is required to receive a program A.A.S. degree
- CPR certification must be current for at least six months after the start of HPM175C



## ■ Medical Biller – Certificate

Districtwide

**Total Credits: 32-35**

Medical billers are responsible for all aspects of the patient billing process. Medical billers maintain records, enter payments, update patients' ledgers, prepare patients' statements, and process insurance claims. As a key part of the medical office accounting system, medical billers track how much money the patients owe and what they paid through the use of computers and patient billing and accounting software programs.

A wide variety of careers exist in the coding fields. Billers can be employed by a medical facility such as hospitals, multi-specialty medical groups, private physicians' practices, clinics, insurance companies, etc.

### Prerequisites

RDG100A or RDG100B (3)

MAT091 Introductory Algebra, Standard (4)

### Core Requirements (11-14)

HCC100 Introduction to Health Care (3)

HCC110A Medical Terminology A (3)

HCC110B Medical Terminology B (3)  
*Students with prior medical knowledge may take HCC116 Medical Terminology Accelerated instead of HCC110A and HCC110B.*

HCC111 Health Care Law and Ethics (2)

HCC112 Interpersonal Skills (2)

HCC113 Math and Dosage Calculations (1)

### Specialty Requirements (21)

HIM131 Electronic Medical Billing (3)

HPM159 Administrative Medical Procedures (3)

HIM161 Introduction to Insurance and Insurance Billing (3)

HIM175K Practicum Medical Biller (4)

OAS Ten-Key Pad course (1)

Computer Competency Course (3) AGB124 or CIS120

CBA MS Word course(s) (2)

OAS Keyboarding course(s) (2)

### Additional Requirements

A grade of "C" or better in each course is required to receive a program certificate.

## ■ Medical Clinical Assistant – Certificate

Districtwide

**Total Credits: 33-36**

This certificate program prepares individuals for entry-level positions in medical offices and clinics. Medical Clinical Assistant certificate enables one to perform in-office laboratory testing, EKGs, patient preparation for diagnostic testing, and assisting the medical practitioner in patient treatments. The Medical Assistant has a broad knowledge of medical terminology, anatomy and physiology, surgical procedures, medications, diagnostic tests, curative procedures, and medical-legal principles.

### Prerequisites

RDG100A or RDG100B (3) or equivalent reading assessment

MAT091 Introductory Algebra, Standard (4)

### Core Requirements (11-14)

HCC100 Introduction to Health Care (3)

HCC110A Medical Terminology A (3)

HCC110B Medical Terminology B (3)  
*Students with prior medical knowledge may take HCC116 Medical Terminology Accelerated instead of HCC110A and HCC110B.*

HCC111 Health Care Law and Ethics (2)

HCC112 Interpersonal Skills (2)

HCC113 Math and Dosage Calculations (1)

### Specialty Requirements (22)

BIO160 Introduction to Human Anatomy and Physiology (4)

HPM140 Medical Assisting Skills I (4)

HPM141 Medical Assisting Skills II (4)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM173 Pathophysiology (3)

HPM175E Practicum – Medical Clinical Assistant (4)

### Other Requirements

- A grade of "C" or better in each course is required to receive a program certificate.
- CPR certification must be current for at least six months after the start of HPM175E Practicum – Medical Clinical Assistant.



## ■ Medical Transcription – A.A.S.

Districtwide

**Total Credits: 63-66**

Medical transcriptionists are medical language specialists who transcribe medical dictation. Medical transcriptionists can be either self-employed or employed by medical facilities, such as hospitals, multi-specialty medical groups, private physicians' practices, clinics, insurance companies, etc. After a year of work experience, medical transcriptionists are eligible to become certified medical transcriptionists by taking the national certification exam offered by the American Association for Medical Transcription.

### Prerequisites

RDG100A or RDG100B (3) or equivalent reading assessment

MAT091 Introductory Algebra, Standard (4)

### General Education Requirements (19 – See page 56)

#### Written Communications (3)

ENG101 English Composition III (3)

#### Oral Communications (3)

COM100 Fundamentals of Human Communication (3)

#### Arts and Humanities (3)

#### Social and Behavioral Science (3)

PSY101 Introduction to Psychology (3)

#### Biological or Physical Lab Science (4)

BIO160 Introduction to Human Anatomy and Physiology (4)

#### Mathematics (3)

Numbered 100 or above

### Core Requirements (11-14)

HCC100 Introduction to Health Care (3)

HCC110A Medical Terminology A (3)

HCC110B Medical Terminology B (3)

*Students with prior medical knowledge may take HCC116 instead of HCC110A and HCC110B.*

HCC111 Health Care Law and Ethics (2)

HCC112 Interpersonal Skills (2)

HCC113 Math and Dosage Calculations (1)

### Specialty Requirements (26)

HIM156 Introduction to Medical Transcription (3)

HIM157 Intermediate Medical Transcription (3)

HPM162 Basic Pharmacology for Health Occupations (3)

HIM169 Advanced Medical Transcription (3)

HPM173 Pathophysiology (3)

HIM175F Practicum – Medical Transcription (4)

OAS125 Proofreading and Editing for Business (3)

OAS Keyboarding course(s) (2)

CBA MS Word course(s) (2)

**Electives numbered 100 or above to meet 64-hour requirement if HCC116 option is selected.**

### Other Degree Requirements (4)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment and MAT091
- Computer Competency (3) AGB124 or CIS110
- A grade of "C" or better in each course is required to receive a program A.A.S. degree



**■ Medical Transcription – Certificate**

Districtwide

**Total Credits: 37-40**

Medical transcriptionists are medical language specialists who transcribe medical dictation by physicians and other health professionals regarding patient diagnosis, treatment and prognosis. They have a broad knowledge of medical terminology, anatomy and physiology, surgical procedures, medications, diagnostic tests, curative procedures, and medical-legal principles.

Medical transcriptionists can be either self-employed or employed by medical facilities, such as hospitals, multi-specialty medical groups, private physicians' practices, clinics, insurance companies, etc.

After a year of work experience, medical transcriptionists are eligible to become certified medical transcriptionists by taking the national certification exam offered by the American Association for Medical Transcription. Students are encouraged to take the associate of applied science courses with the health occupation courses to obtain an A.A.S. in medical transcription.

**Prerequisites**

RDG100A or RDG100B (3) or equivalent reading assessment

MAT091 Introductory Algebra, Standard (4)

CBA MS Word course(s) totaling 2 credits

**Core Requirements (11-14)**

HCC100 Introduction to Health Care (3)

HCC110A Medical Terminology A (3)

HCC110B Medical Terminology B (3)  
*Students with prior medical knowledge may take HCC116 instead of HCC110A and HCC110B.*

HCC111 Health Care Law and Ethics (2)

HCC112 Interpersonal Skills (2)

HCC113 Math and Dosage Calculations for Health Occupations (1)

**Specialty Requirements (26)**

BIO160 Introduction to Human Anatomy and Physiology (4)

HIM156 Introduction to Medical Transcription (3)

HIM157 Intermediate Medical Transcription (3)

HIM169 Advanced Medical Transcription (3)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM173 Pathophysiology (3)

HIM175F Practicum – Medical Transcription (4)

OAS125 Proofreading and Editing for Business (3)

**Other Certificate Requirements**

- A grade of "C" or better in each course is required to receive a program certificate.

**■ Nursing – A.A.S.**

Signal Peak

**Total Credits: 67**

Registered nurses have many opportunities to specialize and to go on to higher degrees for practice, teaching and administration. The job market is good for the person with experience and specialization. Jobs in many areas of the community such as home health, long-term, or skilled care are expanding, as well as in hospitals.

The Nursing Program at Central Arizona College is accredited by the Arizona State Board of Nursing (602-331-8111 or [www.azbn.org](http://www.azbn.org)) and by the National League for Nursing Accrediting Commission (800-669-1556 or [www.nlnac.org](http://www.nlnac.org)). Multiple exit options permit students to work in nursing as they proceed through the program. After completing the second semester of the program, the student receives a Practical Nurse certificate and is prepared to take the Practical Nurse licensing examination (NCLEX-PN). Completion of the four-semester program qualifies the student for the associate in applied science degree in nursing 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:

- Competence in Math, English and Reading;
- Completion of BIO201 and BIO202;
- Completed program application;
- Certified Nursing Assistant certification.

The Arizona State Board of Nursing must be consulted by individuals with license stipulations, previous felony convictions or substance abuse violations prior to applying to the Nursing Program. Licensure will not be granted for five years after absolute discharge of sentence for any felony.

Students must be able to meet the physical performance competencies of the Nursing Program as listed in the current nursing brochure.

Admission to any level of the Nursing Program is limited and based on specific criteria. New students are admitted only in the fall. Acceptance into the college does not guarantee acceptance into the Nursing Program. Further information may be obtained from the current nursing brochure available in the Office of Admissions on any Central campus.



### General Education Requirements (7 – See page 56)

#### Arts and Humanities (3)

#### Mathematics

MAT 121 Intermediate Algebra, Standard (4)  
OR

MAT 151 College Algebra, Standard (4)

*Other general education requirements are met in required courses listed below.*

#### Required Courses (59)

BIO205 Microbiology (4)  
ENG101 English Composition III (3)  
ENG102 English Composition IV (3)  
NTR240 Clinical Nutrition (3)  
NUR121 Introduction to Nursing Transitions (8)  
NUR122 Nursing in Health Illness Transitions (8)  
NUR126 Principles of Pharmacology and Drug Dosages (2)  
NUR145 Pharmacology (3)  
NUR221 Nursing in Developmental Transitions (8)  
NUR222 Nursing in Organizational Transitions (8)  
PSY101 Introduction to Psychology (3)  
PSY203 Developmental Psychology (3)  
SOC100 Introduction to Sociology (3)

All courses listed within each semester must be successfully completed prior to progressing to the next semester courses.

See current nursing brochure for corequisites and sequence of classes. Students must present proof of immunizations, tuberculosis status and CPR certification and must pay for liability insurance prior to beginning classes. Costs will be borne by the student.

#### Other Degree Requirements (1)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment

### ■ Pharmacy Technician – A.A.S.

*Districtwide*

#### Total Credits: 64

This field of concentration is designed to prepare the student for an entry-level position as a pharmacy technician. Emphasis is placed on basic pharmacy knowledge and skills including medical preparation, drug classifications, reaction, adverse effects and pharmacopeia. Pharmacy technicians have many career opportunities in hospitals, clinics, pharmacies in stand-alone drug stores and pharmacies within stores.

#### Prerequisites

RDG100A or RDG100B (3) or equivalent reading assessment

MAT091 Introductory Algebra, Standard (4)

### General Education Requirements (27 – See page 56)

#### Written Communications (3)

ENG101 English Composition III (3)

#### Oral Communications (3)

COM100 Fundamentals of Human Communication (3)

#### Arts and Humanities (3)

#### Social and Behavioral Science (3)

PSY101 Introduction to Psychology (3)

#### Biological or Physical Lab Science (12)

BIO181 General Biology I (4)

BIO182 General Biology II (4)

CHM151 General Chemistry I (4)

#### Mathematics (3)

Numbered 100 or above

#### Core Requirements (11-14)

HCC100 Introduction to Health Care (3)

HC110A Medical Terminology A (3)

HCC110B Medical Terminology B (3)

*Students with prior medical knowledge may take HCC116 instead of HCC110A and HCC110B.*

HCC111 Health Care Law and Ethics (2)

HCC112 Interpersonal Skills (2)

HCC113 Math and Dosage Calculations for Health Occupations (1)

#### Specialty Requirements (19)

HPM105 Pharmacy Techniques (3)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM164 Pharmacy Certification Review (2)

HPM173 Pathophysiology (3)

HPM175H Practicum – Pharmacy Technician (4)

OAS Keyboarding course(s) (2)

CBA MS Word course(s) (2)

#### Electives numbered 100 or above to meet 64-hour requirement if HCC116 option is selected.

#### Other Degree Requirements (4)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120
- A grade of “C” or better in each course is required to receive a program A.A.S. degree
- CPR certification must be current for at least 6 months after the start of the HPM175H Practicum



## ■ Practical Nursing – Certificate

Signal Peak Campus

**Total Credits: 35**

The Practical Nursing certificate is earned upon successful completion of the first year of the Associate of Applied Science Nursing Degree and the NCLEX PN Completion Course.

### Recommended Proficiencies

Competency in Mathematics, Reading and English

### Prerequisites

Successful completion of the first year Nursing Program

### Required Courses

|        |   |
|--------|---|
| ENG101 | English Composition III (3)                     |
| ENG102 | English Composition IV (3)                      |
| NUR121 | Introduction to Nursing Transitions (8)         |
| NUR122 | Nursing in Health Illness Transitions (8)       |
| NUR126 | Principles of Pharmacology and Drug Dosages (2) |
| NUR145 | Pharmacology (3)                                |
| NUR150 | NCLEX PN Completion (2)                         |
| PSY101 | Introduction to Psychology (3)                  |
| PSY203 | Developmental Psychology (3)                    |

## ■ Professional Coder – Certificate

Districtwide

**Total Credits: 29-32**

Professional coders code information from the patient medical records and ensure the maintenance and accuracy of diagnostic and procedural statistics for the facility. Coders ensure optimum, appropriate reimbursement from third-party payers by the timely coding of diagnoses and procedures using the required classification systems. After a year of work experience as a professional coder, the coder is eligible to become a certified procedural coder by taking the national certification exam offered by the American Academy of Professional Coders.

### Prerequisites

RDG100A or RDG100B (3) or equivalent reading assessment

MAT091 Introductory Algebra, Standard (4)

### Core Requirements (11-14)

HCC100 Introduction to Health Care (3)

HCC110A Medical Terminology A (3)

HCC110B Medical Terminology B (3)

*Students with prior medical knowledge may take HCC116 Medical Terminology Accelerated (3) instead of HCC110A and HCC110B.*

HCC111 Health Care Law and Ethics (2)

HCC112 Interpersonal Skills (2)

HCC113 Math and Dosage Calculations for Health Occupations (1)

### Specialty Requirements (18)

BIO160 Introduction to Human Anatomy and Physiology (4)

HIM138 Introduction to Medical Coding (3)

HIM158 Intermediate Procedural Coding (3)

HIM175I Practicum – Professional Coder (4)

Ten-Key course (1)

Computer Competency course (3) AGB124 or CIS120.

### Additional Requirements

- A grade of “C” or better in each course is required to receive a program certificate.



## LAW ENFORCEMENT

See *Transfer Program* section if you intend to transfer to a university.

### ■ Administration of Justice – A.A.S.

Signal Peak Campus

#### Total Credits: 65

Education and training for professional careers in law enforcement, corrections, parole, probation, the judiciary, and juvenile social work.

#### General Education Requirements (25 – See page 56)

##### Written Communications (6)

ENG101 English Composition III (3)  
AND

ENG102 English Composition IV (3)

##### Oral Communications (3)

##### Arts and Humanities (3)

##### Social Behavioral Science (6)

SOC100 Introduction to Sociology (3)

PSY101 Introduction to Psychology (3)

##### Biological or Physical Lab Science (4)

##### Mathematics (3)

Math numbered 101 or above

#### Required Courses (18)

AJS101 Introduction to Administration of Justice (3)

AJS123 Ethics and the Administration of Justice (3)

AJS209 Substantive Criminal Law (3)

AJS224 Police Administration (3)

AJS230 The Police Function (3)

AJS260 Procedural Criminal Law (3)

#### AJS Electives (12)

#### General Electives (6)

#### Other Degree Requirements (4)

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer Competency (3) AGB124 or CIS120

### ■ Central Arizona Regional Law Officers' Training Academy (CARLOTA) – Certificate

Signal Peak Campus

#### Total Credits: 33.5

Central Arizona College offers a full range of courses for regular and reserve officer certification, as well as in-service seminars to law enforcement agencies. The curriculum, offered through the academy, has been approved by the Arizona Peace Officer Standards and Training Board (AZ POST) and the State Board of Directors for Community Colleges of Arizona. Recruits and reserve officers who complete the basic training program may be eligible to obtain state certification as peace officers. Individuals not sent to the academy by law enforcement agencies may be eligible to attend at their own expense if they meet the requirements currently established by AZ POST for appointment and certification as a peace officer and successfully complete the required CARLOTA testing and screening process.

Further information on admission to the program may be obtained by contacting CARLOTA at 520-494-4370, 602-258-8685 or 800-237-9814.

#### Recommended Proficiencies

Meet AZ POST standards for eligibility

#### Required Courses

AJS122 Traffic Control (3)

AJS124 Defensive Tactics (3)

AJS129 Survey of Law Enforcement (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)

**MANUFACTURING****■ Manufacturing Electronics – A.A.S.***Signal Peak Campus***Total Credits: 64**

Manufacturing Electronics A.A.S. program provides opportunities for students to gain knowledge, skills and understanding of the concepts and applications of electronics in manufacturing. The program has been developed in cooperation with the semiconductor manufacturing industries. The degree prepares students for employment in the electronics, service maintenance and related manufacturing fields as entry-level technicians and provides upgrading of skills for persons presently employed.

**General Education Requirements (19 – See page 56)****Written Communications (3)****Oral Communications (3)****Arts and Humanities (3)****Social and Behavioral Science (3)**

ECN201 Principles of Macroeconomics (3)

**Biological or Physical Lab Science (4)**

CHM130 Fundamental Chemistry (4)

**Mathematics (3)**

MAT121 Intermediate Algebra (4)

**Required Courses (40)**

ELC123 Direct Current Circuit Analysis (3)  
 ELC124 Alternating Current Circuit Analysis (3)  
 ELC200 Radio Frequency RF/High Vacuum HV (3)  
 ELC220 Active Circuits (3)  
 ELC222 Active Circuits and Systems (3)  
 ELC223 Integrated Circuit Devices (3)  
 ELT128 Basic Logic Circuits (3)  
 MET110 Introduction to Quality Assurance (3)  
 MET132 Fluid Power (Hydraulics-Pneumatics) (3)  
 MET221 Electro-Mechanical Technology (3)  
 MET226 Electro-Mechanical Systems (3)  
 MET230 Semiconductor I Seminar (3)  
 PHY100 Physical Universe or higher (4)

**Other Degree Requirements (4)**

- Physical Education Activity excluding varsity sports (1)
- RDG100A or RDG100B or equivalent reading assessment (3)
- Computer Competency (3) AGB124 or CIS120

**■ Manufacturing Electronics – Certificate***Signal Peak Campus***Total Credits: 35**

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

**Required Courses (35)**

CHM130 Fundamental Chemistry (4)  
 ELC123 Direct Current Circuit Analysis (3)  
 ELC124 Alternating Current Circuit Analysis (3)  
 ELC220 Active Circuits (3)  
 ELT128 Basic Logic Circuits (3)  
 ENG121 Applied Technical Writing (3)  
 MAT121 Intermediate Algebra, Standard (4)  
 MET132 Fluid Power (Hydraulics and Pneumatics) (3)  
 MET221 Electro-Mechanical Technology (3)  
 ELC128 Introduction to Programmable Logic Controllers (PLC) (3)  
 ELC223 Integrated Circuit Devices (3)

**NUTRITION AND DIETETICS**

*See Transfer Programs section if you intend to transfer to a university.*

**Dietetic Education Program**

The Dietetic Education Program (DEP) at Central Arizona College has been granted Developmental Accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association.

The Dietetic Education Program provides competency-based, nutrition education and culinary arts programs. DEP offers courses in a variety of formats including on campus, online and a personalized system of instruction, also referred to as Open Entry/Open Exit. The programs offered by the DEP provide students with the skills and the experiences necessary to secure a job in a variety of settings. Hospitals, restaurants, wellness centers, retirement homes, school food service, and community nutrition agencies are just a few of the employment settings that employ graduates from DEP. For additional information, please contact the DEP office at 520-494-5497 or 1-800-465-1016.



## Cook's Apprenticeship Program

The Cook's Apprenticeship Program is a unique two-step program promoting the network between nutrition, culinary arts, and hospitality. The program is designed to provide basic training and knowledge for apprentice cooks interested in becoming professional chefs, as well as entry-level cooks from all food service, hospitality, and nutrition-related industries.

The student will obtain knowledge and practical experience in food preparation and production, proper sanitation, nutrition, dining and beverage service, use of food service equipment in professional kitchens, and basic supervisory and management skills. The training will enable the student to meet the growing needs of the food service industry.

Students enrolled in the Cook's Apprenticeship Program (CAP) may also transfer to the Dietetic Education Program or Hotel and Restaurant Management Program offered through Central Arizona College. Students completing both levels of the Cook's Apprenticeship Program and the 6,000 practice hours may apply for the national certification exam through the American Culinary Federation Education Institute (ACFEI).

For additional information contact the Dietetic Education Program at 520-494-5497 or Gayle Haro at 520-494-5403 or 800-237-9814, extension 5497.

### ■ Cook Level 2 – Culinary Apprenticeship – A.A.S.

*Districtwide*

**Total Credits: 65-67**

The A.A.S. Cook Level 2 Apprenticeship Program is a culinary arts program that follows the guidelines of the American Culinary Federation (ACF) Educational Foundation. May permit the student to successfully apply as a certified cook/chef through ACF.

**General Education Requirements (19 – See page 56)**

**Written Communications (3)**

**Oral Communications (3)**

**Arts and Humanities (3)**

**Social and Behavioral Science (3)**

SOC100 Introduction to Sociology (3)

PSY100 Introduction to Psychology (3)

**Biological or Physical Lab Science (4)**

BIO100 Biology Concepts (4)

CHM130 Fundamental Chemistry (4)

ENV101 Environmental Science (4)

**Mathematics (3)**

Math numbered 100 or above or BUS101

**Required Courses: Cook Level 1 (17-19 Credits)**

HRM203 Introduction to Culinary Arts (3)

HRM250 Professional Baking and Garde Manger (3)

**Choose one of the following courses:**

HRM150 Dining and Beverage Service (2)

NTR150 Dining and Beverage Service (2)

**Choose one of the following courses:**

HRM100 Introduction to Hospitality (3)  
*Required for the A.A.S. degree*

NTR126 Introduction to School Food Service (2)

NTR129 Introduction to Health Care for Nutrition Professionals (3)

**Choose one of the following options:**

NTR125 Food Prep and Culinary Presentation (3)  
OR

HRM103 Managing Food Service Operations (2)  
AND

HRM205 HACCP Manager Certified Course (1)

**Choose one of the following courses:**

NTR104 Nutrition (3)

NTR141 Nutrition and Wellness (4)

**Choose one of the following courses:**

HRM105 Food Safety Foundations (1)

NTR105 ServSafe Certification (1)

**Required Courses for Cook Level 2 (25)**

HRM106 Supervision in the Hospitality Industry (3)

NTR151 Culinary Practicum I (2)

NTR152 Culinary Practicum II (2)

NTR153 Culinary Practicum III (3)

NTR223 Food Service Management (3)

NTR250 Professional Baking/Garde Manger (3)  
OR

HRM250 Professional Baking/Garde Manger (3)

NTR251 Basic Baking/Garde Manger Practicum IV (4)

NTR252 Advanced Food Prep Culinary Practicum V (4)

NTR253 Culinary Seminar (1)

OR

HRM205 HACCP Manager Certified Course (1)

**Other Degree Requirements (4)**

- Physical Education Activity (1) excluding varsity sports
- RDG100A or RDG100B or equivalent reading assessment
- Computer competency (3) CIS120



## Additional Apprenticeship Requirements

Written application and acceptance through an ACF Chapter Apprenticeship is required to participate in practicum courses, document competencies, and clock the 4,000 requisite practice hours to provisionally complete the apprenticeship program. Application packets are available through Central Arizona College. Upon completion of this program of study students will be conferred with an A.A.S. by Central Arizona College in Culinary Apprenticeship. Students must pass the final ACF comprehensive exam to receive the national culinary certification.

## ■ Cook Level 1 – Cook's Certificate

*Signal Peak Campus*

**Total Credits: 17-19**

The first level provides skills for an entry-level cook position or affirms the working knowledge of a current food service employee. Application to the apprenticeship program is not required at this level.

### Required Courses

- HRM203 Introduction to Culinary Arts (3)
- HRM250 Professional Baking and Garde Manger (3)

### Choose one of the following courses

- HRM150 Dining and Beverage Service (2)
- NTR150 Dining and Beverage Service (2)

### Choose one of the following courses

- HRM100 Introduction to Hospitality (3)  
*Required for the A.A.S. degree*
- NTR126 Introduction to School Food Service (2)
- NTR129 Introduction to Health Care for Nutrition Professionals (3)

### Choose one of the following options

- NTR125 Food Prep and Culinary Presentation (3)  
OR
- HRM103 Managing Food Service Operations (2)  
AND
- HRM205 HACCP Manager Certified Course (1)

### Choose one of the following courses

- NTR104 Nutrition (3)
- NTR141 Nutrition and Wellness (4)

### Choose one of the following courses

- HRM105 Food Safety Foundations (1)
- NTR105 ServSafe Certification (1)

## ■ Diabetes Prevention Assistant Certificate

**Contact Program Director at  
520-494-5497 or 800-465-1016**

**Total Credits: 17**

The Diabetes Prevention Assistant (DPA) Certificate is designed to provide current training and information to paraprofessionals working with people at risk for developing diabetes or developing complications from diabetes. This program will enhance understanding and the application of strategies to prevent and/or manage diabetes mellitus with emphasis on lifestyle modification.

### Required Courses

#### Group A:

- NTR131 Introduction to Diabetes (3)
- NTR132 Meal Planning and Preparation for Diabetes (3)
- NTR141 Nutrition and Wellness (4)
- NTR231 Prevention and Management of Diabetes (3)
- NTR232 Culture, Behavior and Coping Skills for Diabetes (3)
- NTR233 Diabetes Prevention Field Experience (1)

#### OR

#### Group B:

- NTR104A The Energy Nutrients (1)
- NTR104B Nutrition Guidelines (1)
- NTR104C Nutrition for Growth and Maintenance (1)
- NTR131A Diabetes and Prevention (1)
- NTR131B Tools for Diabetes Management (1)
- NTR131C Tools for Diabetes Treatment (1)
- NTR132A Budgeting for Diabetes Management (1)
- NTR132B Meal Planning for Diabetes Management (1)
- NTR132C Food Preparation for Diabetes Management (1)
- NTR141D Nutrition and Wellness Lab (1)
- NTR231A Anatomy and Physiology of Diabetes (1)
- NTR231B Managing Complications of Diabetes (1)
- NTR231C Preventing Complications of Diabetes (1)
- NTR232A Food and Culture (1)
- NTR232B Psychosocial Impact of Diabetes (1)
- NTR232C Changing Behaviors (1)
- NTR233 Diabetes Prevention Field Experience (1)



## ■ Dietary Manager – Certificate

*Districtwide*

**Contact Program Director at  
520-494-5497 or 1-800-465-1016**

**Total Credits: 20**

The Dietary Manager certificate prepares food service workers and/or supervisors for management in health care facilities and various other food service establishments. This certificate program has been approved by the Dietary Manager's Association (DMA). Upon successful completion, graduates are eligible to take the National Certification Exam for the Certified Dietary Manager (CDM) and the Certified Food Protection Professional (CFPP) credentials.

### Recommended Proficiencies

High school diploma or GED

### Required Courses

|        |   |
|--------|---|
| NTR129 | Introduction to Health Care for Nutrition Professionals (3)                                   |
| NTR142 | Applied Food Science (3)  |
| NTR105 | ServSafe Certification (1)  |
| NTR141 | Nutrition and Wellness (4) OR NTR104 Nutrition (3) and NTR141D Nutrition and Wellness Lab (1) |
| NTR240 | Clinical Nutrition (3)  |
| NTR223 | Food Service Management (3)   |
| NTR229 | Dietary Manager Internship (3)  |

## ■ Dietetic Technician – A.A.S.

*Districtwide*

**Contact Program Director at  
520-494-5497 or 1-800-465-1016**

**Total Credits: 65**

This degree program is approved by the American Dietetic Association (ADA), and prepares the graduate to take the National Registration Examination for Dietetic Technicians. Eligibility to sit for the registration examination requires a verification statement issued by the program director documenting completion of all required courses. The Dietetic Technician A.A.S degree is accredited by the Commission on Accreditation for Dietetics Education through 2013 with the next review in 2008.

### Recommended Proficiencies

High school diploma or GED

Pre-enrollment requirements of the program

Completion of course requirements within 5 years of the begin date of the program, including any certificate recommendation

Chemistry course within the last five years

A grade of "C" (70%) or above on all NTR courses taken

Meet all American Dietetic Association requirements

Recommend that the student is working in a nutrition-related field at least 15 hours per week

### General Education Requirements (27 – See page 56)

#### Written Communications (3)

|        |                               |
|--------|-------------------------------|
| ENG101 | English Composition III (3)   |
| ENG121 | Applied Technical Writing (3) |

#### Oral Communications (3)

|        |   |
|--------|---|
| COM100 | Fundamentals of Human Communication (3) |
| COM206 | Public Speaking (3)                     |

#### Arts and Humanities (3)

Select from courses numbered 100 or above in the following areas: Philosophy, Art, Music, Literature, World Religions, and Theater.

#### Social and Behavioral Science (3)

|        |                                |
|--------|--------------------------------|
| PSY101 | Introduction to Psychology (3) |
| SOC100 | Introduction to Sociology (3)  |

#### Biological or Physical Lab Science (12)

|        |   |
|--------|---|
| BIO160 | Intro to Human Anatomy and Physiology (4) |
| BIO205 | Microbiology (4)                          |
| CHM130 | Fundamental Chemistry (4)                 |

#### Mathematics (3)

Math numbered 101 or above OR BUS101

#### Required Food and Nutrition Courses (34)

|        |   |
|--------|---|
| NTR105 | Serv Safe Certification (1)                                 |
| NTR142 | Applied Food Science (3)                                    |
| NTR123 | Nutrition throughout the Life Cycle (3)                     |
| NTR129 | Introduction to Health Care for Nutrition Professionals (3) |
| NTR141 | Nutrition and Wellness (4)                                  |
| NTR222 | Nutrition Assessment (3)                                    |
| NTR223 | Food Service Management (3)                                 |
| NTR228 | Dietetic Seminar (2)  |
| NTR240 | Clinical Nutrition (3)                                      |
| NTR229 | Dietary Managers Internship (3)                             |
| NTR230 | Dietetic Technician Internship (6)                          |

#### Other Requirements (4)

- Physical Education Activity (1) PAC Courses numbered 100 or above excluding varsity sports
- Computer Competency (3) AGB124 or CIS120
- RDG100A or RDG100B OR equivalent reading assessment



**■ Food Service Management – Certificate**

*Districtwide*

**Total Credits: 15-16**

The Food Service Management certificate provides an opportunity for individuals working with the National School Lunch Program to develop skills and competencies in food safety, sanitation, nutrition, and food service management. This certificate is recognized by the School Nutrition Association (SNA) and the Arizona Department of Education.

**Recommended Proficiencies**

High School Diploma or GED

**Required Courses (12)**

- NTR105 ServSafe Certification (1)
- NTR120 Marketing of Food Service Programs (3)
- NTR126 Introduction to School Food Service (3)
- NTR134 Healthy Weight for Kids (1)
- HRM205 HACCP Manager Certified Course (1)
- NTR223 Food Service Management (3)

**Choose one of the following courses (3-4)**

- NTR141 Nutrition and Wellness (4)  
OR
- NTR104 Nutrition (3)

**■ WIC Nutrition Assessment – Certificate**

*Districtwide*

**Total Credits: 15**

The WIC Nutrition Assessment 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.

**Required Courses (11)**

- NTR123 Nutrition Throughout the Life Cycle (3)
- NTR127 Breastfeeding and Human Lactation (1)
- NTR134 Healthy Weight for Kids (1)
- NTR272 Certified Breastfeeding Counselor (2)
- NTR220 Community Nutrition Field Experience (2)
- NTR232A Food and Culture (1)
- NTR232C Changing Behaviors (1)

**Choose one of the following options (4)**

- NTR104 Nutrition (3)  
AND
- NTR141D Nutrition and Wellness Lab (1)  
OR
- NTR141 Nutrition and Wellness (4)

**SPORTS AND FITNESS**

**■ Athletic Training Education Program – Transfer Pathway**

*Signal Peak Campus*

**Total Credits: 66**

The Athletic Training Education Program (ATEP) is a collaborative effort between the Sport and Fitness Division and the Intercollegiate Athletic Department. The ATEP provides both academic instruction and hands-on clinical application to prepare the student to transfer to an accredited university to complete the professional development in the field of Athletic Training. Students will take courses in math, science, English, and athletic training education including kinesiology, rehabilitation, taping, as well as practice and event coverage of varsity athletic teams leading to an Associate of Arts (A.A.) degree with a specialization in Athletic Training.

**Recommended Proficiencies**

Previous experience in a High School athletic program is a plus but not necessary.

**Prerequisites**

Reading 100A or 100B, or equivalent assessment score

**General Education Requirements (32 – See page 56)**

**Written Communications (6)**

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

**Oral Communications (3)**

- COM100 Fundamentals of Human Communications (3)

**Arts and Humanities (6)**

**Social/Behavioral Science (6)**

- PSY101 Introduction to Psychology
- Select three additional credits

**Physical and Biological Science (8)**

- BIO201 Human Anatomy/Physiology I (4)
- BIO202 Human Anatomy/Physiology II (4)

**Mathematics (3)**

- MAT151 or higher

**Core Courses (30)**

- PED104 Anatomical Kinesiology (3)
- PED108 Introduction to Athletic Training (3)
- PED109A Athletic Training Practicum I (3)
- PED109B Athletic Training Practicum II (3)
- PED109C Athletic Training Practicum III (3)
- PED109D Athletic Training Practicum IV (3)
- PEH101 Personal Health (3)
- PEH111 Nutrition for Health, Fitness & Sport (3)



- PEH200 Sports Safety Training: CPR/AED for the Professional Rescuer (3)  
 PED209 Intro to Rehabilitation Techniques (3)

#### Other Requirements (4)

- Physical Education (1) excluding varsity sports
- Computer Competency (3): AGB124 or CIS120

### ■ Group Fitness Instructor – Transfer Pathway

*Districtwide*

#### Total Credits: 64

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

#### Recommended Proficiencies

Student wishing to enroll in this program must possess the ability to read, write and verbally communicate effectively.

#### General Education Requirements (35 – See page 56)

##### Composition (6)

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

##### Oral Communications (3)

- COM100 Fundamentals of Human Communications (3)  
 is recommended

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

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

- PSY101 Introduction to Psychology  
 Select three additional credits

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

- BIO201 Human Anatomy/Physiology I (4)  
 BIO202 Human Anatomy/Physiology II (4)

##### Mathematics (3)

- MAT151 or higher

#### Required Courses (18)

- PED104 Anatomical Kinesiology (3)  
 PEH200 Sports Safety Training/CPR/AED for the Professional Rescuer (3)

- PED103 Foundations of Exercise (3)  
 PEH111 Nutrition for Health, Fitness & Sport (3)  
 OR  
 NTR111 Nutrition for Health, Fitness & Sport  
 PEH203 Group Fitness Instructor Methods (3)

**Three PAC (Physical Activity) courses also will be required for the certificate portion. Those recommended are:**

- PAC101J Basic and Beginning Techniques of Weight Training (1)  
 PAC101K Basic and Beginning Techniques of Stretch and Tone (1)  
 PAC101T Step Aerobics I (1)

#### Electives (11)

#### Special Requirements

*May be fulfilled by the required courses above if chosen carefully.*

- Intensive Writing/Critical Thinking (3)
- Ethnic/Race/Gender Awareness (3)
- Global/Historical Awareness (3)

### ■ Group Fitness Instructor – Certificate

*Signal Peak Campus*

#### Total Credits: 18

Upon completion, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Group Fitness Instructor. The program core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Group Fitness Instructor. Courses include introductions to biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures, and health screening.

#### Recommended Proficiencies

Student wishing to enroll in this program must possess the ability to read, write and verbally communicate effectively.

#### Required Courses

- PED103 Foundations of Exercise (3)  
 PED104 Anatomical Kinesiology (3)  
 PEH111 Nutrition for Health, Fitness and Sport (3)  
 PEH200 Sports Safety Training/CPR/AED for the Professional Rescuer (3)  
 PEH203 Group Fitness Instructor Methods (3)

**Three Physical Activity (PAC) courses will also be required. Those recommended are:**

- PAC101J Basic and Beginning Techniques of Weight Training (1)  
 PAC101K Basic and Beginning Techniques of Stretch and Tone (1)  
 PAC101T Step Aerobics I (1)



**■ Personal Trainer – Transfer Pathway**

*Districtwide*

**Total Credits: 64**

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

**Recommended Proficiencies**

Students wishing to enroll in this program must possess the ability to read, write and verbally communicate effectively.

**General Education Requirements (35 – See page 56)**

**Composition (6)**

ENG101 English Composition III (3) and  
ENG102 English Composition IV (3) are recommended

**Oral Communications (3)**

COM100 Fundamentals of Human Communications (3) is recommended

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

**Social/Behavioral Science (6-9)**

PSY101 Introduction to Psychology is recommended

**Biological and Physical Lab Sciences (8)**

BIO201 Human Anatomy/Physiology I (4) and  
BIO202 Human Anatomy/Physiology II (4) are recommended

**Mathematics (3)**

MAT151 or higher is recommended

**Required Courses (18)**

PED104 Anatomical Kinesiology (3)  
PEH200 Sports Safety Training/CPR/AED for the Professional Rescuer (3)  
PED103 Foundations of Exercise (3)  
PEH111 Nutrition for Health, Fitness & Sport (3)  
OR  
NTR111 Nutrition for Health, Fitness & Sport (3)  
PEH204 Personal Trainer Methods (3)

**Three PAC (Physical Activity) courses will also be required for the certificate portion. Those recommended are:**

PAC101J Basic and Beginning Techniques of Weight Training (1)  
PAC101K Basic and Beginning Techniques of Stretch and Tone (1)  
PAC101T Aerobics I (1)

**Electives (11)**

**Special Requirements**

*May be fulfilled by the required courses above if chosen carefully.*

- Intensive Writing/Critical Thinking (3)
- Ethnic/Race/Gender Awareness (3)
- Global/Historical Awareness (3)

**■ Personal Trainer – Certificate**

*Signal Peak Campus*

**Total Credits: 18**

Upon completion, the student will be eligible to sit for certification as an American Council on Exercise (ACE) Personal Trainer. The program core focuses on the foundations necessary to successfully compete and succeed in the fitness industry as a Certified Personal Trainer. Courses include introductions to biomechanics, sports nutrition, sports psychology, motor development, exercise physiology, injury prevention, emergency procedures, and health screening.

**Required Courses**

PED103 Foundations of Exercise (3)  
PED104 Anatomical Kinesiology (3)  
PEH111 Nutrition for Health, Fitness and Sport (3)  
PEH200 Sports Safety Training/CPR/AED for the Professional Rescuer (3)  
PEH204 Personal Training Methods (3)

**The three Physical Activity (PAC) courses are also required. Those recommended are:**

PAC101J Basic and Beginning Techniques of Weight Training (1)  
PAC101K Basic and Beginning Techniques of Stretch and Tone (1)  
PAC101T Step Aerobics I (1)



## ■ Recreation and Tourism Management – A.A.

*Signal Peak Campus*

### **Total Credits: 69**

The Recreation and Tourism Management 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.

### **Recommended Proficiencies**

Students wishing to enroll in this program must possess the ability to read, write and verbally communicate effectively.

### **Prerequisites**

RDG100A or RDG100B or equivalent reading assessment

### **General Education Requirements (35 – See page 56)**

#### **Composition (6)**

ENG101 English Composition III (3)

ENG102 English Composition IV (3)

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

COM263 Intercultural Communication (3)

#### **Humanities (3)**

*It is recommended that the course chosen satisfies Intensive Writing and Critical Inquiry Awareness*

#### **Social/Behavioral Science (6)**

#### **Biological and Physical Lab Science (8)**

#### **Art and Humanities (3)**

#### **Mathematics (3)**

MAT140 or higher

#### **Global/International-Historical Awareness (3)**

### **Core Requirements (30)**

REC101 Recreation, Leisure and the Quality of Life (3)

REC102 Leisure and Society (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)

PEH200 Sports Safety Training/CPR/AED for the Professional Rescuer (3)

ACC201 Financial Accounting (3)

**And select one of the following three courses:**

BUS100 Introduction to Business (3)

ECN202 Principles of Microeconomics (3)

BUS190 Applied Business Management (3)

### **Other Degree Requirements (4)**

- Computer Competency (3): CIS120

- Physical Education Activity (1) excluding varsity sports

## ■ Sports Management – A.A.S.

*Signal Peak Campus*

### **Total Credits: 72**

Central's 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, team sports officiating, strength/athletic training, sports nutrition, lifetime fitness/wellness, sports safety training, and physical activity.

### **Recommended Proficiencies**

Students wishing to enroll in this program must possess the ability to read, write and verbally communicate effectively.

### **Prerequisites**

RDG100A or RDG100B or equivalent reading assessment

### **General Education Requirements (29 – See page 56)**

#### **Composition (3)**

ENG101 English Composition III (3)

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

COM263 Intercultural Communication (3)

*It is recommended that the course chosen satisfies Ethnic/Race/Gender Awareness*

#### **Arts (3)**

#### **Humanities (3)**

PHI105 Introduction to Ethics (3) is suggested

#### **Social/Behavioral Science (6)**

ECN201 Principles of Macroeconomics

ECN202 Principles of Microeconomics



### Biological or Physical Lab Sciences (8)

- BIO201 Human Anatomy – Physiology I and  
 BIO202 Human Anatomy – Physiology II are  
 suggested

### Mathematics (3)

MAT140 or higher

### Business/Management Core (12)

- ACC201 Financial Accounting (3)  
 BUS201 Legal Environment of Business (3)  
 BUS123 Human Relations (3)  
 BUS190 Applied Business Management (3)

### Choose from the following Sports and Fitness

#### Division courses (12)

- PED103 Foundations of Exercise (3)  
 PED108 Introduction to Athletic Training (3)  
 PED112 Introduction to Strength Training (3)  
 PED202 Team Sports Officiating I (3)  
 PED203 Team Sports Officiating II (3)  
 PEH111 Nutrition for Health, Fitness & Sport (3)  
 OR  
 PEH200 Sports Safety Training/CPR/AED  
 for the Professional Rescuer (3)

### Other Degree Requirements (19)

- Computer Competency (3): CIS120
- Physical Education Activity (1) excluding varsity sports
- BUS101 Business Mathematics (3)
- MSC101 Introduction to Mass Communication (3)
- PED100 History & Philosophical Foundations  
 of Sport & Physical Education (3)
- PSY101 Introduction to Psychology (3)
- PED102 Management of Sports (3)

## TECHNOLOGY

### ■ Computer Aided Design – Certificate

*Signal Peak Campus*

#### Total Credits: 23-25

Preparation for entry-level positions in computer aided  
 design and drafting.

#### Required Core Courses (9)

- DFT127 Autocad I (3)  
 DFT128 Autocad II (3)  
 MAT101 or above (3)

#### Choose one of the following courses (1-3)

- DFT131 Autocad III (3)  
 DFT130 Advanced Computer Assisted Drafting  
 Applications (1-3)

### Choose one of the following courses (3)

- ENG121 Applied Technical Writing (3)  
 COM100 Fundamentals of Human Communication (3)

### Other Requirements (10)

#### Select 10 Credits from any of the following areas

- CIS Computer Information Systems  
 DFT Drafting  
 CET Civil Engineering Technology  
 MET Manufacturing Engineering Technology  
 ELC Electricity  
 ELT Electronics  
 HEO Heavy Equipment Operator  
 MAT120 Intermediate Algebra with Review (5)  
 or higher

### ■ Welding – Certificate

*Aravaipa Campus*

*Signal Peak Campus*

#### Total Credits: 35

Provides students with entry-level skills to enter the  
 welding profession as welding technicians.

#### Required Courses (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 (6)  
*(two semesters)*

#### Choose one of the following courses (3)

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

#### Choose from the following courses (14)

- AUT121 Auto Body Repairing and Refinishing (4)  
 AUT122 Auto Body Repairing and Refinishing II (4)  
 MAT141 College Mathematics, Standard (4)  
 MET120 Machine Trade Technology I (3.5)  
 WLD110 Survey of Welding Processes (3)  
 WLD120 Oxy-Acetylene Welding (3)  
 WLD125 Pipe Welding I (3)  
 WLD128 Blueprint Reading for Welders (3)  
 WLD223 Automatic and Semi-Automatic Welding (3)  
 WLD225 Shielded Metal Arc Welding III (3)



# COURSE DESCRIPTIONS





## Course Delivery

In addition to classes offered at our campus sites, Central Arizona College also offers classes in a variety of flexible modalities and formats for our students' convenience. Forms include on-site, face-to-face, hybrid, online, interactive TV, open entry/open exit, accelerated and correspondence. While assignments and methods vary, all classes, regardless of modality or format, hold students to the same rigor and high academic expectations.

The format of a class is indicated in the class schedule. 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 web site.

## Prerequisites and Corequisites

A *prerequisite* is a requirement that the student must meet prior to enrollment in the proposed course. A *corequisite* is a requirement that the student must meet concurrently with the proposed course.

Prerequisites and corequisites may be met by completing the course listed with a grade of "C" or better, completing a competency exam, or through an equivalent assessment score.

A Consent of Instructor for a student to enter a class without the prerequisite or corequisite does not guarantee a waiver of these prerequisites and corequisites for any other course.

Dropping a required corequisite will cause the student to be withdrawn from the class requiring the corequisite.

Courses that may be repeated for credit are so noted in the course description. These courses may not be repeated in the same semester.

Students may select the "Satisfactory/unsatisfactory" grading option on courses so noted in the course description.

## SPECIAL COURSES

### 088/098 Selected Topic, Developmental

*Variable Credit*

Developmental instruction in a specific discipline such as English, mathematics, reading, social sciences, etc. Provides foundation for college-level course work.

### 197/297 Career Advancement

*Up to 4 Credits*

A combination of on-the-job and related college training with the flexibility to meet students' specialized vocational needs. May be offered in any discipline with appropriate approvals. May be repeated for credit.

### 198/298 Selected Topics

*Variable Credit*

Special and current topics offered 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.

The following is a list of classes that can be taught by Central Arizona College. Not all of these classes are taught every semester. Please see the Class Schedule for a listing of currently offered classes.

## ACCOUNTING (ACC)

### ACC100 Fundamentals of Accounting

*3 Credits (3 Lectures)*

The concepts of accounting for a personal service enterprise or small retail business.

*Prerequisite: RDG091. Approved for Tech Prep.*

### ACC121 Income Tax Fundamentals

*3 Credits (3 Lectures)*

Theory, rules, and procedures used in preparing federal income tax returns for individuals, corporations, and partnerships both manually and with the use of computer software.

*Prerequisite: RDG100A or RDG100B.*

### ACC201 Financial Accounting

*3 Credits (3 Lectures)*

Theory and practice of accounting applicable to the accumulation, external reporting, and external uses of financial information.

*Prerequisite: RDG100A or RDG100B.*

### ACC202 Managerial Accounting

*3 Credits (3 Lectures)*

Selection and analysis of accounting information for internal organization use by management.

*Prerequisite: ACC201.*

### ACC222 Payroll Accounting

*3 Credits (3 Lectures)*

Functions and practical operation of payroll accounting, with examination of current payroll tax laws, methods of computing wages and salaries, timekeeping methods, and microcomputer software for payroll systems.

*Prerequisite: ACC100 or ACC201.*



### **ACC226 Accounting with QuickBooks Pro**

3 Credits (3 Lectures)

Practical application of accounting utilizing QuickBooks Pro. Topics covered will include the general ledger, accounts receivable, accounts payable, job costing, and payroll.

*Prerequisite: ACC100 or ACC201.*

### **ACC227 Accounting with Peachtree Complete**

3 Credits (3 Lectures)

Practical application of accounting concepts utilizing Peachtree Complete. This course covers accounts payable, accounts receivable, payroll, inventory, job costing, fixed assets, and time and billing features of Peachtree Complete.

*Prerequisite: ACC100 or ACC201.*

### **ACC230 Uses of Accounting Information I**

3 Credits (3 Lectures)

Introduces how to use accounting information by emphasizing the business cycle. Concentration is placed on financial statement analysis and how accounting information is used by business stakeholders to make sound decisions. This course is primarily designed for those students planning to transfer to Arizona State University.

*Prerequisites: RDG100A or RDG100B and ACC100 or ACC201.*

### **ACC240 Uses of Accounting Information II**

3 Credits (3 Lectures)

A continuation of ACC230. Emphasis in ACC240 is on using accounting information internally to manage a business. This course is primarily designed for those students planning to transfer to Arizona State University.

*Prerequisite: ACC230.*

### **ACC250 Introductory Accounting Lab**

1 Credit (1 Lecture)

The mechanics (debits and credits) of accounting for accumulating financial data and generation of financial reports. This course is primarily designed for those students planning to transfer to Arizona State University.

## **ADMINISTRATION OF JUSTICE (AJS)**

### **AJS101 Introduction to Administration of Justice**

3 Credits (3 Lectures)

Organization and jurisdiction of local, state, and federal law enforcement, judicial, and correctional systems. History and philosophy, career opportunities and qualifying requirements, terminology, and constitutional limitations of the system.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

### **AJS110 Public Safety Dispatch Education and Training**

3 Credits (3 Lectures)

An introduction to the theories, methods, and techniques of public safety dispatching for police, fire, and EMS agencies to include actual scenario-based instruction and practice.

### **AJS122 Traffic Control**

3 Credits (3 Lectures)

Analysis of traffic control; fundamentals of traffic accident investigation and motor vehicle law, including laws of Arizona.

### **AJS123 Ethics and the Administration of Justice**

3 Credits (3 Lectures)

Explores ethical issues in the justice system. Focuses on ethics and the law, the police, courts, and corrections. Reviews ethical theory as it relates to the administration of justice.

*Prerequisite: RDG100A or RDG100B.*

### **AJS124 Defensive Tactics**

3 Credits (1 Lecture, 4 Labs)

Physical control of suspects including handcuffing, search security, baton, come-along, and defense tactics.

*Prerequisites: Certification of good health. Central Arizona Regional Law Officers' Training Academy (CARLOTA) Program students only.*

### **AJS129 Survey of Law Enforcement**

3 Credits (3 Lectures)

An introduction to the philosophy, history, and development of law enforcement; a review of the organization and jurisdiction of law enforcement agencies; and a survey of opportunities and current trends in law enforcement.

### **AJS130 Firearms**

3 Credits (2 Lectures, 3 Labs)

Firearm safety, marksmanship, combat shooting, and legal responsibilities.

*Prerequisite: CARLOTA Program students only.*

### **AJS140 Communications in Law Enforcement**

3.5 Credits (3 Lectures, 2 Labs)

Properly written reports and elements of composition and substance; techniques of police radio use. Use of modern technology in gathering and processing information; benefits of developing police community relations and recognition of cultural and behavioral differences along with dynamics of officer/citizen interactions.



## **AJS209 Substantive Criminal Law**

*3 Credits (3 Lectures)*

Philosophy of legal sanctions and historical development from common law to modern American criminal law, classifications of crimes, elements of and parties to crimes, general definitions of crimes, and common defense.

*Prerequisite: AJS101 or currently enrolled in CARLOTA Program.*

## **AJS212 Juvenile Justice Procedures**

*3 Credits (3 Lectures)*

History and development of juvenile justice theories, procedures, and institutions.

*Prerequisite: AJS101 or SOC100.*

## **AJS222 Criminalistics**

*3 Credits (3 Lectures)*

Introduction to the scientific aspects of criminal investigation and the crime laboratory's role in the criminal justice system. Emphasis on the collection, preservation, and transportation of evidence and the techniques of examining physical evidence to include modern criminalistic research developments.

*Prerequisite: AJS101.*

## **AJS224 Police Administration**

*3 Credits (3 Lectures)*

Principles of administration, organization, and management; responsibilities and interrelationships of administrative and line-and-staff services. Analysis of functional divisions of modern police and correctional operations.

*Prerequisite: AJS101.*

## **AJS225 Criminology**

*3 Credits (3 Lectures)*

Study of deviance and society's role in defining behavior. Theories of criminality and the economic, social, and psychological impact of crime, victimization, and relationships between statistics and crime trends.

*Prerequisite: AJS101 or SOC100.*

## **AJS229 Criminal Justice Training**

*3 Credits (3 Lectures)*

An introduction to theories, methods, and techniques of learning and instruction, with a review of various instructional approaches and instruction in the use of audiovisual equipment.

*Prerequisite: Police personnel sent by criminal justice agency.*

## **AJS230 The Police Function**

*3 Credits (3 Lectures)*

Theories of procedures and methods of operation of public police, with emphasis on discretionary powers, with a survey of career opportunities and current trends in law enforcement.

*Prerequisite: AJS101 or currently enrolled in CARLOTA Program.*

## **AJS240 The Corrections Function**

*3 Credits (3 Lectures)*

History and development of correctional theories and institutions.

*Prerequisite: AJS101.*

## **AJS241 Management of the Offender: Institutional**

*3 Credits (3 Lectures)*

Study of correctional institutions with emphasis on personnel and security measures, care and treatment programs and institutional planning to familiarize persons in the criminal justice system with matters of custody and treatment in correctional institutions and jails.

*Prerequisite: AJS240.*

## **AJS242 Management of the Offender: Community Setting**

*3 Credits (3 Lectures)*

Principles and procedures of probation and parole, attention to pertinent legal principles, and case study preparation and analysis. Familiarize with matters of custody and treatment in correctional institutions and jails.

*Prerequisite: AJS240.*

## **AJS260 Procedural Criminal Law**

*3 Credits (3 Lectures)*

Introduction to procedural criminal law, focusing on court holdings, the procedural requirements, and effect on the daily operations of law enforcement.

*Prerequisite: AJS101.*

## **AJS270 Community Relations**

*3 Credits (3 Lectures)*

Recognition and understanding of community problems; methods of coping with crisis situations, victimology, ethnic and minority cultures, and cooperating with personnel in community action programs and local police operations.

*Prerequisite: AJS101 or currently enrolled in CARLOTA Program.*

## **AJS275 Criminal Investigations**

*3 Credits (3 Lectures)*

Theory of criminal investigation, crime scene procedures, case preparation, interviewing, and basic investigative techniques.

*Prerequisite: AJS101 or currently enrolled in CARLOTA Program.*



## ADULT BASIC EDUCATION (ABE)

### ABE080 Adult Basic Education Beginning Literacy

3 Credits (3 Lectures)

Introductory or beginning literacy level of basic math, reading, science, social studies and writing skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: Pre-test to determine existing skill level.*

### ABE081 Adult Basic Education I

3 Credits (3 Lectures)

Beginning level of basic math, reading, science, social studies and writing skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ABE080 or pre-test to determine existing skill level and to evaluate deficiencies and determine specific needs.*

### ABE082 Adult Basic Education II

3 Credits (3 Lectures)

Low intermediate level of basic math, reading, science, social studies and writing skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ABE081 or pre-test to determine existing skill level and to evaluate deficiencies and determine specific needs.*

### ABE093 Adult Basic Education III

3 Credits (3 Lectures)

High intermediate level of basic math, reading, science, social studies and writing skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ABE082 or pre-test to determine existing skill level and to evaluate deficiencies and determine specific needs.*

## AGRICULTURE BUSINESS (AGB)

### AGB121 Resource and Environmental Economics

3 Credits (3 Lectures)

Introductory analysis of the agriculture economy dealing with the principles of economics and marketing of agriculture products.

### AGB123 Agriculture Accounting

3 Credits (3 Lectures)

Agriculture accounting principles and practices.

### AGB124 Microcomputers in Agriculture

3 Credits (2 Lectures, 2 Labs)

Introduction to agricultural use of microcomputers in word processing, spreadsheets, presentation graphics, networks and other areas.

*Prerequisite: RDG100A or RDG100B.*

### AGB127 Farm Business Management IA

5 Credits (2 Lectures, 9 Labs)

Financial and physical recordkeeping required for farm analysis and decision-making.

### AGB128 Farm Business Management IB

5 Credits (2 Lectures, 9 Labs)

This course continues the study of proper accounting procedures for ensuring accurate and timely information farm business management.

*Prerequisite: AGB127.*

### AGB130 Agricultural Leadership

1 Credit (1 Lecture)

Identification of styles and roles of agricultural leadership; development of leadership techniques and skills required in working with organizations and youth groups; including communicating, guiding, evaluating and ethical consideration for leaders. May be taken two times for credit.

### AGB213 Introduction to Agricultural Commodity and Food Marketing

3 Credits (3 Lectures)

An investigation of the organizational, institutional and economic principles that form the agricultural and food marketing systems in the United States. Applications of microeconomics, market performance, and international trade analysis.

### AGB225 Agriculture Business Analysis

3 Credits (3 Lectures)

The use of agriculture accounting in analyzing a business to determine profit and loss, financing the credit needs of an agriculture business, making budgets, and programming.

### AGB228 Farm Business Management IIA

5 Credits (2 Lectures, 9 Labs)

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

### AGB229 Farm Business Management IIB

5 Credits (2 Lectures, 9 Labs)

Process/procedures enabling cooperator to complete the second financial analysis of his/her farm, which includes income statement, net worth, cash flow, budget projections, and enterprise reports.

*Prerequisite: AGB228.*



## **AGB230 Farm Business Management IIIA**

*5 Credits (2 Lectures, 9 Labs)*

Instruction and assistance required to properly evaluate and reorganize the farm business, focusing on farm accounting and analysis of aspects identified in the organizational plan.

## **AGB231 Farm Business Management IIIB**

*5 Credits (2 Lectures, 9 Labs)*

Farm business management necessary to complete the third year of farm analysis; emphasizing comparative analysis and business reorganization.

*Prerequisite: AGB230.*

## **AGB232 Advanced Farm Management 2007**

*3 Credits (1 Lecture, 6 Labs)*

A seminar designed to provide educational support to assist in the selection of farm business management 2007 software updates. Emphasis is placed on update procedures and utilization of software enhancements.

*Prerequisite: Farm Business Management certificate or equivalent.*

## **AGB233 Farm Business Management Payroll**

*3 Credits (1 Lecture, 6 Labs)*

Procedures to enable participants to understand and use payroll computer software in farm business.

## **AGB234 Agricultural Leadership Development**

*3 Credits (3 Lectures)*

Characteristics of effective leaders. Leadership styles and strategies for the management and organization of youth groups in agriculture. Practice in leadership development techniques.

*Prerequisite: RDG100A or RDG100B.*

## **AGRICULTURE SCIENCE (AGS)**

### **AGS101 World of Plants**

*4 Credits (3 Lectures, 3 Labs)*

The structure, function and use of plants in the living world. Scientific experiences relating to the plant kingdom and the plant environment.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

### **AGS104 Agricultural Environmental Science**

*4 Credits (3 Lectures, 3 Labs)*

An introductory course with emphasis on science-based approaches to understanding the environmental concepts of ecosystems, population dynamics, and agricultural sustainability.

*Prerequisite: RDG100A or RDG100B.*

### **AGS106 Entomology**

*4 Credits (3 Lectures, 3 Labs)*

Identification, classification, control, and management of insects and other land arthropods affecting humans and their environment.

### **AGS120 Principles of Horticulture**

*3 Credits (2 Lectures, 3 Labs)*

Principles and skills in the science, operations and management of field, orchard, and ornamental horticultural plant propagation using seeds, cuttings, budding and grafting in propagating structures and outdoor nurseries.

*Prerequisite: RDG100A or RDG100B.*

### **AGS122 Natural Resources and Conservation**

*3 Credits (3 Lectures)*

The conservation and multiple use of renewable natural resources, including forest, range, wildlife, and water.

*Prerequisite: RDG100A or RDG100B.*

### **AGS130 Plant Science**

*4 Credits (3 Lectures, 3 Labs)*

An introduction to growth, development, reproduction and structure of vascular plants. Fundamental activities of plants including photosynthesis and respiration. Emphasis on agricultural and horticultural crops of Arizona.

*Prerequisite: RDG100A or RDG100B.*

### **AGS221 Soil Science**

*4 Credits (3 Lectures, 3 Labs)*

Fundamental principles of soil science, including the origin, nature, and classification of soils, emphasizing the chemical, physical, and biological properties in relation to growth and nutrition of plants.

*Prerequisite: RDG100A or RDG100B.*



## AIR CONDITIONING AND REFRIGERATION (ACR)

### ACR120 Principles of Air Conditioning Systems

3 Credits (2 Lectures, 2 Labs)

The theory of refrigerants, stressing pressure and temperature relationship and the theory of the refrigeration cycle, including all mechanical systems components: compressors, evaporators, condensers, metering devices, and accessories. The importance of safety is emphasized.

### ACR121 Air Conditioning Electrical Systems and Controls

3 Credits (2 Lectures, 2 Labs)

The study of electricity with application to air conditioning systems: magnetic starters, relays, capacitors, motors and safety devices, low and high-voltage control circuits, wiring diagrams, and schematic symbols, emphasizing the use and care of electrical test equipment and meters.

### ACR122 Air Conditioning Diagnosis and Repair

3 Credits (2 Lectures, 2 Labs)

Diagnostic and repair procedures relating to electrical and mechanical components used in air conditioning systems ranging in size from window units to large residential and medium-sized commercial units. Safety procedures are emphasized.

*Prerequisite:* ACR120.

## ANIMAL SCIENCE (ANS)

### ANS101 Animal Industry

3 Credits (2 Lectures, 3 Labs)

Fundamental principles of animal, dairy, and poultry science focusing on marketing and distribution.

### ANS111 Horseshoeing I

3 Credits (2 Lectures, 3 Labs)

Fundamentals for the beginning horseshoer, including horse anatomy and physiology relative to the proper shoeing of horses.

### ANS172 Introduction to Western Horsemanship

3 Credits (2 Lectures, 3 Labs)

An introduction to the basic theories of western horsemanship with an emphasis on correct seat, leg and hand positions. Course includes proper equine handling techniques. Students will ride in a schooling show environment using western tack. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### ANS200 Introduction to Equine Science

3 Credits (3 Lectures)

Introduction to equine sciences: including basic structure and function of equine anatomy, disease prevention and treatment, common breeds, and nutritional requirements of horses.

*Prerequisite:* RDG100A or RDG100B.

### ANS211 Advanced Horseshoeing

3 Credits (2 Lectures, 3 Labs)

Advanced skills in shoeing horses to eliminate and/or correct lameness to the extent that the animal remains useful and pain free.

*Prerequisite:* ANS111.

### ANS213 Animal Genetics

3 Credits (3 Lectures)

The principles of genetics in domestic animals including molecular, classical and population genetics.

*Prerequisite:* BIO100 or higher.

### ANS215 Anatomy and Physiology of Domestic Animals

4 Credits (3 Lectures, 3 Labs)

Functional anatomy and systemic physiology of domestic animals with emphasis on physiological systems of importance to animal production.

*Prerequisite:* BIO100 or higher.

### ANS216 Equine Anatomy & Physiology

3 Credits (3 Lectures)

Introduction to the structure and function of the equine. Includes cell structure and anatomy & physiology of major systems including skeletal, muscular, circulatory and digestive systems.

*Prerequisite:* ANS200.

### ANS220 Artificial Insemination

3 Credits (2 Lectures, 3 Labs)

Anatomy and physiology of reproduction, heat detection, semen handling, herd management, and the techniques of artificial insemination.

### ANS226 Feeds and Feeding

3 Credits (3 Lectures)

Identification and preparation of feeds, digestion and utilization of various feed products, and computation of standard rations for livestock.



## ANTHROPOLOGY (ASB)

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

3 Credits (3 Lectures)

Basic concepts and methods of physical anthropologists and archaeologists. Evidence and processes of human evolution and of culture change. Primates. Fossil hominids and their tools. Race, variation, and heredity. Environment and human biology. Prehistoric culture and society.

*Prerequisite:* RDG100A or RDG100B.

**ASB102 Cultural Anthropology**

3 Credits (3 Lectures)

Principles and concepts of sociocultural anthropology and anthropological linguistics with illustrations from a variety of cultures around the world. Exploration of culture to include; concept; culture change and globalization; and sociocultural systems, subsistence, political organization, economies, marriage and family, kinship and descent, language, religion and arts. Examination of perspectives and issues concerning ethnicity, race and gender, and consideration of historical and potential contributions arising from societal diversity.

*Prerequisite:* RDG100A or RDG100B.

**ASB201 Indians of the Southwest**

3 Credits (3 Lectures)

Introduction to the cultural geography and social institutions of cultures of contemporary Indians of the American Southwest and their antecedents. With respect to ethnic, race and gender issues, an examination of the similarities and differences among Southwestern Indian cultures and between Indian cultures and other social groups in the United States. Examination of historic and contemporary relations among Indian cultures. Examination of historic and contemporary relations of Indian peoples with Spain, Mexico, and the United States' federal and state governments. Examination of relationships of Indian nations to multinational corporations and the connectedness of Indian peoples with other peoples of the world, including considerations of global issues.

*Prerequisite:* RDG100A or RDG100B.

## ARCHAEOLOGY (ARH)

**ARH200 Principles of Archaeology**

3 Credits (3 Lectures)

History of archaeological research; survey of concepts, methods and goals of archaeology as a subdiscipline of anthropology.

*Prerequisite:* RDG100A or RDG100B.

## ART (ART)

**ART100 Art Appreciation**

3 Credits (3 Lectures)

Introduction to the history, development, materials, and processes of art with an emphasis on painting, sculpture, and architecture.

*Prerequisite:* RDG100A or RDG100B.

**ART101 Two-Dimensional Design**

3 Credits (2 Lectures, 3 Labs)

A study of perception, emphasizing the elements and principles of design as a basis of all creative work in the visual arts, with emphasis on two-dimensional media.

**ART102 Three-Dimensional Design**

3 Credits (2 Lectures, 3 Labs)

A study of perception, emphasizing the elements and principles of design as a basis of all creative work in the visual arts, with emphasis on three-dimensional media.

**ART103 Beginning Jewelry and Metalsmithing**

3 Credits (2 Lectures, 3 Labs)

Basic jewelry design and silversmithing techniques for the beginner.

**ART104 Advanced Jewelry and Metalsmithing**

3 Credits (2 Lectures, 3 Labs)

Advanced jewelry design and metalsmithing techniques. May be taken two times for credit.

*Prerequisite:* ART103.

**ART105 Ceramics I**

3 Credits (2 Lectures, 3 Labs)

A working overview of handbuilding, wheel throwing, glazing, materials and concepts of ceramics as a foundation for further work in ceramic arts. Satisfactory/unsatisfactory grading available.

**ART106 Ceramics II**

3 Credits (2 Lectures, 3 Labs)

Instruction in advanced ceramic techniques and in-depth study of one or more construction techniques and/or surface treatments. May be taken two times for credit.

*Prerequisite:* ART105.

**ART107 Basic Drawing**

3 Credits (2 Lectures, 3 Labs)

Introductory study of linear perspective, shading theory and composition using basic drawing media.



### **ART108 Intermediate Drawing**

*3 Credits (2 Lectures, 3 Labs)*

Drawing problems with emphasis on the creative use of different techniques as a means of expression. May be repeated for credit.

*Prerequisite: ART107.*

### **ART201 Painting I**

*3 Credits (2 Lectures, 3 Labs)*

An introduction to painting problems, techniques, and subject matter, with emphasis on skill building.

*Prerequisite: ART107.*

### **ART202 Painting II**

*3 Credits (2 Lectures, 3 Labs)*

Exploration of color, composition, techniques and subject matter in painting media.

*Prerequisite: ART201.*

### **ART203 Life Drawing**

*3 Credits (2 Lectures, 3 Labs)*

An introduction to drawing the human figure emphasizing form, structure and anatomy. May be taken two times for credit.

*Prerequisite: ART107.*

### **ART204 Watercolor Painting**

*3 Credits (2 Lectures, 3 Labs)*

An introduction to the basic techniques of transparent watercolor with application of basic design and drawing principles in composition. May be taken two times for credit.

*Prerequisite: ART107.*

### **ART205 Intermediate Painting**

*3 Credits (2 Lectures, 3 Labs)*

Projects in painting with emphasis on compositional problems and personal expression. May be taken two times for credit.

*Prerequisite: ART202.*

### **ART206 Portrait Drawing**

*3 Credits (1 Lecture, 2 Studios)*

Drawing the human figure with emphasis on portraiture.

*Prerequisites: ART107, RDG100A or RDG100B.*

### **ART207 Art of the Western World I**

*3 Credits (3 Lectures)*

A survey of the history of art in Western Civilization from the Prehistoric Era through the Gothic Era.

*Prerequisite: RDG100A or RDG100B.*

### **ART208 Art of the Western World II**

*3 Credits (3 Lectures)*

A survey of the history of art in the Western Civilization from the Renaissance to the present.

*Prerequisite: RDG100A or RDG100B.*

### **ART210 Ceramics Workshop**

*2 Credits (2 Lectures)*

An introductory course in the technology, processes, techniques and aesthetics of ceramic art. Satisfactory/unsatisfactory grading available. May be taken more than four times for credit.

*Prerequisite: ART105.*

### **ART215 Printmaking**

*3 Credits (2 Lectures, 3 Labs)*

An introduction to two or more methods of producing fine art prints.

*Prerequisite: None; ART101 and ART107 are recommended.*

## **ASSOCIATED GENERAL CONTRACTORS (AGC)**

### **AGC101 Orientation – Associated General Contractors and Trade**

*0.5 Credit (0.5 Lecture)*

An overview of the Associated General Contractor's Operator Apprenticeship Program policies and requirements, heavy equipment operation, operator responsibilities and career opportunities. Basic principles of safety and engine operation.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll in this course.*

### **AGC102 Introduction to Construction Math**

*1 Credit (1 Lecture)*

Basic addition to multiplying fractions, multiplication tables and unit conversion chart. Prepares trainees to do the calculations performed on the job site.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC103 Basic Safety**

*0.5 Credit (0.5 Lecture)*

Need-to-know information for trainees to work safely. Personal protective equipment, performing basic construction tasks safely, and what to do if an accident occurs.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*



### **AGC104 Soils I**

*1 Credit (1 Lecture)*

An overview of soil composition and characteristics. Description and use of different types of soil classification methods. Introduction to the concept of soil compaction in highway building and building construction.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC105 Grades I**

*1 Credit (1 Lecture)*

Introduction to the concept of preparing graded surfaces using heavy equipment. Identification of construction stakes and interpretation of marks on each type of stake. Description of the process for grading slopes.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC106 Machine Orientation I**

*0.5 Credit (0.5 Lecture)*

Introduction to the most used pieces of heavy equipment: dump trucks, backhoes, bulldozers, wheel loaders, excavators, and others. Functional operation and uses for each piece of equipment. Performing pre-operational walk-around inspections and procedures, correctly starting and stopping the machine, and performing basic maneuvers.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC107 Machine Operation I**

*1 Credit (1 Lecture)*

Basic on-the-iron training on backhoes, excavators, bulldozers, front-end loaders, scrapers, graders, and dump and water trucks. Safely performing and practicing basic maneuvers, pre-start and proper shut-down procedures, basic earth moving tasks on assigned machines.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC110 Mobile Air Conditioning**

*1 Credit (1 Lecture)*

This course presents the theory of operation, diagnostic procedures. Machines and location of components and preventative maintenance and procedures of repair will be covered. The use of technical service literature and an array of special engine tools are emphasized. Safety is stressed.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC111 Mobile Air Conditioning Lab**

*1.5 Credits (5 Labs)*

This course will cover component function, testing, diagnostic and repair procedures on actual machines, the use of technical service literature, and an array of service tools are emphasized. Safety is stressed. (Apprentice is required to acquire 96 hours on the job working with supervisor to meet this requirement.)

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC121 Equipment Preventive Maintenance**

*1 Credit (1 Lecture)*

Preventive maintenance responsibilities including specifying basic equipment subsystems and major mechanical systems. How and when to complete routine inspections of equipment.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC122 Introduction to Earth Moving**

*1 Credit (1 Lecture)*

A broad introduction to the process of planning and executing earth-moving activities on various types of construction projects. Use of heavy equipment such as bulldozers, scrapers, excavators, and loaders.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC123 Machine Orientation II**

*0.5 Credit (0.5 Lecture)*

A continuation of Machine Orientation I. Identifying safety hazards, proper start-up and shut-down procedures, and basic operational procedures.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC124 Machine Operation II**

*2.5 Credits (1 Lecture, 5 Labs)*

Machine operation and earth moving to build on previous training for advancement of skills. Identifying safety hazards, proper start-up, shut-down, and operational procedures.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC131 Safety Part II**

*1 Credit (1 Lecture)*

Safety requirements for operating heavy equipment, activities of Occupational Safety and Health Administration relative to OSHA inspections and reporting requirements, and use of protective gear.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC132 Rigging and Hoisting**

*1 Credit (1 Lecture)*

Slings, hardware, hoists, and hitches used in rigging operations, highlighting critical safety issues and accepted rigging techniques and practices.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC133 Machines Theory I (Backhoes, Excavators, Dozers and Loaders I)**

*1 Credit (1 Lecture)*

Reviews the use and maintenance of backhoes, excavators, bulldozers, and front-end loaders. Emphasizes the safety of the operator and the equipment. Covers operating procedures and techniques through actual on-the-iron demonstrations and the uses of various machine attachments.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*



### **AGC134 Machine Operation III**

*2 Credits (1 Lecture, 3 Labs)*

Hands-on operator training on backhoes, excavators, bulldozers and front-end loaders I, utilizing skills learned in previous classes.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC141 Soils II**

*1 Credit (1 Lecture)*

Basic soil classification methods, factors affecting classification, and soil density and compaction requirements. Requirements for handling and combining different types of materials.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC142 Grades II**

*1 Credit (1 Lecture)*

Proper practices for setting grades off from bench marks and methods for setting grades using various types of levels. Reading and interpreting construction plans to determine grading requirements; review of basic grading operations.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC143 Machines Theory II (Scrapers, Loaders II, Dump and Water Trucks)**

*1 Credit (1 Lecture)*

Review of the use and maintenance of scrapers, front-end loaders II, dump and water trucks, emphasizing the safety of the operator and the equipment. Operating procedures and techniques through actual on-the-iron demonstrations and the uses of various machine attachments.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC144 Machine Operation IV**

*2 Credits (1 Lecture, 3 Labs)*

Hands-on operator training on scrapers, front-end loaders II, dump and water trucks, utilizing skills learned in previous classes.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC151 Machines Theory III (Graders and Telescoping Excavators)**

*0.5 Credit (0.5 Lecture)*

Reviews the use and maintenance of motor graders and telescoping excavators. Emphasizes the safety of the operator and equipment. Covers operating procedures and techniques through actual on-the-iron demonstrations and the uses of various machine attachments.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC152 Advanced Safety**

*1 Credit (1 Lecture)*

Advanced safety techniques and requirements for heavy equipment operators. Emphasizes organizing and conducting safety meetings. Discussion of OSHA hazardous material requirements and safe operations of equipment. Safety reporting, inspections, and investigations.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC153 Soils III**

*1 Credit (1 Lecture)*

Problems associated with bridged areas and breakthroughs, as well as soil stabilization. Proper use of geotextile materials. Review of soil compaction requirements, and specific procedures for running moisture-density tests. Methods of fixing compaction problems.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC154 Machine Operation V**

*2.5 Credits (1 Lecture, 5 Labs)*

Hands-on operator training on motor graders and telescoping excavators, utilizing skills learned in previous classes.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC161 Finishing and Grading**

*1.5 Credits (1 Lecture, 2 Labs)*

Training on the various types of heavy equipment to finish and trim grades and slopes of roads, pads, ditches, and other structures. Specifications used for grading and procedures for checking the final grade.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC162 Operator Supervision**

*1 Credit (1 Lecture)*

Responsibilities of the finish operator. Discussion of leadership abilities in relation to organizing and directing workers and operations. Understanding and interpreting production requirements and specifications. Setting up and adjusting leveling instruments.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

### **AGC163 Machine Operation VI**

*2.5 Credits (1 Lecture, 5 Labs)*

Advanced hands-on operator training on all machines used in the program, utilizing skills learned in previous classes. Finishing touches for the operator before certification.

*Prerequisite: Must be sponsored by an Associated General Contractor to enroll.*

**ASTRONOMY (AST)****AST101 Survey of Astronomy**

4 Credits (3 Lectures, 3 Labs)

An introduction to the history of astronomy, use of astronomical instruments, celestial motion, space flight, planetary systems, structure and evolution of stars, galaxies and cosmology. Labs will include nighttime observing sessions.  
*Prerequisites: RDG100A or RDG100B; MAT091.*

**AUTOMOTIVE/DIESEL (AUT)****AUT121 Auto Body Repairing and Refinishing I**

4 Credits (2 Lectures, 4 Labs)

An introduction to body repair techniques including surface preparation and painting procedures.

**AUT122 Auto Body Repairing and Refinishing II**

4 Credits (2 Lectures, 4 Labs)

Emphasis on detailed body repair procedures and advanced painting techniques. Principles of wire feed welding, unibody construction and repair.  
*Prerequisite: AUT121.*

**BIOLOGY (BIO)****BIO100 Biology Concepts**

4 Credits (3 Lectures, 2 Labs, 1 Recitation)

Basic principles and concepts of biology. Methods of scientific inquiry and behavior of matter and energy in biological systems are explored. Field trips may be required at student's expense.  
*Prerequisite: RDG100A or RDG100B.*

**BIO156 Human Biology for Allied Health**

4 Credits (3 Lectures, 3 Labs)

An introductory course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, genetics and microbiology.  
*Prerequisite: RDG100A or RDG100B.*

**BIO160 Introduction to Human Anatomy and Physiology**

4 Credits (3 Lectures, 3 Labs)

An introduction to and study of the structure and function of the human body. Structural organization, homeostasis, control mechanisms and the major organ systems of the body will be emphasized.  
*Prerequisite: RDG100A or RDG100B.*

**BIO181 General Biology I**

4 Credits (2 Lectures, 1 Recitation, 3 Labs)

A basic yet comprehensive study of living organisms, including the principles of structure and function at the molecular, cellular and organismal levels.  
*Prerequisite: RDG100A or RDG100B.*  
*Recommended: CHM130 or one year of high school chemistry.*

**BIO182 General Biology II**

4 Credits (3 Lectures, 3 Labs)

A continuation of BIO181, using scientific reasoning and critical thinking skills. Topics include a cursory study of biology of evolution, ecology and human anatomy.  
*Prerequisites: BIO181; RDG100A or RDG100B.*

**BIO201 Human Anatomy – Physiology I**

4 Credits (3 Lectures, 3 Labs)

Study of structure and function of the human body. Topics include a general introduction and basic orientation of the human body, basic chemistry for biology, cells, tissues, integumentary system, skeletal system, muscular system, nervous system and the special senses.  
*Prerequisites: BIO156 or BIO181 or one year of high school biology; RDG100A or RDG100B.*

**BIO202 Human Anatomy – Physiology II**

4 Credits (3 Lectures, 3 Labs)

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; RDG100A or RDG100B.*

**BIO205 Microbiology**

4 Credits (3 Lectures, 3 Labs)

Structure and function of microorganisms and the role they play in the environment and human disease, with emphasis on the medical importance of microbes. Laboratory includes the handling and identification of microorganisms.  
*Prerequisites: BIO156 or BIO181; CHM130 or one year of high school chemistry; RDG100A or RDG100B.*



## BUILDING CONSTRUCTION TECHNOLOGY (BCT)

### **BCT110 Introduction to Construction Industry**

3 Credits (3 Lectures)

Focuses on safety on the construction site and the role that the construction industry plays in the Arizona economy. *Approved for Tech Prep.*

### **BCT115 Construction Math and Blueprints**

3 Credits (3 Lectures)

Math and blueprint fundamentals as they apply to plumbing, carpentry, and electrical in the construction industry.

*Corequisite: MAT081 or equivalent score on math placement test.*

### **BCT120 Plumbing Fundamentals for Construction**

4 Credits (4 Lectures)

The basics of plumbing, including safety, tools, and code.

*Corequisite: MAT081 or equivalent score on math placement test.*

### **BCT125 Electrical Fundamentals for Construction**

4 Credits (4 Lectures)

The basics of electrical construction, including concepts, terminology, safety, code, and applications.

*Corequisite: MAT081 or equivalent score on math placement test.*

### **BCT130 Carpentry Fundamentals for Construction**

6 Credits (6 Lectures)

The basics of carpentry including safety, tools, code, and hands-on skills.

*Corequisite: MAT081 or equivalent score on math placement test. Approved for Tech Prep.*

### **BCT135 Masonry Fundamentals for Construction**

4 Credits (4 Lectures)

The basics of masonry construction including concepts, terminology, safety, code and applications.

### **BCT140 Concrete Finishing Fundamentals for Construction**

4 Credits (4 Lectures)

The basics of concrete finishing construction, including concepts, terminology, safety, code, and applications.

### **BCT151 Applied Construction Technology I**

6 Credits (2 Lectures, 12 Labs)

Application of building construction skills, including preliminary site work, execution of frame, and rough-in of electrical and plumbing.

*Prerequisites: BCT110, BCT115, BCT120, BCT125, BCT130.*

### **BCT152 Applied Construction Technology II**

5 Credits (5 Lectures)

Application of building construction skills, including completion of exterior walls and roofing; installation of insulation, drywall, cabinetry, flooring, and appliances; and completion of plumbing, electrical, and mechanical work.

*Prerequisites: BCT110, BCT120, BCT125, BCT130, BCT135, BCT140.*

### **BCT155 Professional Development for Construction**

3 Credits (3 Lectures)

Overview of communication, job search, team building, and introductory business skills for use in the construction industry. Personal money management also included.

### **BCT210 Construction Internship**

3-6 Credits (3-6 Internships)

Construction internship office/field experience with private/public agencies or as a part of a citizen volunteer group.

*Prerequisites: BCT151, BCT152, BCT155 with C or better or Consent of Instructor.*

## BUSINESS (BUS)

### **BUS100 Introduction to Business**

3 Credits (3 Lectures)

Survey of the field of business administration in functional areas of marketing, economics, production, business organization and ownership, financial management, human resources, management, communication, taxation and regulation.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

### **BUS101 Business Mathematics**

3 Credits (3 Lectures)

A study of arithmetic computations as applied in various business transactions including discounts, interest, payroll, bank reconciliations, and basic business statistics.

*Prerequisites: MAT081; RDG100A or RDG100B.*



## **BUS110 Workforce Readiness**

*3 Credits (3 Lectures)*

Introduction to the important steps for success in gaining employment in the workforce.

## **BUS120 Personal Money Management**

*3 Credits (2 Lectures, 3 Labs)*

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, health care, insurance, savings, investments, debt, and taxes.

*Prerequisite: RDG100A or RDG100B.*

## **BUS122 Small Business Management**

*3 Credits (3 Lectures)*

Factors in planning, owning and managing a small business with use of case materials to develop entrepreneurship and managerial/marketing skills.

*Prerequisite: RDG100A or RDG100B.*

## **BUS123 Human Relations**

*3 Credits (3 Lectures)*

Interpersonal skills necessary for improving supervision and leadership through a basic understanding of interactions among people.

*Prerequisite: RDG100A or RDG100B.*

## **BUS180 Introduction to Marketing**

*3 Credits (3 Lectures)*

An introduction to marketing with regard to product, principles, practices, and problems of the total marketing process.

*Prerequisites: MAT082; RDG100A or RDG100B.*

## **BUS190 Applied Business Management**

*3 Credits (3 Lectures)*

Traditional and contemporary theories and concepts of management; theories and principles of the four management functions; and a working knowledge of the law and social and ethical issues.

*Prerequisite: BUS100.*

## **BUS201 Legal Environment of Business**

*3 Credits (3 Lectures)*

An examination of the legal framework governing rules of conduct among businesses, and the legal implications of establishing business policy.

*Prerequisite: RDG100A or RDG100B.*

## **BUS207 Business Communications**

*3 Credits (3 Lectures)*

Written and oral communications in organizations with emphasis on writing business letters, memos, and reports; speaking and listening skills; communication theory; critical analysis of appropriate writing; and various business communication situations.

*Prerequisite: ENG101 or OAS125.*

## **BUS208 Business Statistics**

*3 Credits (3 Lectures)*

A review of business applications using descriptive and inferential statistics, measurement of relationships, and statistical process control management techniques.

*Prerequisites: MAT120; RDG100A or RDG100B; CIS120 or CBA123A or CBA123B.*

## **BUS260 Applied Business Seminar**

*3 Credits (3 Lectures)*

A capstone course for all business students completing degree requirements. Students interact and apply their skills as a team to research business problems, solve case studies, and critique actual business situations within the community.

*Prerequisite: Successful completion of 36 college credit hours.*

## **CARPENTRY (CRP)**

### **CRP222 Cabinetmaking I**

*3 Credits (1 Lecture, 4 Labs)*

The principles and practices of cabinet construction. Standards of joining assembly, quality workmanship, mill equipment and mill-made products.

### **CRP228 Cabinetmaking II**

*3 Credits (2 Lectures, 2 Labs)*

More advanced skills needed for the cabinetmaking trade as well as to establish an accepted standard of joining, assembly and workmanship based on approved practices throughout the country. More advanced and intricate cabinetry will be emphasized.

*Prerequisite: CRP222.*

## **CHEMISTRY (CHM)**

### **CHM130 Fundamental Chemistry**

*4 Credits (3 Lectures, 2 Labs, 1 Recitation)*

The basic aspects of such topics as matter, energy, measurement, atoms, molecules, ions, chemical bonding, chemical arithmetic, and nuclear reactions.

*Prerequisites: MAT091; RDG100A or RDG100B.*



### CHM151 General Chemistry I

4 Credits (3 Lectures, 2 Labs, 1 Recitation)

Topics such as matter, energy, measurement, atoms, ions, molecules, chemical formulas and equations, chemical arithmetic, thermochemistry, states of matter, chemical bonding, and solutions are covered.

*Prerequisites:* RDG100A or RDG100B; MAT121; CHM130 or high school chemistry.

### CHM152 General Chemistry II

4 Credits (3 Lectures, 2 Labs, 1 Recitation)

Topics such as chemical kinetics, spontaneity of chemical change, chemical equilibrium, precipitation reactions, acid and base equilibria, complexions, oxidation-reduction reactions, nuclear reactions, and introduction to organic chemistry are covered.

*Prerequisites:* CHM151; RDG100A or RDG100B.

### CHM230 Fundamental Organic Chemistry

4 Credits (3 Lectures, 2 Labs, 1 Recitation)

A survey including alkanes, alkenes, alkynes, aromatics, stereoisomerism, organic halogen, compounds, alcohols, ethers, aldehydes, ketones, carboxylic acids, derivatives of carboxylic acids, amines, carbohydrates, lipids, and proteins.

*Prerequisites:* CHM130 or CHM151; RDG100A or RDG100B.

### CHM235 General Organic Chemistry I

4 Credits (3 Lectures, 2 Labs, 1 Recitation)

A comprehensive study including the areas of structure and bonding, molecular properties, alkanes, cycloalkanes, stereochemistry, mechanisms for organic reactions, alkenes, alkynes, alkyl halides, conjugated dienes, alcohols, and thiols.

*Prerequisites:* CHM152; RDG100A or RDG100B.

### CHM236 General Organic Chemistry II

4 Credits (3 Lectures, 2 Labs, 1 Recitation)

Topics covered are alcohols and thiols, ethers and epoxies, aldehydes and ketones, carboxylic acids and carboxylic acid derivatives, carbohydrates, lipids, amines, amino acids, polymers, the chemistry of benzene, and aromatic character.

*Prerequisites:* CHM235; RDG100A or RDG100B.

## CIVIL TECHNOLOGY (CET)

### CET121 Basic Surveying and Grade Staking

4 Credits (2 Lectures, 6 Labs)

Theory of measurements and errors; methods of vertical and horizontal control setting of grade stakes; use and care of surveying equipment.

### CET125 Construction and Mining Equipment

3 Credits (3 Lectures)

The introduction to the characteristics of construction materials. The capabilities, limitations, uses and maintenance of heavy equipment employed in heavy construction and mining. Using mathematical formulas and calculations as well as utilizing computer software to determine owner costs and equipment requirements.

## COMMUNICATIONS (COM)

### COM100 Fundamentals of Human Communication

3 Credits (3 Lectures)

Basic theories, dimensions, and concepts of human communicative interaction and behavior in small groups, interpersonal communication, and public speaking.

*Prerequisite:* RDG100A or RDG100B.

### COM101 Interpersonal Communication

3 Credits (3 Lectures)

Theoretical and practical examination of how individuals stimulate meanings in others in interpersonal settings. Emphasis on situational variables, concept construction, and the development of interpersonal communication competence. Writing intensive.

*Prerequisites:* ENG102; RDG100A or RDG100B.

### COM202 Introduction to Group Discussion

3 Credits (3 Lectures)

Principles and practices of effective communication in the small group setting, including problem solving and decision-making processes, skill development for participation, leadership and teamwork.

*Prerequisite:* RDG100A or RDG100B.

### COM206 Public Speaking

3 Credits (3 Lectures)

Principles and practice of public speaking, with special attention given to the selection, organization, and presentation of material based upon audience analysis as well as acquisition of confidence and speaking poise.

*Prerequisite:* RDG100A or RDG100B.



## **COM263 Intercultural Communication**

3 Credits (3 Lectures)

Basic concepts, principles and skills for improving communication between persons from different minority, racial, ethnic and cultural backgrounds.

*Prerequisite: RDG100A or RDG100B.*

## **COMPUTER BUSINESS APPLICATIONS (CBA)**

### **CBA090 Introduction to Central Arizona College Online**

0.5 Credit (0.5 Lecture)

A course for students to learn how to access the Internet, send and receive e-mail, research the World Wide Web, and understand the protocols and services necessary to be successful in an online course from Central Arizona College.

### **CBA101A Internet for Personal Use**

0.5 Credit (0.5 Lecture)

Introduction to basic concepts and features of the Internet for limited personal use.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA102A Workshop for MS Word – Introduction**

0.5 Credit (0.5 Lecture)

Basic skills including creating and editing documents and formatting.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA103A Workshop MS Excel 2000 – Introduction**

0.5 Credit (0.5 Lecture)

Use MS Office Excel to create spreadsheets and charts.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA110A Computers for Beginners**

1 Credit (1 Lecture)

Introduction to essential microcomputer terminology for literacy. Demonstration and guided software applications.

### **CBA110B MS Windows Operating System**

1 Credit (3 Labs)

A course for students to learn how to use a personal computer, featuring MS Windows.

### **CBA110C MS Windows Basics**

1 Credit (1 Lecture)

Use of Microsoft Windows operating system to manage files and programs.

### **CBA111A Internet Explorer**

1 Credit (3 Labs)

Use Internet Explorer to navigate the World Wide Web.  
*Prerequisites: Basic Windows and file management knowledge.*

### **CBA111B Netscape Navigator**

1 Credit (3 Labs)

Use Netscape Navigator to navigate the World Wide Web.  
*Prerequisites: Basic Windows and file management knowledge.*

### **CBA112A MS Word – Basic**

1 Credit (3 Labs)

Use MS Office Word commands to create business documents.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA112B MS Word – Intermediate**

1 Credit (3 Labs)

Use MS Office Word to create illustrated, merged, and multi-paged documents and web pages.

*Prerequisites: CBA112A; Basic Windows and file management knowledge.*

### **CBA112C MS Word – Advanced**

1 Credit (3 Labs)

Learn to create spectacular graphics, usable forms, and colorful charts. Explore collaboration features that make working with a group easy. Learn to create macros that make quick work of repetitive tasks.

*Prerequisite: CBA112B.*

### **CBA112D WordPerfect – Basics**

1 Credit (3 Labs)

Use of WordPerfect software to create business documents.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA113A MS Excel – Basic**

1 Credit (3 Labs)

Use of MS Office Excel to create and use simple spreadsheets and charts.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA113B MS Excel – Intermediate**

1 Credit (3 Labs)

Use MS Office Excel to manage data, to create and use lists, to enhance charts and worksheets, to create and use macros, and to share information.

*Prerequisite: CBA113A.*

### **CBA113C MS Excel – Advanced**

1 Credit (3 Labs)

Use what-if analysis, Pivot tables, and advanced worksheet management in MS Excel to solve business problems.

*Prerequisite: CBA113B.*



### **CBA114A MS Access – Basic**

1 Credit (3 Labs)

Use Access to learn database basics.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA114B MS Access – Intermediate**

1 Credit (3 Labs)

Use MS Access to create complex queries, forms, and reports.

*Prerequisite: CBA114A.*

### **CBA114C MS Access – Advanced**

1 Credit (3 Labs)

Use advanced MS Access concepts to manage database objects, create macros and graphic reports, understand modules, and maintain databases.

*Prerequisite: CBA114B.*

### **CBA115 MS Office Integration**

1 Credit (3 Labs)

Importing and exporting files among and between MS Office programs to create documents.

*Prerequisites: MS Word, Access, Excel, and PowerPoint course modules/levels.*

### **CBA116A MS PowerPoint – Basic**

1 Credit (3 Labs)

Use PowerPoint to create, edit and present simple presentations.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA117A MS Publisher – Basic**

1 Credit (3 Labs)

Create simple publications using MS Publisher.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA117B MS Publisher – Intermediate**

1 Credit (3 Labs)

Create customized publications, business forms and tables, and web pages using MS Publisher.

*Prerequisite: CBA117A.*

### **CBA118 MS Outlook**

1 Credit (3 Labs)

Using Microsoft Outlook to coordinate mail, appointments, events, contacts, tasks, and notes.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA122A MS Word – Module 1**

2 Credits (2 Lectures)

Basics of Microsoft Word to create documents for business and personal use.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA122B MS Word – Module 2**

2 Credits (2 Lectures)

Advanced functions of Microsoft Word for word processing.

*Prerequisite: CBA122A.*

### **CBA123A MS Excel – Module 1**

2 Credits (2 Lectures)

Basics of MS Excel to create spreadsheets and related charts. Students must have access to Excel 2003.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA123B MS Excel – Module 2**

2 Credits (2 Lectures)

Features of Microsoft Excel to use advanced aspects of the program with spreadsheets. Students must have access to Excel 2003.

*Prerequisite: CBA123A.*

### **CBA133A Spreadsheet Applications – Excel**

3 Credits (2 Lectures, 3 Labs)

Use of computer software to create, format and print both structured and “what-if” spreadsheets using formulas and functions, charting and analysis.

*Prerequisites: Basic Windows and file management knowledge and BUS101 or MAT091.*

### **CBA133B Advanced Spreadsheet Applications – Excel**

3 Credits (2 Lectures, 3 Labs)

Use of advanced features of software to import and export data, use templates, generate reports, use macros, audit a worksheet, and use analysis tools.

*Prerequisite: CBA133A.*

### **CBA134A Database Management – Access**

3 Credits (2.75 Lectures, 1 Lab)

Use of computer software to design and create relational databases. Query, report and produce forms on the data and publish to the web.

*Prerequisites: Basic Windows and file management knowledge.*

### **CBA134B Advanced Database Management – Access**

3 Credits (2.75 Lectures, 1 Lab)

Use of advanced features of software to customize a database, do advanced queries and reports, automate tasks and prepare supporting documentation.

*Prerequisite: CBA134A.*



## **CBA210 Web Development Tools**

*3 Credits (2 Lectures, 3 Labs)*

Create and manage Web sites using current tools such as Macromedia Dreamweaver, Flash, FrontPage, Dynamic HTML, and various multimedia and CSS standards. Implement the latest strategies to develop third-generation Web sites, evaluate design tools, discuss future technology standards, and explore the incompatibility issues surrounding current browsers. Focuses on theory, design and Web construction, along with information architecture concepts, Web project management, scenario development and performance evaluations. Satisfactory/unsatisfactory grading available.

*Prerequisite: CIS120.*

## **CBA211 JavaScript Programming**

*3 Credits (2 Lectures, 3 Labs)*

Using the features of the JavaScript language to design client-side, platform-independent solutions. Writing Javascript programs, script for the JavaScript object model, control program flow, validate forms, animate images, target frames, and create cookies. Understand and use the most popular applications of JavaScript. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CBA210.*

## **CBA212 Layout and Design**

*3 Credits (2 Lectures, 3 Labs)*

Formal elements of typography, color, industry practices, and idea generation, as well as the development of professional attitudes and approaches to problem solving. Discussion, demonstration, and hands-on projects that simulate real-world scenarios. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CBA210.*

## **COMPUTER INFORMATION SYSTEMS (CIS)**

### **CIS110 Computer First Look**

*3 Credits (3 Lectures)*

Introduction to essential microcomputer terminology, core software applications (word processor, spreadsheet, database, slide presentation, file manager), operating system, and internet exploration with hands-on usage of microcomputers emphasized throughout course. This course is not designed for students who are pursuing a CIS degree or certificate.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

### **CIS111 Introduction to the Internet**

*2 Credits (1 Lecture, 3 Labs)*

An introduction to the structure of the Internet and its underlying concepts and terminology. Use of a variety of Internet tools including web browsers, e-mail, search engines, and file transfer. Satisfactory/unsatisfactory grading option available. *Approved for Tech Prep.*

### **CIS112 Web Page Design Fundamentals**

*3 Credits (2 Lectures, 3 Labs)*

Hands-on building static Web pages using HTML. Basic understanding of different web browsers and utilizing Hypertext Markup Language and basic JavaScripting in designing web pages.

*Prerequisite: CIS111. Approved for Tech Prep.*

### **CIS120 Survey of Computer Information Systems**

*3 Credits (2 Lectures, 3 Labs)*

Survey of computer information systems, fundamental computer concepts, programming techniques, and networking. Hands-on experience with selected application software and one or more programming languages.

*Prerequisite: RDG100A or RDG100B.*

### **CIS121 Microcomputer Operating System Fundamentals**

*3 Credits (2 Lectures, 3 Labs)*

Installations, administrations, upgrades, configuration and diagnostics of most popular microcomputer Operating systems including file handling, desktop customization, troubleshooting tools, system performance, backup and optimizations of disks, software and hardware installation, Registry and the Command-line environment to allow users to effectively utilize a microcomputer system.

*Prerequisite: RDG100A or RDG100B.*

### **CIS123 Introduction to Programming**

*3 Credits (2 Lectures, 3 Labs)*

Introduction to structured programming techniques and various logic tools used to implement these techniques. Flowcharting, pseudocode and other tools are used as a means of representing the algorithms. Problem analysis is based on the input/process/output cycle using appropriate case studies. A programming language is used to code the solutions into the computer.

*Prerequisite: RDG100A or RDG100B.*

**CIS129 Database Fundamentals**

3 Credits (2 Lectures, 3 Labs)

Introduction to fundamentals of relational database design, implementation and management. Development of concepts related to databases such as referential integrity, concurrency, data validity and entity-relationships. Discussions will include design, Structured Query Language, and database normalization.

*Prerequisite: CIS120.*

**CIS150 Windows 2003 Server**

3 Credits (2 Lectures, 3 Labs)

A study of server network operating systems using networking features such as Active directory, system security, system policies, Internet information server (IIS), domain name services (DNS), dynamic host control protocol (DHCP), and building trust relationship between servers. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS121.*

**CIS151 FrontPage and HTML Application Development**

3 Credits (2 Lectures, 3 Labs)

A cutting-edge Web development course dedicated to providing coverage of the latest in emerging Internet and Web technologies. Covers HTML programming fundamentals, using Microsoft FrontPage to design, develop, enhance and deploy Web pages on the Internet; integrates active server page scripting in the development of interactive Web pages. Satisfactory/unsatisfactory grading available.

*Prerequisite: CIS120.*

**CIS152 Network Infrastructure**

3 Credits (2 Lectures, 3 Labs)

Focus on Windows 2003 networking, naming services, connectivity and security services, managing IP routing, remote access, IP security, network address translation and virtual private networking. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS150.*

**CIS153 Network Security**

3 Credits (2 Lectures, 3 Labs)

Focus on identifying security risks, security planning with emphasis on designing Windows 2003 security solutions. Covers securing network resources, services, communications, remote access users and designing a secure access to the Internet. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS150, CIS152.*

**CIS213 Fundamentals of Internetworking**

3 Credits (2 Lectures, 3 Labs)

Focus on connecting different network operating systems and migration of users, data, security policies from one network to another. Covers the migration of other networks into Microsoft networks, and the basics of networking using Linux operating systems. Satisfactory/unsatisfactory grading option available.

*Prerequisites: CIS120, CIS150.*

**CIS214 Application Development in Excel**

3 Credits (3 Lectures, 2 Labs)

Applications development in Microsoft Excel focusing on the programming behind developing spreadsheet applications with Microsoft Excel. Covers VBA fundamentals early on and spreadsheets in great detail, including an enhanced review of macros in an Excel application. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS133A.*

**CIS215 CISCO Routers**

3 Credits (2 Lectures, 3 Labs)

Focus on CISCO routers installation, setup and configuration. Various routing protocols such as BGP, EIGRP, OSPF, and IGP will be used to configure and troubleshoot the routers. Covers route filtering and routing policies.

*Prerequisites: CIS120, CIS150.*

**CIS216 Java Programming**

4 Credits (3 Lectures, 2 Labs)

Object-oriented techniques are introduced featuring short code examples that are built from the bottom up. Through coverage of the basics, explanations and examples using the StringBuffer class and Swing. This course is designed to teach Java to those studying programming for the first time, but is also appropriate for those building on experiences in another programming language. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS123.*

**CIS217 Application Development in Access**

3 Credits (2 Lectures, 3 Labs)

Applications development in Microsoft Access focusing on the programming behind developing database applications with Microsoft Access. Covers VBA fundamentals early on and explores data access pages in great detail. An enhanced review of Access tables, queries, forms, and report fundamentals. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS134A.*



## **CIS218 C++ Programming**

*4 Credits (3 Lectures, 2 Labs)*

Using problem-solving techniques and the fundamentals of data structure, this course offers comprehensive coverage of introductory C++ programming and data structure topics and prepares the student to confidently learn advanced concepts in programming with C++. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS123.*

## **CIS219 Exchange Server 2003**

*3 Credits (2 Lectures, 3 Labs)*

Exchange messaging and collaboration platform that provides e-mail, calendaring, instant messaging, chat, conferencing and XML Web services for custom collaborative applications. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS150, CIS152.*

## **CIS233 Web Application Development Using ASP**

*3 Credits (2 Lectures, 3 Labs)*

A cutting-edge Web development course dedicated to providing coverage of the latest in emerging Internet and Web technologies. This course enables students to design and maintain interactive and dynamic Web applications with the server-based scripting language, Active Server Pages (ASP).

*Prerequisites: CIS120, CIS123, CIS150, CIS151.*

## **CIS234 Visual Basic Programming**

*4 Credits (3 Lectures, 2 Labs)*

Discussing Visual Basic as an object-oriented, data-driven language. Tackling the numerous changes and enhancements to the .Net framework, this course is designed for individuals with little or no programming background, and introduces sound programming techniques through hands-on exercises using Visual Basic.Net. Satisfactory/unsatisfactory grading available.

*Prerequisites: CIS120, CIS123.*

## **CIS235 Oracle Forms and Reports**

*3 Credits (2 Lectures, 3 Labs)*

There are many tools and utilities used with databases. Form tools, database mining tools, data warehousing tools, as well as utilities to monitor database performance, create reports and more. This course introduces students to the use of these tools and utilities for information gathering and management.

*Prerequisites: CIS120, CIS129.*

## **CIS236 SQL Programming**

*3 Credits (2 Lectures, 3 Labs)*

Structure Query Language (SQL) is the standard command set used to communicate with the most important RDBMS on the market today. This course will cover all tasks relating to SQL, such as creating database objects, retrieving, inserting, updating and deleting information.

*Prerequisites: CIS120, CIS129.*

## **CIS237 Oracle 10g Administration**

*3 Credits (2 Lectures, 3 Labs)*

Internal structures and interactions of a database. The emphasis is on managing the database capabilities in an effective, efficient manner. These will include SQL, database tuning, and backup and recovery.

*Prerequisites: CIS120, CIS129.*

## **CIS240 Networking Essentials**

*3 Credits (2 Lectures, 3 Labs)*

A basic introduction to networking principles. Topics include: an introduction to the seven-layered Open Systems Interconnection (OSI) Model of networking, an introduction to physical and logical network topologies, networking protocols, network services, network fault tolerance, and hardware/software devices used in a network.

*Prerequisites: CIS121 and RDG100A or RDG100B.*

## **CONSTRUCTION AND FORESTRY EQUIPMENT TECHNOLOGY (CFE)**

### **CFE101 John Deere Diesel Engines and Fuel Systems**

*12 Credits (10 Lectures, 6 Labs)*

Theory of operation, diagnostic procedures, and service and repair techniques related to diesel engine systems and fuel systems used in John Deere construction and forestry equipment. The use of technical service literature, an array of special engines tools, and safety throughout the entire course will be emphasized.

### **CFE102 John Deere Hydraulic and Electrical/Electronics Systems**

*12 Credits (10 Lectures, 6 Labs)*

Theory of operation, diagnostic procedures, service and repair techniques related to hydraulic and electronic controlled systems used in John Deere construction and forestry equipment. The use of service manuals, hydraulic/electrical schematics, and safety are emphasized.

*Prerequisite: CFE101.*



### **CFE201 John Deere Chassis and Drives**

*10 Credits (7 Lectures, 9 Labs)*

Theory of operation, diagnostic procedures, and service and repair techniques related to John Deere power train components used in John Deere construction and forestry equipment. Use of technical service literature, reconditioning procedures, and safety are emphasized.

*Prerequisites: CFE101, CFE102.*

### **CFE202 John Deere Heavy Equipment Reconditioning and Operations**

*10 Credits (7 Lectures, 9 Labs)*

The training necessary to operate, maintain, and service John Deere construction and forestry equipment. The use of technical service literature, an array of special tools, and safety are emphasized.

*Prerequisites: CFE101, CFE102, CFE201.*

## **COUNSELING/PERSONAL DEVELOPMENT (CPD)**

### **CPD101 Orientation to Student Development**

*1 Credit (1 Lecture)*

In this course students explore campus, college and academic supports for college success. Recommended for students in the first semester of college or transferring from another institution. Emphasis is placed on developing an individual education plan, goal setting, and developing learning success strategies. Satisfactory/unsatisfactory grading available.

### **CPD111 College Success Skills**

*2 Credits (2 Lectures)*

Personal, campus, college and academic orientation emphasizing strategies for empowering students to learn and practice skills and techniques for college life success.

### **CPD115 Assertiveness Training**

*1-2 Credits (1-2 Lectures)*

The differences between assertive, non-assertive, and aggressive behavior and identifying personal areas of non-assertiveness or aggression, with emphasis on techniques of conflict management in the one or two-credit course.

### **CPD118 Stress Management**

*1 Credit (1 Lecture)*

Introduction to pathology and management of stress.

### **CPD120 Career Awareness**

*1-3 Credits (1-3 Lectures)*

A survey of the world of work, manpower needs of tomorrow, research of particular careers, local projections, and exploration of traditional and non-traditional careers.

### **CPD125 Portfolio of Prior Learning**

*2 Credits (2 Lectures)*

An introduction to the concepts of identifying experiential learning as it applies to degree requirements. Familiarizes students with writing, speaking and critical thinking skills and assists them in evaluation training experiences and outcomes related to their profession. May be taken two times for credit.

### **CPD160 The Master Learner**

*3 Credits (3 Lectures)*

Framework for self-discovery and learning. Students learn to maximize academic performance and develop analytical and critical thinking to build confidence as a learner. Recommended for learners seeking to improve or develop their current level of academic and personal success. Satisfactory/unsatisfactory grading available.

*Prerequisite: ASSET/COMPASS test.*

*Corequisite: Registered for the appropriate reading class.*

### **CPD170 Transfer Preparation**

*2 Credits (2 Lectures)*

Students will obtain knowledge and develop a plan to prepare for a successful transition to a university. The course includes selecting a degree/major, introduction to transfer resources, development of a personal transfer plan, and general transition planning.

## **DIESEL/HEAVY EQUIPMENT (DIE)**

### **DIE132 Diesel Engines**

*12 Credits (10 Lectures, 6 Labs)*

The theory of operation, diagnostic procedures, 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.

### **DIE133 Heavy Equipment Chassis and Drives**

*12 Credits (10 Lectures, 6 Labs)*

Theory of operation, diagnostic procedures, service and repair techniques related to chassis and drive trains used in heavy equipment and truck applications, emphasizing use of technical service literature, reconditioning procedures, and safety.

### **DIE197 Career Advancement**

*3 Credits (3 Internships)*

Career advancement study that will allow the students to obtain college credit for hands-on work experience.

*Prerequisite: Enrolled in Diesel/Heavy Equipment or Construction and Forestry Equipment Program.*



## **DIE222 Mobile Refrigeration**

3 Credits (2 Lectures, 3 Labs)

Principles of operation for the various types of mobile air conditioning systems utilized in diagnosing, testing and reconditioning these systems.

## **DIE225 Preventive Maintenance**

2 Credits (1 Lecture, 3 Labs)

The development of skills necessary to identify, prevent, and repair mechanical problems as related to the maintenance of heavy earth-moving equipment.

## **DIE234 Diesel and Heavy Equipment Electricity/Electronics and Hydraulics**

12 Credits (10 Lectures, 6 Labs)

The theory of operation, diagnostic procedures, service and repair techniques related to electrical and hydraulics systems used in heavy equipment and truck applications, emphasizing the use of electrical and hydraulic schematics, test equipment and service manuals.

## **DIE235 Heavy Equipment Reconditioning and Operations**

8 Credits (4 Lectures, 12 Labs)

The operation, maintenance, and servicing of heavy equipment, emphasizing the use of technical service literature and an array of special tools.

## **DIE297 Career Advancement**

3 Credits (3 Internships)

Career advancement study that will allow the students to obtain college credit for hands-on work experience.

*Prerequisite: DIE197.*

## **DRAFTING (DFT)**

### **DFT120 Interpreting Engineering Drawings**

3 Credits (2 Lectures, 2 Labs)

An introduction to blueprint interpretation, including alphabet of lines, orthographic projection, multiview drawings, scales, sectioning, dimensioning, tolerancing and freehand technical sketching. *Approved for Tech Prep.*

### **DFT127 Autocad I**

3 Credits (2 Lectures, 3 Labs)

Autocad computer-aided drafting (CAD), emphasizing operation of computer and software, management of data files, and creation of two-dimensional drawings in the application of CAD design, including drawing fundamentals, creating geometrical shapes, editing drawings, dimensioning, and plotting. *Approved for Tech Prep.*

### **DFT128 Autocad II**

3 Credits (2 Lectures, 3 Labs)

Advanced Autocad two-dimensional applications and techniques.

*Prerequisite: DFT127 or Consent of Instructor.*

### **DFT130 Advanced Computer Aided Drafting Applications**

1-3 Credits (1-3 Lectures)

Advanced work in an area of individual interest within the scope of computer-aided drafting.

### **DFT131 Autocad III**

3 Credits (2 Lectures, 3 Labs)

Comprehensive Autocad computer-aided drafting (CAD). Emphasizes operation of computer and software, management of data files, creation of three-dimensional drawings in the application of CAD design. Advanced editing, creating libraries, three-dimensional drawings, alternate coordinate system, multi-view ports, and import and export drawings through "dxf" and "iges" files.

*Prerequisite: DFT127.*

## **EARLY CHILDHOOD EDUCATION (ECE)**

### **ECE116 Guiding and Observing Children**

3 Credits (3 Lectures)

Positive guidance and discipline techniques to encourage self-discipline and enhance a positive self image. Techniques to effectively observe and record child characteristics and behavior, with emphasis on appropriate use of observations. *Approved for Tech Prep.*

### **ECE117 Guidance for Family Child Care**

3 Credits (3 Lectures)

Positive guidance and discipline techniques for family child care providers that encourage self-discipline and enhance a positive self-image of children ages 0-12.

### **ECE120B Providing a Healthy Environment**

1 Credit (1 Lecture)

Procedures and practices designed to protect the health of young children in early childhood programs, with emphasis on the development of lifelong health habits and attitudes. *Approved for Tech Prep.*

### **ECE120D Ensuring a Safe Environment**

1 Credit (1 Lecture)

Practices and procedures to use when providing for the safety of children in early childhood programs. *Approved for Tech Prep.*



### **ECE121 Health for Family Child Care**

*1 Credit (1 Lecture)*

Procedures and practices designed to protect the health of children in family child care settings with emphasis on the development of lifelong health habits and attitudes.

### **ECE122 Safety for Family Child Care**

*1 Credit (1 Lecture)*

Practices and procedures to use when providing for the safety of children in family child care programs.

### **ECE123 Nutrition for Family Child Care**

*1 Credit (1 Lecture)*

Introduction to nutrition with emphasis on methods of planning and implementing nutrition education and experiences in family child care programs.

### **ECE124 Active Learning in Math and Science**

*3 Credits (3 Lectures)*

Techniques for helping children to develop cognitive thinking skills, including mathematical concepts and developing an awareness and appreciation of the natural environment. Problem-solving processes used by young children, and activities and techniques to promote the development of these skills.

### **ECE125A Nutrition**

*1 Credit (1 Lecture)*

Introduction to nutrition, emphasizing methods of planning and implementing nutrition education and experiences in the early childhood settings. *Approved for Tech Prep.*

### **ECE125C Blocks**

*1 Credit (1 Lecture)*

Block play in the early childhood curriculum and techniques to encourage and enhance block activities.

### **ECE128A Environments for Infants and Toddlers**

*1 Credit (1 Lecture)*

Practical theories and principles for the arrangement of a safe, healthy environment for infants and toddlers with emphasis on indoor/outdoor environments and material selection and usage, based on observation and participation in an infant/toddler care setting.

### **ECE129B Observation Skills in the Infant and Toddler Program**

*1 Credit (1 Lecture)*

Techniques and skills to effectively observe and record characteristics and developmental stages of infants and toddlers. Recordkeeping procedures, an overview of a variety of caregiving settings, and observation in an infant/toddler program.

### **ECE129C Recordkeeping Skills: Infant/Toddler Programs**

*1 Credit (1 Lecture)*

Techniques and skills to effectively observe and record characteristics and developmental stages of infants and toddlers. Recordkeeping procedures for the daily operations of an infant/toddler program. An overview of caregiving settings, and observation and participation in an infant/toddler program.

### **ECE130A Learning Environment for School-Agers**

*1 Credit (1 Lecture)*

The school-age child's total learning environment, incorporating indoor, outdoor, and community aspects, stressing the importance of well-organized learning centers, age-appropriate equipment and materials with consideration to the spaces where school-age programs are located.

### **ECE176 Child Development I**

*3 Credits (3 Lectures)*

Theories, trends and research in human development from prenatal to age five with emphasis on the principles of physical, social, emotional and intellectual growth of children, their general characteristics and behaviors and comparisons to generally accepted norms.

*Prerequisite: RDG100A or RDG100B or equivalent reading assessment. Approved for Tech Prep.*

### **ECE177 Ages and Stages of Children 0-12**

*3 Credits (3 Lectures)*

Ages and stages of children ages 0-12, emphasizing the principles of physical, social, emotional and intellectual growth.

### **ECE183 Curriculum and Learning Materials for Infants**

*1 Credit (1 Lecture)*

Practical theories and principles for infant curriculum with emphasis on responsive relationships, developmental stages, applied observation, and providing developmentally appropriate safe learning materials for infant exploration.



### **ECE184 Curriculum and Learning Materials for Toddlers**

*1 Credit (1 Lecture)*

Practical theories and principles for toddler curriculum with emphasis on responsive relationships, developmental stages, applied observation, and providing developmentally appropriate safe learning materials for toddler exploration.

### **ECE200 Current Issues**

*3 Credits (3 Lectures)*

Current issues and trends in child care and early education programs and the implications for practice.

### **ECE212 Creative Expressions for Young Children**

*3 Credits (3 Lectures)*

The value of creative expressions, methods for creating an environment that encourages creativity and skills for selecting materials.

### **ECE220 Managing Food, Health and Safety in Child Care Programs**

*3 Credits (3 Lectures)*

Planning, developing, implementing and evaluating health, safety and food services for early childhood programs.

*Prerequisite: RDG100A or RDG100B.*

### **ECE221 Financial Management of an Early Childhood Program**

*3 Credits (3 Lectures)*

Planning, developing, implementing an accounting and financial system for use in an early childhood program setting.

*Prerequisite: RDG100A or RDG100B.*

### **ECE222 Managing and Evaluating an Early Childhood Program**

*3 Credits (3 Lectures)*

Management and evaluation skills necessary to effectively operate a quality early childhood program.

*Prerequisite: RDG100A or RDG100B.*

### **ECE223 Planning and Promoting an Early Childhood Program**

*3 Credits (3 Lectures)*

Designing, planning and marketing an early childhood program based upon a program philosophy, to parents and the community.

*Prerequisite: RDG100A or RDG100B.*

### **ECE224 Supervision in Early Childhood Programs**

*3 Credits (3 Lectures)*

Personnel management in an early childhood program, including staffing, supervision and evaluation.

*Prerequisite: RDG100A or RDG100B.*

### **ECE225A Guidance Principles for Encouraging Self Discipline in School-Age Children**

*1 Credit (1 Lecture)*

Positive guidance and discipline techniques that encourage children and youth to develop self-discipline and take responsibility for their actions.

### **ECE226A Cognitive Development of Infants and Toddlers**

*1 Credit (1 Lecture)*

Theories, trends, and principles of cognitive growth and development of infants and toddlers, and examination of development stages and norms through observation and participation in an infant/toddler care program.

### **ECE226C Language Development of Infants and Toddlers**

*1 Credit (1 Lecture)*

Theories, trends, and principles of cognitive growth and language development 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)*

The normal sequence of social and emotional development of infants and toddlers as it relates to discipline, emphasizing appropriate positive guidance and discipline techniques through observation and participation in an infant/toddler program.

### **ECE227C Enhancing Social Competency of Infants/Toddlers**

*1 Credit (1 Lecture)*

The normal sequence of social and emotional development with emphasis on providing appropriate experiences and environment to enhance development of social competency and positive functioning within a group through observation and participation in an infant/toddler program.

**ECE228B Physical Development in Infancy/Toddlerhood**

*1 Credit (1 Lecture)*

The normal sequence of physical development in infants, observations and participation in infant/toddler care activities to individualize the program.

**ECE229 Professional Portfolio Preparation**

*3 Credits (2 Lectures, 3 Labs)*

Preparation and compilation of a professional portfolio to be used for assessment (CDA credential), employment and educational opportunities.

**ECE231 Planning an Early Childhood Program**

*1 Credit (1 Lecture)*

Designing, planning, and implementing an early childhood program based upon a specific program philosophy.

**ECE232 Managing an Early Childhood Program**

*1 Credit (1 Lecture)*

Management skills necessary to effectively operate a quality early childhood program.

**ECE233 Budgeting and Financial Management**

*1 Credit (1 Lecture)*

Planning, developing, and implementing an accounting and financial system for use in an early childhood program setting.

**ECE241 Staffing an Early Childhood Program**

*1 Credit (1 Lecture)*

Personnel management in an early childhood program, including staffing patterns, recordkeeping, and employee compensation.

**ECE242 Providing Supervision and Leadership for Staff**

*1 Credit (1 Lecture)*

The skills necessary for providing effective supervision and leadership in an early childhood program.

**ECE243 Providing Ongoing Training for Staff**

*1 Credit (1 Lecture)*

The skills essential for assessing, providing, and evaluating a staff training program for quality early childhood programs.

**ECE244 Evaluating Staff**

*1 Credit (1 Lecture)*

The skills necessary to develop and conduct personnel evaluations in an early childhood program.

**ECE245 Indoor and Outdoor Environments**

*1 Credit (1 Lecture)*

The arrangement of indoor and outdoor play spaces in early childhood environments in accordance with the philosophy, goals, and objectives of the program and the needs of the children.

**ECE246 Providing Food and Nutrition Services**

*1 Credit (1 Lecture)*

Planning, developing, implementing, and evaluating nutrition and food services for early childhood programs.

**ECE248 Early Childhood Program Philosophies**

*1 Credit (1 Lecture)*

The variety and complexity of early childhood programs with development of a personal program philosophy.

**ECE249 Marketing the Program**

*1 Credit (1 Lecture)*

The skills and methods necessary to market the early childhood program to parents and the community, including recruitment and enrollment.

**ECE250 Professionalism**

*1 Credit (1 Lecture)*

Professionalism in the early childhood field, including a history of the profession, advocacy of ethical behavior, and commitment to professional growth.

**ECE251 Regulations and Legal Issues**

*2 Credits (2 Lectures)*

Applicable state, local, and/or federal regulations and administrative law in operating early childhood programs, including corporate legal requirements, applicable tax laws and requirements, and insurance requirements.

**ECE252 Evaluating an Early Childhood Program**

*1 Credit (1 Lecture)*

Methods of developing and implementing an evaluation system for an early childhood program.



## **ECE253 Ages and Stages: School-Age Years Six to Twelve**

*1 Credit (1 Lecture)*

Theories, trends, and research in development during the middle childhood years, emphasizing the principles of physical, social, emotional, and intellectual growth of young children and also noting general characteristics and behaviors as well as comparisons to generally accepted norms.

## **ECE254 Emergent Language and Literacy**

*3 Credits (3 Lectures)*

Understanding, assessing and enhancing language and literacy development for the young child.

## **ECE255 Communications for Family Child Care**

*3 Credits (3 Lectures)*

Methods of developing effective communication with parents in the family child care 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.

## **ECE256 Math for School-Agers**

*1 Credit (1 Lecture)*

Theories, research, and concrete experiences related to mathematical reasoning and skills of the school-age child.

## **ECE257 The Business of Family Child Care**

*3 Credits (3 Lectures)*

The multifaceted business aspects of providing family child care. Fundamentals of a recordkeeping system and the principles of achieving a balance in work and family life while operating a family child care business.

## **ECE271 Creating Early Childhood Environments**

*3 Credits (3 Lectures)*

Methods of establishing an age-appropriate learning environment, incorporating indoor, outdoor and community aspects. Design and implementation of schedules, lesson plans and transitions designed to meet the needs of young children in a variety of early childhood settings.  
*Approved for Tech Prep.*

## **ECE272 Family Child Care Environments**

*3 Credits (3 Lectures)*

Creating age-appropriate learning environments, incorporating indoor, outdoor and community aspects for family child care. Implementation of schedules, lesson plans and transitions designed to meet the needs of all children in a family child care setting.

## **ECE276 Child Development II**

*3 Credits (3 Lectures)*

Theories, trends and research in human development from prenatal through adolescence with emphasis on the principles of physical, social, emotional and intellectual growth of children and adolescents, their general characteristics and behaviors, both typical and atypical; and comparisons to generally accepted norms.

*Prerequisites: RDG100A or RDG100B.*

*(ECE176 is required for ECE Students.)*

## **ECE278 Effective Curriculum Design for Teachers of Young Children**

*3 Credits (3 Lectures)*

Methods of collecting and organizing curriculum resources. Planning and implementing a developmentally appropriate program.

*Prerequisite: ECE176.*

## **ECE279 Curriculum for Family Child Care**

*3 Credits (3 Lectures)*

Plan and implement a developmentally appropriate curriculum for all children in family child care. Methods of collecting and organizing curriculum resources.

## **ECE280 Inclusion of Children with Special Needs**

*3 Credits (3 Lectures)*

The concepts of quality inclusion of children with special needs, including information on laws governing services to children with disabilities, knowledge of individualized plans, a review of typical and atypical child development, developmentally appropriate activities for children, working collaboratively with families, service providers, and multi-disciplinary teams.

*Prerequisite: ECE176.*

## **ECE283 Valuing Families and Diversity**

*3 Credits (3 Lectures)*

Methods of developing effective communication skills to involve parents in the early childhood program. Building an awareness of diverse family values and implementing a diverse curriculum. Skills to help parents and staff work together to understand the child's needs.



## ECONOMICS (ECN)

### ECN101 Introduction to Economics

3 Credits (3 Lectures)

Investigates the basic concepts and principles of economics, and how they operate within the American economic system. Highlights both Macroeconomics and Microeconomics in simplified terms, intended for those who will only take one course in economics.

*Prerequisite: RDG100A or RDG100B.*

### ECN201 Principles of Macroeconomics

3 Credits (3 Lectures)

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. Consideration given to money and banking, national income accounting and fiscal and monetary policy, and international trade.

*Prerequisite: RDG100A or RDG100B.*

### ECN202 Principles of Microeconomics

3 Credits (3 Lectures)

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: RDG100A or RDG100B.*

## EDUCATION (EDU)

### EDU101 Tutor Training I

2 Credits (1 Lecture, 2 Labs)

Preparation of students for certification as tutors. Training to be effective tutors in academic course materials and area content skills. Analysis of how people learn and acquire skills. Discussion of leadership and tutoring ethics. Assistance in problem-solving with the support of content-area faculty and resources.

*Prerequisite: Grade point average of 3.00 or higher and/or recommendation by a faculty member.*

### EDU102 Tutor Certification II

1 Credit (1 Lecture, 1 Practicum)

Refinement of student tutoring skills and uses of academic materials, exploration of a topic directly related to the tutor's goals, and further tutor certification. Satisfactory/unsatisfactory grading available.

*Prerequisites: EDU101. Grade point average of 3.00 or higher and/or recommendation by a faculty member.*

### EDU103 Substitute Teacher Survival Strategies

2 Credits (2 Lectures)

Academic and behavioral strategies and other pertinent information needed to be a successful substitute teacher in today's K-12 schools.

### EDU204 Electronic Multimedia Portfolio Development

3 Credits (3 Lectures)

Instruction in development of CAC General Education portfolio.

*Prerequisites: Completion of 12 credit hours at CAC; basic computer skills.*

### EDU205 Introduction to the Study of Language

3 Credits (3 Lectures)

A study of language, including such topics as code, phonology, morphology, lexicon, language acquisition, and language behavior.

*Prerequisite: RDG100A or RDG100B.*

### EDU210 Arizona Community College Certification

3 Credits (3 Lectures)

A study of the history, philosophy, functions, organization, and current issues in the community/junior college with emphasis placed on the Arizona community colleges. Meets Arizona community college course requirement for certification.

### EDU221 Introduction to Education

3 Credits (3 Lectures)

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 K-12 school or community college environments.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

### EDU222 Introduction to Special Education

3 Credits (3 Lectures)

Overview of Special Education theory and practice in the United States today, including the characteristics of students with specific disabilities and the effects on the individuals and their families.

*Prerequisite: RDG100A or RDG100B.*

**EDU223 Foundations of ESL and Bilingual Education**

3 Credits (3 Lectures)

A foundational course in the historical, contemporary and legal issues related to educational programs for language minority students. Comparison of ESL and bilingual program models, first and second language acquisition theories, and other theories underlying program models.  
*Prerequisite: RDG100A or RDG100B.*

**EDU224 The Role of the Paraeducator**

3 Credits (3 Lectures)

Job functions of a special education paraeducator.

**EDU225 Relationships in the Classroom**

3 Credits (2 Lectures, 3 Labs)

An introduction to pre- K-12 classroom settings and the relationships between teachers and their students. Focus on class management, developing positive and appropriate individual relationships with students, and classroom observations and participation. Course includes 2 hours per week fieldwork in actual classroom settings.  
*Prerequisite: RDG100A or RDG100B.*

*Approved for Tech Prep.*

**EDU226 Accommodations and Adaptations**

3 Credits (3 Lectures)

Developing a practical instructional environment for students with a variety of special needs.

*Prerequisite: EDU222.*

**EDU228 Behavior Management**

3 Credits (3 Lectures)

Develops an awareness of various behavior management strategies, both for individual and group management, alternative scheduling strategies, and current best practice in collaboration with other professionals, parents and the community.

*Prerequisite: RDG100A or RDG100B*

**EDU230 Cultural Values in Education**

3 Credits (2 Lectures, 3 Labs)

Examination of the relationship of cultural values to the formation of the child's self-concept and learning styles. Examination of the role of prejudice, stereotyping and cultural incompatibilities in education. Emphasis on preparing future teachers to offer an equal educational opportunity to all children.

*Prerequisite: RDG100A or RDG100B.*

**EDU232 Classroom Practicum**

6 Credits (18 Labs)

Capstone class in the Special Education Paraeducators program. Transforming knowledge and skills of previous special education courses from theory to practice.

*Prerequisites: EDU226, EDU228, and at least 2 elective credits in Special Education.*

**EDU250 Structured English Immersion**

3 Credits (3 Lectures)

Introduction to Structured English Immersion for Teachers and Administrators who are working in the K-12 school system.

*Prerequisites: RDG100A or RDG100B and 15 hour ADE Approval SEI workshop.*

**EDU276 Child Development II**

3 Credits (3 Lectures)

Theories, trends and research in human development from prenatal through adolescence with emphasis on the principles of physical, social, emotional and intellectual growth of children and adolescents, their general characteristics and behaviors, both typical and atypical; and comparisons to generally accepted norms.

*Prerequisites: RDG100A or RDG100B. (ECE176 is required for ECE Students.)*

**EDU284 Severe and Multiple Disabilities**

3 Credits (3 Lectures)

Implementing educational programs for students with severe/multiple disabilities.

*Prerequisite: EDU222.*

**EDU291 Children's Literature for Educators**

3 Credits (3 Lectures)

Past and present literature, including fiction, poetry, and non-fiction, written specifically for children. The focus is how to effectively choose and use children's literature in educational contexts.

*Prerequisite: RDG100A or RDG100B.*

*Corequisite: ENG102.*



## ELECTRICITY (ELC)

### ELC120 Electricity/Electronics Fundamentals

3 Credits (2 Lectures, 2 Labs)

Fundamental electrical concepts of direct and alternating current electricity. Includes the elements of circuits, circuit configurations, electromagnetism, inductance, capacitance, resonant and non-resonant circuits and basic filters.

### ELC123 Direct Current Circuit Analysis

3 Credits (2 Lectures, 3 Labs)

The study of basic electricity theory and components beginning with Ohm's Law and atomic structure and progressing to circuit analysis techniques used in solving series, parallel and series-parallel networks. Network theorems and electronic simulation software are used to solve and evaluate multi-source circuits.

### ELC124 Alternating Current Circuit Analysis

3 Credits (2 Lectures, 3 Labs)

The study of basic electrical theory as it applies to circuits containing capacitance, inductance and resistance with sinusoidal voltages applied. These basic circuits are implemented with real components as well as with electronic simulation software. Various real and simulated instruments are used to power and measure the real and simulated circuits.

*Prerequisite: ELC123.*

### ELC125 Motors, Generators, and Converters

6 Credits (5 Lectures, 2 Labs)

Common types of DC, single-phase AC, and three-phase AC motors and generators and single-phase and three-phase transformers studied from an industrial electrician's viewpoint, covering theories of operation; voltage, current, and power calculations; parallel operation; construction details; and practical considerations of hook-up and trouble shooting.

*Prerequisite: ELC124.*

### ELC126 Residential Wiring

3 Credits (2 Lectures, 2 Labs)

Residential wiring according to the National Electrical Code, with emphasis on proper use of materials and techniques for safe electrical installation or extensions in single and multi-family dwellings.

*Prerequisite: ELC124.*

### ELC127 Industrial Wiring

3 Credits (2 Lectures, 2 Labs)

Industrial and commercial wiring by the National Electrical Code, with emphasis on proper materials and techniques for safe electrical installation or extension, in commercial and industrial applications.

*Prerequisite: ELC124.*

### ELC128 Introduction to Programmable Logic Controllers

3 Credits (2 Lectures, 2 Labs)

Principles and applications of programmable logic controls (PLCs). Numbering systems, control strategies and ladder logic. Basic machine functions and operations to include programming, troubleshooting and maintenance. Application of PLC programming, operations and troubleshooting skills.

*Prerequisites: ELC123, ELC124.*

### ELC200 Radio Frequency RF/High Vacuum HV

3 Credits (2 Lectures, 3 Labs)

Prepares students entering the workforce in many industries that use high vacuum and plasma systems in the processing of their products. Used in the manufacture of semiconductor devices, processing foods, surface hardening, compact disk production, film deposition.

*Prerequisite: Consent of Instructor (Sophomore standing).*

### ELC220 Active Circuits

3 Credits (2 Lectures, 3 Labs)

The study of basic semiconductor devices, their characteristics and associated basic circuits. The basic types of transistors, diodes and thyristors are characterized and implemented in appropriate circuit breadboards and circuit simulation software.

*Prerequisite: ELC124.*

### ELC221 Control Devices

6 Credits (5 Lectures, 2 Labs)

Electrical controls, instruments, and devices for industrial equipment such as motor starting and speed control, voltage regulation, and automatic controls for AC and DC machines.

*Prerequisites: ELC125, ELC220.*

### ELC222 Active Circuits and Systems

3 Credits (2 Lectures, 3 Labs)

Theory and design of active circuits and systems used in electronic and electro-mechanical equipment, integration of active circuits into subsystems and complete electro-mechanical systems, analog-to-digital and digital-to-analog systems with reference to data acquisition and control.

*Prerequisite: ELC220.*



## **ELC223 Integrated Circuit Devices**

3 Credits (2 Lectures, 3 Labs)

Introduction to timers, counters, linear and digital circuits, operational amplifier circuits and systems, voltage regulators, digital number code systems, integrated circuit logic devices, multi-vibrators memory systems, analog-to-digital, and digital-to-analog devices.

*Prerequisites: ELT128, ELC220.*

## **ELC228 Advanced Programmable Logic Controllers**

3 Credits (2 Lectures, 2 Labs)

Advanced principles and applications of programmable logic controls (PLCs). Advanced programming using math function blocks, bit manipulation blocks and subroutines. Networking of PLCs and HMI devices will also be introduced.

*Prerequisite: ELC128.*

## **ELT128 Basic Logic Circuits**

3 Credits (2 Lectures, 3 Labs)

Theory and application of inverters, AND, OR, NAND, and NOR gates analyzed from a basic circuit and system standpoint. Additional topics covered are flip flops, counters, timers and registers.

*Prerequisite: ELC123. Corequisite: ELC124.*

## **ELT130 Computer Upgrades and Operating Systems I**

3 Credits (2 Lectures, 3 Labs)

Apply previous A+ and Networking experience to actually upgrade computers and configure operating systems by doing hands-on projects in a lab-situated class.

## **EMERGENCY MEDICAL SERVICES (EMS)**

### **ELECTRONICS (ELT)**

## **ELT101 Aries PC Maintenance and Repair: Hardware I**

4.5 Credits (3 Lectures, 3 Labs)

A+ Web-based multimedia curriculum designed to help students troubleshoot and maintain personal computers; includes 50 hours of internship. *Approved for Tech Prep.*

## **ELT102 Aries PC Maintenance and Repair: Operating System**

4.5 Credits (3 Lectures, 3 Labs)

More in-depth extension of the Aries A+ Certified Computer Technician I course as an A+ Web-based multimedia curriculum designed to help students troubleshoot and maintain personal computers; includes 50 hours of internship.

*Prerequisite: ELT101. Approved for Tech Prep.*

## **ELT103 Aries Net+ Certified Technician**

4.5 Credits (3 Lectures, 3 Labs)

The Aries Net+ Web-based multimedia curriculum offers one semester of dynamic, professional IT training that builds a solid foundation of networking guidelines, standards and practices.

*Prerequisite: ELT102. Approved for Tech Prep.*

## **ELT104 Aries Server Essentials**

4.5 Credits (3 Lectures, 3 Labs)

Web-based multimedia curriculum providing professional IT training that builds a solid foundation of networking guidelines, standards and practices. Enhancement of skills learned in ELT103. Includes internship lab of 50 hours.

*Prerequisite: ELT103. Approved for Tech Prep.*

## **EMS100 CPR for Professionals**

0.5 Credit (0.5 Lecture)

CPR skills for 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. For certified or non-certified, licensed or non-licensed healthcare professionals. Satisfactory/unsatisfactory grading only.

## **EMS101 First Care**

0.5 Credit (0.5 Lecture)

A course to train a lay person to provide care for patients suffering sudden illness or injury. Focus is on providing immediate care until EMS personnel arrive. Intent is to fulfill OSHA, specific business or industry job requirements. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **EMS123 First Responder**

3 Credits (3 Lectures)

A comprehensive course to train a lay person to provide care for patients suffering sudden illness or injury. For members of law enforcement agencies, industry and the private sector.



### **EMS125 Basic Emergency Medical Technician**

*8 Credits (7 Lectures, 3 Labs)*

This course follows the 1994 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, rescuer and patient safety. Infection control is addressed at every level of care. New skills have been added to include patient assisted medications and use of the AED. This training program is a state approved program with a medical director and is updated to state standards as required by the ADHS.

*Prerequisites: Reading ASSET score of 41; immunizations for TB, MMR and Tetanus. Age 18, and current CPR Health Care Provider Card.*

### **EMS190 Pediatric Education for Prehospital Providers**

*1 Credit (1 Lecture)*

An interactive, scenario-based course designed for certified EMTs (Emergency Medical Technicians) who practice in the field. Enables providers to perform a rapid assessment of sick and injured children in a variety of circumstances. Treatment of children in accordance with recommendation of the AAOP.

*Prerequisite: Advanced Life Support Provider (ALS) – IEMT, Paramedic, Nurse, MD.*

### **EMS200 Basic EMT Refresher**

*2 Credits (2 Lectures)*

The EMT refresher course incorporates the standards as adopted by the State of Arizona, DHS, EMS Division and the U.S. Department of Transportation's National Highway Traffic Safety Administration 1994 and 1996 revisions. Prepares students for state recertification. May be taken two times for credit.

*Prerequisites: Current Basic EMT and CPR certifications.*

### **EMS201 Basic EMT Renewal Challenge**

*1 Credit (1 Lecture)*

Designed to contribute to 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. Satisfactory/unsatisfactory grading only. May be taken four times for credit.

*Prerequisites: Basic EMT certification, CPR certification.*

### **EMS208 Intermediate Emergency Medical Technician**

*20 Credits (13 Lectures, 14 Labs)*

Designed to meet the U.S. Department of Transportation, Arizona Department of Health Services, Office of Emergency Medical Services requirements for EMT – Intermediate. Provides advanced knowledge and skills related to hypoperfusion states, respiratory arrest or insufficiency, seizure states, cardiovascular emergencies, unconscious states of undetermined etiology, head injury with altered levels of consciousness, and chest trauma. Current EMT certification for one year. Comprehensive written, oral and practical evaluation on basic EMT skills.

*Prerequisites: Valid EMT certification; HCP CPR; DHS requirements.*

### **EMS235 Emergency Cardiac Care**

*3 Credits (3 Lectures)*

Designed to acquaint all levels of emergency care providers with basic electrocardiographic (ECG) rhythm analysis and interpretation and related care in a clinical and pre-hospital setting.

*Prerequisite: EMS125 or Consent of Instructor.*

### **EMS236 Pharmacology in an Emergency Setting**

*3 Credits (3 Lectures)*

Designed for the Emergency Medical Technician dealing with the administration of emergency medications in the field as outlined in current paramedic legislation. 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**

*2 Credits (2 Lectures)*

Didactic and psychomotor skills training and validation in techniques of Advanced Cardiac Life Support according to the 2005 Standards and Guidelines of the American Heart Association. Includes endotracheal intubation; ECG arrhythmia recognition; synchronized, unsynchronized and automated defibrillation; cardiovascular pharmacology; and electronic pacemaker. For all health-care related professionals, clinical and prehospital. May be taken two times for credit.

*Prerequisites: Current American Red Cross or American Heart Association Basic Life Support Health Care Provider validation, or National Safety Council Green Cross Professional Rescuer, or Consent of Instructor.*

**EMS241 Advanced Cardiac Life Support (ACLS) Refresher**

0.5 Credits (0.5 Lecture)

Designed for all levels of emergency medical technicians, nurses, physicians and physicians' assistants to assure maintenance of didactic and psychomotor skill training in techniques of Advanced Cardiac Life Support (ACLS) according to the 2005 Standards and Guidelines of the American Heart Association. Includes endotracheal intubation, ECG arrhythmia recognition, synchronized and unsynchronized and automated defibrillation, cardiovascular pharmacology, and electric pacemaker.

*Prerequisites:* Current CPR provider level, ACLS provider level.

**EMS242 Advanced Life Support Refresher Course**

3.5 Credits (3.5 Lectures)

Designed to meet requirements for EMT – Intermediate and EMT – Paramedic under guidelines of the U.S. Department of Transportation (US-DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS) for recertification.

*Prerequisite:* Paramedic or IEMT certification.

**EMS255 Instructional Strategies for EMT Instructors**

2 Credits (2 Lectures)

Participative course to prepare all levels of EMT and/or nurses as instructors in EMT programs. Includes writing objectives, preparing class and course schedules, reviewing AZ-DHS rules and regulations.

*Prerequisites:* AZ-DHS EMT, IEMT, CEP certification or RN with 2 years experience in emergency nursing.

**EMS272A Advanced Emergency Medical Technology/Paramedic, Module I**

14.5 Credits (9.5 Lectures, 15 Labs)

Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured.

*Prerequisites:* Certified EMT 1 year, FSC129.

**EMS272B Advanced Emergency Medical Technology/Paramedic, Module II**

14.5 Credits (9.5 Lectures, 15 Labs)

Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured.

*Prerequisites:* EMS272A.

**EMS272C Advanced Emergency Medical Technology/Paramedic, Module III**

14.5 Credits (9.5 Lectures, 15 Labs)

Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured.

*Prerequisite:* EMS272B.

**EMS275 Critical Care for Paramedics (CCEMTP)**

5.25 Credits (5 Lectures, 1 Lab)

Critical Care Emergency Medical Transport Program (CCEMTP) is designed to prepare paramedics and nurses to function as members of a critical care transport team. Students will gain an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment, and develop skill to maintain the stability of hospital equipment and procedures during transport.

*Prerequisites:* Paramedic or Nurse, CPR, BTLS or PHTLS, PALS or PEPP, ACLS.



## ENGLISH (ENG)

### ENG090 English Composition I

3 Credits (3 Lectures)

Introduction to the writing process; emphasizing idea development and organization, as well as aspects of grammar and mechanics, in sentences and paragraphs.

*Prerequisite: Appropriate English assessment.*

### ENG095 Writing Center

1-2 Credits (2-4 Labs)

Individualized materials and tutoring to aid students in improving writing skills. Satisfactory/unsatisfactory grading only.

### ENG100 English Composition II

3 Credits (3 Lectures)

Development of abilities to generate ideas suitable for formal academic writing and to express those ideas in essay form, using their writings to identify punctuation, grammatical usage, and spelling problems and create effective strategies for their correction.

*Prerequisite: ENG090 or appropriate placement test score.*

### ENG101 English Composition III

3 Credits (3 Lectures)

Development of ability to read and write academic, college-level essays with an emphasis on generating a thesis and supporting ideas, and using a process of writing, revising and editing to create organized, coherent, thoughtful, and well-developed essays which adhere to the conventions of English grammar, mechanics, and usage.

*Prerequisites: ENG100 or appropriate writing placement score; RDG100A or RDG100B.*

### ENG102 English Composition IV

3 Credits (3 Lectures)

Further emphasis on critical reading and essay writing, with each student writing short essays as well as an extended research paper, engaging students in the reading, thinking, and writing processes central to academic research: paraphrase, summary, critical analysis, and synthesis.

*Prerequisites: ENG101; RDG100A or RDG100B or appropriate reading placement score.*

### ENG121 Applied Technical Writing

3 Credits (3 Lectures)

Students apply their writing skills to producing clearly organized reports and other business communications. Processes for reporting technical information, business and professional writing styles, plus mechanical and syntax are stressed.

*Prerequisites: ENG090, RDG091 or appropriate placement test score.*

### ENG200 Creative Writing

3 Credits (3 Lectures)

Practice in the writing of various literary forms: poetry, short fiction, drama, and creative or journalistic articles with emphasis on any particular form, depending on individual student preferences.

*Prerequisite: RDG100A or RDG100B.*

### ENG203 Advanced Composition

3 Credits (3 Lectures)

Designed to help transfer students further develop their critical reading, writing, and research abilities. Emphasis is placed on the methods of discourse students will need to know in their own disciplines and areas of interest.

*Prerequisites: ENG102; RDG100A or RDG100B.*

### ENG205 Introduction to the Study of Language

3 Credits (3 Lectures)

A study of language, including such topics as code, phonology, morphology, lexicon, language acquisition, and language behavior.

*Prerequisite: RDG100A or RDG100B.*

### ENG220 Technical Report Writing

3 Credits (3 Lectures)

Advanced techniques of gathering information, organizing data, and writing job-related reports and correspondence.

*Prerequisites: RDG100A or RDG100B; ENG101 or ENG121, or other on-the-job writing experience; basic word processing and computer skills or Consent of Instructor.*

### ENG250 English for Chinese Graduate Students and Educators

1 Credit (1 Lecture)

Offered via Distance Learning/Blackboard to graduate students and faculty at Northeastern University in Shenyang, China to aid in improving oral and written English proficiency. May be repeated for credit.

**ENGLISH SECOND LANGUAGE (ESL)****ESL080 English Language for Adults Beginning Literacy**

3 Credits (3 Lectures)

Basic listening, reading, speaking and writing skills for ELAA (English Language Acquisition for Adults) learners with zero to minimal language literacy. Satisfactory/unsatisfactory grading only.

*Prerequisite: Pre-test to determine existing skill level, evaluate deficiencies and determine specific needs.*

*May be taken two times for credit.*

**ESL081 English Language Acquisition for Adults I**

3 Credits (3 Lectures)

Basic listening, reading, speaking and writing skills for ELAA (English Language Acquisition for Adults) learners with minimal English language literacy. Satisfactory/unsatisfactory grading only.

*Prerequisite: Pre-test to determine existing skill level, evaluate deficiencies and determine specific needs.*

*May be taken two times for credit.*

**ESL082 English Language Acquisition for Adults II**

3 Credits (3 Lectures)

Listening, reading, speaking and writing skills for ELAA (English Language Acquisition for Adults) learners with basic English language skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ESL081 or pre-test to determine that existing skill level is appropriate. May be taken two times for credit.*

**ESL083 English Language Acquisition for Adults III**

3 Credits (3 Lectures)

Listening, reading, speaking and writing skills for ELAA (English Language Acquisition for Adults) learners with low-intermediate English language skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ESL082 or pre-test to determine that existing skill level is appropriate. May be taken two times for credit.*

**ESL084 English Language Acquisition for Adults IV**

3 Credits (3 Lectures)

Listening, reading, speaking and writing skills for ELAA (English Language Acquisition for Adults) learners with intermediate English language skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ESL083 or pre-test to determine that existing skill level is appropriate. May be taken two times for credit.*

**ESL085 English Language Acquisition for Adults V**

3 Credits (3 Lectures)

Listening, reading, speaking and writing skills for ELAA (English Language Acquisition for Adults) learners with advanced English language skills. Satisfactory/unsatisfactory grading only.

*Prerequisite: ESL084 or pre-test to determine that existing skill level is appropriate. May be taken two times for credit.*

**ESL090W English Composition I for English Language Learners**

3 Credits (3 Lectures)

Designed to focus English Language Learners on the introduction to the North American English writing process; emphasizing idea development and organization, grammar and mechanics in sentences and paragraphs. It is highly recommended that ESL085 be completed prior to enrollment in ESL090W.

*Prerequisite: Appropriate ESL placement score.*

**ESL091R College Vocabulary for English Language Learners**

4 Credits (4 Lectures)

Designed to focus the learner on a primary content area to improve critical thinking skills while improving language development in reading, vocabulary, and comprehension. This course focuses on word interpretation skills that can be applied to any personal or academic reading situation. It is highly recommended that ESL085 be completed prior to enrollment in ESL091R.

**ESL100W English Composition II for English Language Learners**

3 Credits (3 Lectures)

This course focuses on developing one's abilities to generate ideas suitable for formal North American English academic writing and to express those ideas in essay form. Students will use their writing to identify punctuation, grammatical usage and spelling problems, and create effective strategies for their correction. It is highly recommended that ESL091R be completed prior to enrollment in ESL100W.

*Prerequisite: ESL090W or appropriate ESL placement score.*



## ENVIRONMENTAL SCIENCE (ENV)

### ENV101 Environmental Science

4 Credits (3 Lectures, 3 Labs)

Fundamentals of ecology and their relevance to human impact on natural ecosystem. Field trips may be required at student's expense.

*Prerequisites:* RDG100A or RDG100B.

## FIRE SCIENCE TECHNOLOGY (FSC)

### FSC106 Principles of Emergency Services

3 Credits (3 Lectures)

This course provides an overview to fire protection; 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; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

### FSC108 Fundamentals of Fire Prevention

3 Credits (3 Lectures)

Organization and function of a fire prevention bureau including familiarization with state and local laws and ordinances, codes and principles of fire prevention, the inspector's job, and public relations. Fundamentals of fire prevention. Includes techniques, procedures, regulations and enforcement. Also includes discussion of hazards in ordinary and special occupancies. Field trips and lectures from industry also included.

### FSC111 Emergency Driver Operator

2 Credits (1 Lecture, 3 Labs)

Emergency vehicle operator's training including the problems facing operators; the personal qualities of emergency vehicle operator candidates; legal responsibilities of operators; and physical forces involved in driving an emergency vehicle. Includes hands-on training in an emergency vehicle, trouble shooting apparatus, foam equipment and systems, and apparatus testing.

*Prerequisites:* FSC117, FSC118.

### FSC117 Fire Apparatus and Equipment

3 Credits (3 Lectures)

Principles of care, maintenance, and operation of fire apparatus and pumps. Includes pump construction and accessories, pumping techniques, power development and transmission. Driving, troubleshooting and producing effective fire streams.

### FSC118 Fire Hydraulics

3 Credits (3 Lectures)

Review of basic mathematics, hydraulic laws and formulas as applied to the fire service. Application of formulas and calculations to hydraulic problems, water supply variables and discharge requirements for pumps. Completion of FSC117 is recommended prior to enrollment in FSC118.

### FSC129 Hazardous Materials First Responder Operations

3 Credits (3 Lectures)

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. Confined space operations in accordance with the National Fire Protection Agency.

### FSC130 Fitness for Firefighters/CPAT

1.5 Credits (1.5 Lectures)

Skills and abilities required for entry-level position in the fire service including physical ability, and stamina. Opportunity to take the International Association of Fire Fighters (IAFF) Candidate Physical Ability Test (CPAT) at the end of the course. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### FSC134 Fitness and Conditioning for Firefighters

3 Credits (3 Lectures)

Overview of all aspects of fitness for current and prospective firefighters, including physical fitness and workout techniques as they apply to performing specific firefighting tasks.

### FSC140 Firefighter I and II

11 Credits (10 Lectures, 3 Labs)

Introductory fire science course primarily designed for the fire department recruit. Includes firefighting skills, equipment, and administrative policies, fire department operations, personnel policies, and International Fire Service Accreditation Congress Practical Skills Testing.

*Prerequisites:* EMS125 (certified EMT), EMS100 (CPR).

### FSC180 Wildland Fire, Module 1

2 Credits (2 Lectures)

Basic-level course for individuals with little or no experience in the wildland environment. Preparation for performing as a beginning-level wildland firefighter with an organized fire department engine or hand crew. Training will allow student to obtain basic fire behavior factors that will aid them in safe and effective control of wildland fires. Satisfactory/unsatisfactory grading available. May be taken two times for credit.



## **FSC181 NWCG Advanced Firefighter Training, S131**

*0.5 Credits (0.5 Lecture)*

Advanced firefighter training. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

*Prerequisite: FSC130.*

## **FSC182 NWCG Portable Pumps and Water Use, S211**

*1 Credit (1 Lecture)*

Combined self-paced/field exercise format providing training for a portable water pump operator. Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

## **FSC183 NWCG Wildland Power Saws, S212**

*1.5 Credits (1.5 Lectures)*

Skill course designed to instruct prospective chain saw operators in the requirements of the wildfire powersaw operator position. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

## **FSC184 NWCG Supervisory Concepts and Techniques, S281 (L281)**

*1 Credit (1 Lecture)*

Instruction in basic supervision applicable to the single resource boss in the incident command system (ICS) and nonoperations first-level supervisors. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

## **FSC185 NWCG Crew Boss (Single Resource), I200**

*0.75 Credit (0.75 Lecture)*

Instructional course designed to introduce Wildland Firefighters to the principles of the Incident Command System (ICS) associated with incident-related performance in wildfires. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

## **FSC186 NWCG Crew Boss (Single Resource), S230**

*1.5 Credits (1.5 Lectures)*

Instruction to produce student proficiency in the performance of all duties associated with the single resource crew boss, which includes preparation, mobilization, assignment, tactics and safety, demobilization at wildfires. This course is required to obtain the NWCG Engine Boss qualification. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

*Prerequisite: NWCG S131 or FSC181.*

## **FSC187 NWCG Engine Boss (Single Resource), S231**

*0.5 Credit (0.5 Lecture)*

Skill course required for Engine Boss, to produce student proficiency associated with the single resource engine boss. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

*Prerequisite: NWCG S131 or FSC181.*

## **FSC188 NWCG Ignition Operations, S234**

*2 Credits (2 Lectures)*

Combined classroom/field exercise providing an entry-level training in the functional roles and responsibilities connected with firing operations at wildfire situations. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

*Prerequisite: NWCG S290 or FSC191.*

## **FSC189 NWCG Interagency Incident Business Management, S260**

*1 Credit (1 Lecture)*

Instruction to meet the general training needs of all positions for which an understanding of interagency incident business management is required. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

## **FSC190 NWCG Basic Air Operations, S270**

*1 Credit (1 Lecture)*

Instruction that covers aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

*Prerequisite: NWCG S131 or FSC181.*

## **FSC191 NWCG Intermediate Wildland Fire Behavior, S290**

*2 Credits (2 Lectures)*

Instruction to develop and prepare the prospective supervisors to undertake safe and effective fire management operations. This course is one part of seven for the requirements to obtain NWCG certification for Engine Boss. National Wildfire Coordinating Group standardized course. Satisfactory/unsatisfactory grading available.

*Prerequisites: NWCG 190 or FSC180.*



### **FSC202 Supervisory Training for Firefighters**

*3 Credits (3 Lectures)*

Administrative and personnel methods applied to fire safety, department organization and personnel management. Includes fire service planning and relationships with other city departments.

### **FSC204 Firefighting Tactics and Strategy**

*3 Credits (3 Lectures)*

Methods of coordinating personnel, equipment and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fire. Includes simulation exercises.

*Prerequisite: FSC140.*

### **FSC204A Regional Incident Command/Mutual Aid Training**

*4 Credits (4 Lectures)*

Methods of coordinating personnel, equipment and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fire utilizing demonstration and simulation. This course also covers the eight functions of Command. This course is designed for rural Pinal County fire agencies.

*Prerequisite: FSC140 or equivalent or Firefighter for three years.*

### **FSC205 Command Strategies for Major Emergencies**

*4 Credits (4 Lectures)*

Methods of managing major emergency incidents to include multiple alarm structural fires, high-rise fires, major brush fires, complex hazardous materials incidents and multi-casualty medical incidents. Management of incidents requiring the commitment of resources based on transitional situations and managing the interaction between numerous agencies to achieve control is employed utilizing simulated exercises.

*Prerequisite: FSC204.*

### **FSC208 Firefighter Safety and Building Construction**

*3 Credits (3 Lectures)*

Actions necessary to provide for the safety of firefighters operating on the fireground. Effects that fire and heat may have on various types of building construction resulting in the loss of structural integrity. Includes signs and symptoms of structural damage.

*Prerequisite: FSC140 or current firefighter.*

### **FSC209 Fire Origin, Cause and Determination**

*3 Credits (3 Lectures)*

Methods of determining points of fire origin, path of travel, and fire cause. Includes recognizing and preserving evidence, interviewing witnesses, arson laws, and types of arson fire. Court testimony, report and records are discussed.

### **FSC220 Fire Officer Leadership**

*3 Credits (3 Lectures)*

Supervisory capabilities which includes leadership skills and management styles. Also includes stress management, communication and motivational skills, and roles of the company officer. The course addresses ethics, use and abuse of power at the company officer level, creativity in the fire service environment, and management of the multiple roles of the company officer. This course mirrors the National Fire Academy Leadership I, II, and III course taught by the Arizona State Fire Marshal. This course is required for IFSAC certification as a Fire Officer I.

*Prerequisite: FSC202.*

### **FSC238 Vehicular Extrication and Victim Stabilization**

*2 Credits (2 Lectures)*

Participative course designed for the Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS) for patient assessment and management, and standard operating procedures to selected victim scenarios.

### **FSC250 Ladder Company Officer**

*1 Credit (1 Lecture)*

Overview of all aspects of ladder company operations including activities, expectations and responsibilities required of the ladder captain. Designed for the company officer who aspires to the role of ladder company officer.

### **FSC252 Engine Company Officer**

*1 Credit (1 Lecture)*

Overview of all aspects of engine company operations including the activities and responsibilities performed by the captain as well as mechanisms for developing a personal supervisory style. Designed for the aspiring company officer or anyone having the opportunity for the role of a company officer.



**FRENCH (FRE)**

**FRE101 Elementary French I**

4 Credits (1 Lab, 4 Recitations)

Basic understanding of speaking, reading, and writing French with survey of cultural materials.  
*Prerequisite: RDG100A or RDG100B.*

**FRE102 Elementary French II**

4 Credits (1 Lab, 4 Recitations)

Focus on developing conversational ability in French. Reading, writing, and listening to the spoken language on tapes.  
*Prerequisite: FRE101.*

**FRE201 Intermediate French I**

4 Credits (4 Lectures, 1 Lab)

Development of reading, writing, speaking and listening skills and proficiency at the novice intermediate level. Continuation of understanding, appreciation and sensitivity to cultural norms, values, and beliefs in areas where French is spoken.  
*Prerequisites: FRE102, two years of high school French or Consent of Instructor.*

**GENERAL EDUCATION DEVELOPMENT (GED)**

**GED090 Adult Secondary Education I**

3 Credits (3 Lectures)

Low advanced level of basic math, reading, science, social studies and writing skills to prepare for the GED exam. Satisfactory/unsatisfactory grading only.  
*Prerequisite: ABE093 or pre-test to determine existing skill level and to evaluate deficiencies and determine specific needs.*

**GED092 Adult Secondary Education II**

3 Credits (3 Lectures)

Advanced level of basic math, reading, science, social studies and writing skills. Satisfactory/unsatisfactory grading only.  
*Prerequisite: GED090 or pre-test to determine existing skill level and to evaluate deficiencies and determine specific needs.*

**GED095 GED Studies**

6 Credits (6 Lectures)

Reading in content areas of social studies, science and literature; math and writing skills to pass the GED exam.  
*Prerequisite: Pre-test to evaluate existing skill level, evaluate deficiencies, and determine specific needs.*

**GEOGRAPHY (GEO)**

**GEO101 Introduction to Cultural and Historical Geography**

3 Credits (3 Lectures)

Historical and contemporary spatial variations among cultural groups and spatial functioning of society. Illustrations from a variety of cultures showing how culture is constructed and contested and contextual.  
*Prerequisite: RDG100A or RDG100B.*

**GEOLOGY (GLG)**

**GLG101 Physical Geology**

4 Credits (3 Lectures, 3 Labs)

Basic principles of geology. Earth materials, external processes, internal processes, minerals and energy resources, planetary geology.  
*Prerequisites: MAT091; RDG100A or RDG100B.*

**GLG102 Historical Geology**

4 Credits (3 Lectures, 3 Labs)

Rocks, fossils, organic evolution, geologic time, plate tectonics, earth's origin, and the major time periods of earth history.  
*Prerequisites: MAT091; RDG100A or RDG100B.*

**GLG110 Environmental Geology**

4 Credits (3 Lectures, 3 Labs)

Geological studies as they apply to interactions between humans and the earth, including geologic processes and hazards, resources, and global change.  
*Prerequisites: MAT091; RDG100A or RDG100B.*

**HEALTH KNOWLEDGE & SKILLS (HKS)**

**HKS155 Introduction to Phlebotomy**

3 Credits (2 Lectures, 3 Labs)

An introduction to the basic knowledge and practical experience necessary for the safe and successful collection of blood specimens. Students have the opportunity for practical experience in a hospital setting.  
*Prerequisite: Proof of immunization for Rubella, Rubeola and Varicella. Corequisite: HKS255.*

**HKS255 Phlebotomy Lab**

4 Credits (12 Labs)

An application of basic phlebotomy training to provide safe and successful collection of blood specimens. Students have the opportunity for practical experience in a hospital setting.  
*Prerequisite: Proof of successful completion of drug test. Corequisite: HKS155.*



## HEALTH CAREERS CENTER (HCC)

### HCC100 Introduction to Health Care

3 Credits (3 Lectures)

An introductory course for students entering a variety of college-level health care programs. Topics include health care today, personal and workplace safety, behaviors for success, communication in the health care setting, business of caring, and securing and maintaining employment.

*Prerequisites:* RDG100A or RDG100B.

### HCC110A Medical Terminology A

3 Credits (3 Lectures)

Study of prefixes, suffixes, word roots, combining forms, special endings, plural forms and abbreviations based on anatomy and physiology related to each of the body systems. Pathophysiology and related diagnostic tests and procedures for each of the body systems.

*Prerequisite:* RDG100A or RDG100B. *Approved for Tech Prep.*

### HCC110B Medical Terminology B

3 Credits (3 Lectures)

Study of prefixes, suffixes, word roots, combining forms, special endings, plural forms, and abbreviations based on anatomy, physiology, pathophysiology, diagnostic tests and procedures related to assigned body systems. This course is a continuation of HCC110A, but can be taken before HCC110A.

*Prerequisite:* RDG100A or RDG100B.

### HCC111 Health Care Law and Ethics

2 Credits (2 Lectures)

An overview of medical laws and ethics relevant to medical careers that can help guide the students through the legal and ethical questions they may reasonably expect to face as a health care provider.

*Prerequisite:* RDG100A or RDG100B. *Approved for Tech Prep.*

### HCC112 Interpersonal Skills

2 Credits (2 Lectures)

Basic interpersonal behavior principles for the health care worker with emphasis on effective interaction and cultural diversity in a variety of health care settings.

*Prerequisite:* RDG100A or RDG100B.

### HCC113 Math and Dosage Calculations for Health Occupations

1 Credit (1 Lecture)

Mathematical concepts and dosage calculations required in a variety of health occupations.

*Prerequisites:* RDG100A or RDG100B and MAT091.

### HCC116 Medical Terminology Accelerated

3 Credits (3 Lectures)

Fast-paced for students with medical background or knowledge. A review of body systems, pronunciation, usage, and definition of medical terminology. Review of pharmacological, x-ray, laboratory terms.

*Prerequisite:* RDG100A or RDG100B.

## HEALTH INFORMATION MANAGEMENT (HIM)

### HIM115 Health Information Technology I

4 Credits (4 Lectures)

This course includes fundamentals of health information management, the health information management profession, data collection standards, data quality and technology, data access and retention, coding, classification and reimbursement systems, registries, statistics and research and epidemiology.

*Prerequisite:* RDG100A or RDG100B.

### HIM117 Introduction to Health Information Systems

3 Credits (3 Lectures)

This course includes an introduction to health care delivery systems, organization of data elements in a health record, post-discharge processing, storage, uses, retrieval and reporting of health information, confidentiality and compliance, health care reimbursement, human resource management, training and development.

*Prerequisite:* RDG100A or RDG100B.

### HIM121 Legal Aspects of Health Information

2 Credits (2 Lectures)

This course includes the study of the law in general, including the American legal system, legal procedures and principles of liability; and control and use of patient specific health information, including confidentiality and release of information; and specialized areas of concern in health information technology.

*Prerequisite:* RDG100A or RDG100B.

### HIM131 Electronic Medical Billing

3 Credits (3 Lectures)

This course provides an extensive real-world experience with electronic medical coding and billing based on industry practices and addresses electronic claims and a variety of compliance issues.



## **HIM138 Introduction to Medical Coding**

3 Credits (3 Lectures)

Introduction to the use of diagnostic and procedural codes (ICD9, HCPCS, CPT, RVRVs, HCFA 1500, UB92).

*Prerequisite: RDG100A or RDG100B.*

## **HIM156 Introduction to Medical Transcription**

3 Credits (3 Lectures)

Transcription of basic medical dictation, incorporating English usage, medical transcription skills, medical knowledge, proofreading and editing skills, and meeting progressively demanding accuracy and productivity standards.

*Prerequisites: Keyboarding course(s) totaling 2 credits, MS Word course(s) totaling 2 credits; HCC116 or HCC110A and HCC110B. Corequisite: HCC110B if HCC110A was taken as a prerequisite; HCC110A if HCC110B was taken as a prerequisite.*

## **HIM157 Intermediate Medical Transcription**

3 Credits (3 Lectures)

Transcription of intermediate, original medical dictation using proofreading and editing skills. Emphasis on surgery, radiology and pathology reports. Discussion of legal implications for medical transcriptionists.

*Prerequisites: HIM156; type at least 45 wpm.*

## **HIM158 Intermediate Procedural Coding**

3 Credits (3 Lectures)

Preparation for the American Association of Procedural Coders certification exam, including CPT, ICD-9 and HCPCS coding.

*Prerequisite: HIM138.*

## **HIM161 Introduction to Insurance and Insurance Billing**

3 Credits (3 Lectures)

An interactive, competency-based approach to learning computerized management of a medical office. Learn how to enter patient information, schedule appointments, complete the billing cycle, process insurance claims both on forms and electronically, and perform numerous computer tasks.

*Prerequisite: RDG100A or RDG100B.*

## **HIM169 Advanced Medical Transcription**

3 Credits (3 Lectures)

Transcription of advanced medical dictation and discussion of legal implications for medical transcriptionists.

*Prerequisites: HIM156, HIM157.*

## **HIM175F Practicum – Medical Transcription**

4 Credits (4 Practicums)

This course offers 180 hours of practical experience transcribing advanced medical transcription under supervision of an instructor.

*Prerequisite: Consent of Instructor.*

## **HIM175I Practicum – Professional Coder**

4 Credits (4 Practicums)

This course offers 180 hours of practical experience with medical coding under supervision of an instructor.

*Prerequisite: Consent of Instructor.*

## **HIM175K Practicum – Medical Biller**

4 Credits (4 Practicums)

This course offers 180-hour practical experience with medical billing procedures under supervision of an instructor.

*Prerequisite: Consent of Instructor.*

## **HIM208 Hospital Coding**

3 Credits (3 Lectures)

This course is a comprehensive approach to the key competencies for hospital coding.

*Prerequisites: HIM138 and HIM158.*

## **HIM215 Health Information Technology II**

4 Credits (4 Lectures)

This course includes quality management and clinical outcomes, health law concepts and practices, principles of management, operational management, human resource management, financial management, technology, applications and security, electronic health records: a unifying principle, information systems life cycle.

*Prerequisite: RDG100A or RDG100B.*

## **HIM275Q Practicum – Health Information Technology**

4 Credits (4 Practicums)

This course offers 180 hours of supervised practical experience in a medical facility where students can apply health information technology knowledge and procedures in a situation of actual patient contact.

*Prerequisite: Consent of Instructor.*



## HEALTH PATIENT MANAGEMENT (HPM)

### HPM105 Pharmacy Techniques

3 Credits (3 Lectures)

An overview of pharmacy. History of pharmacy, pharmacy terminology, role and responsibilities of a pharmacy technician in comparison to that of the pharmacist, and ethical and legal information. Theory of procuring, manipulating, calculating and preparing drugs for dispensing.

### HPM125 Nursing Assistant

6 Credits (4 Lectures, 6 Labs)

Entry-level nursing skills, supervised clinical experience, and basic anatomy, physiology, nutrition, and medical terminology pertinent to nursing assisting in nursing homes or hospitals. Potential students convicted of a felony may not apply for state certification or licensure until five years after the date of 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:* CPR for the Health Care Provider, RDG100A or RDG100B, immunizations. Approved for Tech Prep.

### HPM136 Business Skills for Massage Therapy

3 Credits (3 Lectures)

Career options in the massage therapy field, including entrepreneurial opportunities, medical applications and spa work. Insurance billing and preparation for taking the national certification examination.

*Prerequisite:* RDG100A or RDG100B.

### HPM140 Medical Assisting Skills I

4 Credits (3 Lectures, 3 Labs)

This course offers basic medical assisting clinical skills including medical and surgical asepsis, assisting with minor office surgery, physical examinations, hot and cold treatments, administering medications, EKG, and specialty examinations.

*Prerequisite:* RDG100A or RDG100B.

### HPM141 Medical Assisting Skills II

4 Credits (3 Lectures, 3 Labs)

Advanced medical assisting clinical skills including: medical asepsis, sterilization and disinfection, phlebotomy, various hematology, blood chemistry, serology, urinalysis, and microbiology testing.

*Prerequisite:* RDG100A or RDG100B.

### HPM150 Chiropractic Assistant Training

2 Credits (2 Lectures)

This course prepares individuals for entry-level positions in chiropractic offices and clinics and includes both administrative and clinical procedures using chiropractic principles, knowledge of the management of common diseases, history taking, administrative duties including recordkeeping, professional standards of conduct, CPR, and 6-hours of supervised hands-on practicum in a chiropractic office. This course has been submitted for approval by the State of Arizona Board of Chiropractic Examiners. Upon completion of this course, the students must register with the Board of Chiropractic Examiners.

### HPM151 Study of Acupuncture for Chiropractic Assistants

1 Credit (1 Lecture)

Orientation to the use of acupuncture in a chiropractic practice. This course is designed as continuing education for Chiropractic Assistants who are employed by a Chiropractor certified in the specialty of acupuncture.

### HPM152 Study of Physiotherapy for Chiropractic Assistants

1 Credit (1 Lecture)

Orientation to musculoskeletal physiotherapy. This course is designed as continuing education for Chiropractic Assistants who are employed by a Chiropractor certified in the specialty of physiotherapy.

### HPM159 Administrative Medical Procedures

3 Credits (3 Lectures)

Procedures for medical front office and computer applications in a medical environment.

*Prerequisite:* RDG100A or RDG100B.

### HPM160 Applied Anatomy for Massage Therapy

3 Credits (3 Lectures)

Study of bones, joints, and muscles while developing palpation skills with practical application in concurrent massage class experience.

*Prerequisite:* RDG100A or RDG100B. *Corequisite:* BIO160.

### HPM162 Basic Pharmacology for Health Occupations

3 Credits (3 Lectures)

Study of drugs, basic rationale for understanding drug therapy, therapeutic applications and diseases, drug classifications, main therapeutic effects, drug interactions, and adverse reactions.

*Prerequisite:* RDG100A or RDG100B.



## **HPM164 Pharmacy Certification Review**

*2 Credits (2 Lectures)*

Preparation for taking the national pharmacy certification exam necessary for placement in the field and verification of competency.

*Prerequisite: RDG100A or RDG100B.*

## **HPM173 Pathophysiology**

*3 Credits (3 Lectures)*

Pathological conditions and terminology, causes, incidence, signs and symptoms, diagnosis and treatment, and special considerations associated with the major diseases of the body systems core studied.

*Prerequisite: RDG100A or RDG100B.*

## **HPM175C Practicum – Medical Assistant**

*4 Credits (4 Practicums)*

Course offers 180 hours of practical experience in the office of a qualified medical physician or medical facility where the student can apply administrative and clinical procedures in a situation with actual patient contact.

*Prerequisite: Consent of Instructor.*

## **HPM175D Practicum – Medical Administrative Assistant**

*4 Credits (4 Practicums)*

Course offers 180 hours of practical experience in the office of a qualified medical physician or medical facility where the student can apply administrative procedures in a situation with actual patient contact.

*Prerequisite: Consent of Instructor.*

## **HPM175E Practicum – Medical Clinical Assistant**

*4 Credits (4 Practicums)*

Course offers 180 hours of practical experience in the office of a qualified medical physician or medical facility where the student can apply clinical procedures in a situation with actual patient contact.

*Prerequisite: Consent of Instructor.*

## **HPM175H Practicum – Pharmacy Technician**

*4 Credits (4 Practicums)*

Course offers 180 hours of practical experience in a pharmacy of a medical facility where the student can apply pharmacological procedures in a situation with actual patient contact.

*Prerequisite: Consent of Instructor.*

## **HPM175L Practicum – Massage Therapy (Relaxation Massage)**

*1 Credit (1 Practicum)*

Course offers 45 hours of hands-on experience with emphasis on relaxation massage under the supervision of an instructor.

*Prerequisite: HPM180 and Consent of Instructor.*

## **HPM175M Practicum – Massage Therapy (Therapeutic Massage)**

*1 Credit (1 Practicum)*

Course offers 45 hours of hands-on experience with emphasis on therapeutic massage under supervision of an instructor.

*Prerequisites: HOC181 or HPM181; HOC280 or HPM280; and Consent of Instructor.*

## **HPM175N Practicum – Massage Therapy for Special Populations**

*1 Credit (1 Practicum)*

Course offers 45 hours of hands-on experience with emphasis on massage for special populations under supervision of an instructor.

*Prerequisite: HPM281 and Consent of Instructor.*

## **HPM175O Practicum – Massage Therapy (Spa Treatments and Hydrotherapy)**

*1 Credit (1 Practicum)*

Course offers 45 hours of hand-on experience with emphasis on spa treatments and hydrotherapy under supervision of an instructor.

*Prerequisite: HPM282 and Consent of Instructor.*

## **HPM180 Therapeutic Massage I**

*3 Credits (3 Lectures)*

Introduction to massage history, benefits and contraindications, draping, hygiene and safety, Swedish massage techniques and benefits, and business and legal aspects. Medical terminology related to body mechanics and anatomy appropriate to massage. Each area is accompanied by practice in massage techniques.

## **HPM181 Therapeutic Massage II**

*3 Credits (3 Lectures)*

Clothed massage styles that are used at events in public and also may be applied in office settings. Corporate chair massage, sports massage, stretching and rocking (trager-style) massage are taught along with the use of proper body mechanics, hygiene and safety, draping and professional decorum. Joint movement terminology and local anatomy are included.



### **HPM190 Anatomy, Physiology, Pathology & Pharmacology of the Eye**

3 Credits (3 Lectures)

This course covers the anatomy, physiology, common pathologies, and ocular pharmacology of the eye.

*Prerequisite: RDG100A or RDG100B.*

### **HPM210 Review for Registered Medical Assistant Examination**

3 Credits (3 Lectures)

This course is a comprehensive approach to reviewing both front and back office competencies for the AAS medical assistant graduate preparing to take the RMA (registered medical assistant) Medical Assistant Certification Examination offered by the American Medical Technologists (AMT).

*Prerequisites: Medical Assistant graduate with an A.A.S. degree.*

### **HPM230 Review Course for Polysomnographic Technologists RPSGT Exam**

6 Credits (6 Lectures)

This course prepares a Polysomnographic Technologist to sit for the Board of Registered Polysomnographic Technologist (BRPT) examination. Satisfactory/unsatisfactory grading only.

*Prerequisite: Certification in basic cardiac life support.*

### **HPM280 Therapeutic Massage III**

3 Credits (3 Lectures)

Muscle-specific and condition-specific massage designed to aid in the rehabilitative process including carpal tunnel syndrome, thoracic outlet syndrome, sciatic, low back and neck pain.

*Prerequisite: HPM180.*

### **HPM281 Therapeutic Massage IV**

3 Credits (3 Lectures)

Working with special populations such as pregnant women and the elderly. The course also covers lymphatic massage and foot reflexology.

### **HPM282 Therapeutic Massage V**

3 Credits (3 Lectures)

This course consists of 30 hours of spa technology (balneotherapy) and 15 hours of hydrotherapy. The spa protocols include: hot stone massage, the application of therapeutic muds, scrubs and wraps, and a class for preparing students to work in spas and resorts called Finishing Touches. The hydrotherapy portion focuses on medical applications of water, heat and cold for treatment of injuries.

## **HEAVY EQUIPMENT OPERATIONS (HEO)**

### **HEO100 Introduction to Heavy Equipment Operations**

5 Credits (1 Lecture, 12 Labs)

Implementation of basic Heavy Equipment operation knowledge. Covering various types of equipment used in the industry. Providing students with correct theory, safety and operation experiences.

*Prerequisite: Consent of Instructor.*

### **HEO101 Heavy Equipment Operators Camp**

2 Credits (1 Lecture, 1 Practicum)

Introduction to the construction industry with an emphasis on safety, equipment operations, maintenance and career opportunities.

### **HEO121 Heavy Equipment Operations I**

5 Credits (3 Lectures, 6 Labs)

Introduction to the use of heavy equipment with emphasis on safety, preventive maintenance, and grade stake interpretation.

*Prerequisite: Consent of Instructor.*

### **HEO122 Heavy Equipment Operations II**

5 Credits (3 Lectures, 6 Labs)

Expanded operation of heavy equipment.

*Prerequisite: HEO121.*

### **HEO127 Heavy Equipment Reconditioning**

4 Credits (2 Lectures, 6 Labs)

Fundamentals of heavy equipment reconditioning procedures.

### **HEO128 Diesel Equipment Service and Repair**

4 Credits (2 Lectures, 6 Labs)

Training related to the service and repair of diesel and heavy equipment.

### **HEO221 Advanced Heavy Equipment Operations III**

5 Credits (3 Lectures, 6 Labs)

Ability to implement comprehensive heavy equipment operation skills.

*Prerequisite: HEO122.*

**HEO222 Applied Heavy Equipment Construction**

5 Credits (3 Lectures, 6 Labs)

Advanced skills and experience on a specific type of heavy equipment. Student development and construction of a project from start to finish and an introduction to job-seeking techniques necessary to gain employment.

*Prerequisite:* HEO122 and Consent of Instructor.

**HEO223 Commercial Drivers License**

3 Credits (3 Lectures)

Preparation for taking the Arizona Department of Motor Vehicles' written examinations, the pre-trip vehicle inspection procedures, vehicle maneuvering control skills, and on-road driving test. Open ONLY to those students registered in HEO, DIE, or John Deere programs.

**HISTORY (HIS)****HIS101 United States History I**

3 Credits (3 Lectures)

A survey of the significant phases of the history of the United States from pre-European contact to the Civil War and Reconstruction, stressing the political, military, social and economic development of the new republic.

*Prerequisite:* RDG100A or RDG100B.

**HIS102 United States History II**

3 Credits (3 Lectures)

A survey of United States history after Reconstruction to the present, emphasizing the origins and development of the problems confronting a great industrialized world power and the issues arising from the two world wars.

*Prerequisite:* RDG100A or RDG100B.

**HIS103 History of Western Civilization I**

3 Credits (3 Lectures)

Western world development from its beginnings to the mid-17th century, centered on the cultural, scientific, religious, and political contributions of the great western civilizations.

*Prerequisite:* RDG100A or RDG100B.

**HIS104 History of Western Civilization II**

3 Credits (3 Lectures)

Western world development from mid-17th century to modern day, stressing its cultural, intellectual, military and political conflicts and contributions.

*Prerequisite:* RDG100A or RDG100B.

**HIS106 Mexican-American History**

3 Credits (3 Lectures)

Examination of the origins and development of Mexican-American peoples and their contributions to the cultural, social, economic and historical development of the United States. Emphasis on social, economic and political trends from the Mexican-American War to the present.

*Prerequisite:* RDG100A or RDG100B.

**HIS107 African-American History I**

3 Credits (3 Lectures)

A survey of African-American life and history in the United States from 1619-1865. Emphasizes how enslaved Africans lived, worked, socialized and defined themselves in antebellum America, as they developed and sustained a new cultural community with African-American community and familial values and traditions.

*Prerequisite:* RDG100A or RDG100B.

**HIS108 Eastern Civilization – Beginnings to 1850**

3 Credits (3 Lectures)

An examination of the characteristics and development of civilizations, religions and philosophies of the Far East and Southeast Asia from ancient times to the mid-19th century.

*Prerequisite:* RDG100A or RDG100B.

*Corequisite:* ENG102.

**HIS201 Women in United States History**

3 Credits (3 Lectures)

The history of women in American society from colonial times to the present with an emphasis on female leadership, women's issues, and women's social organizations.

*Prerequisite:* RDG100A or RDG100B.

**HIS208 Eastern Civilization – 1850 to Modern Times**

3 Credits (3 Lectures)

An examination of the characteristics and development of civilizations, religions and philosophies of the Far East and Southeast Asia from the mid-19th century to modern times.

*Prerequisite:* RDG100A or RDG100B.

*Corequisite:* ENG102.



## HONORS (HNR)

### HNR201 Honors Seminar I

*1 Credit (1 Recitation)*

Required for Honors students in the 18-hour academic transfer program. A one-hour Honors Seminar must be taken concurrently with each content course taken for Honors credit. Honors students and faculty work closely together on in-depth projects outside the regular curriculum. During the seminar, the project is developed and research shared with other Honors students through in-depth discussion and analysis.

*Prerequisite: HNR204 or HNR205.*

### HNR202 Honors Seminar II

*1 Credit (1 Recitation)*

Required for Honors students in the 18-hour academic transfer program. A one-hour Honors Seminar must be taken concurrently with each content course taken for Honors credit. Honors students and faculty work closely together on in-depth projects outside the regular curriculum. During the seminar, the project is developed and research shared with other Honors students through in-depth discussion and analysis.

*Prerequisite: HNR204 or HNR205.*

### HNR203 Honors Seminar III

*1 Credit (1 Recitation)*

Required for honors students in the 18-hour academic transfer program. A one-hour Honors Seminar must be taken concurrently with each content course taken for Honors credit. Honors students and faculty work closely together on in-depth projects outside the regular curriculum. During the seminar, the project is developed and research shared with other honors students through in-depth discussion and analysis.

*Prerequisite: HNR204 or HNR205.*

### HNR204 Honors Colloquium I

*3 Credits (3 Lectures, 3 Recitations)*

The Honors Colloquium is required for Honors students in the eighteen-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 Discoverer's: 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: RDG100A or RDG100B. Corequisite: ENG101.*

### HNR205 Honors Colloquium II

*3 Credits (3 Lectures, 3 Recitations)*

The Honors Colloquium is required for Honors students in the eighteen-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; RDG100A or RDG100B.*

*Corequisite: ENG102.*

**HOSPITALITY MANAGEMENT (HRM)****HRM100 Introduction to Hospitality**

3 Credits (3 Lectures)

An introduction to hotel, restaurant, tourism and related industries.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

**HRM101 Facilities Management**

3 Credits (3 Lectures)

The principles of property/facilities management with focus on lodging and food service operations. Concepts of the physical plant and engineering systems are introduced. Environment and energy conservation issues are discussed.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

**HRM102 Management of Guest Services**

3 Credits (3 Lectures)

Covers all aspects of front office management including the duties and responsibilities of the bell service personnel, clerks, cashiers, and reservationists. Areas of concentration will include interoffice communication and revenue management.

*Prerequisite: RDG100A or RDG100B. Approved for Tech Prep.*

**HRM103 Managing Food Service Operations**

2 Credits (2 Lectures)

The principles of commercial food service operations from a systemic approach.

*Corequisite: RDG100A or RDG100B.*

**HRM105 Food Safety Foundations**

1 Credit (1 Lecture)

Applied course in food safety and sanitation to identify, analyze, the factors that cause food borne illnesses through the study of proper purchasing, preparation, handling, and storage.

**HRM106 Supervision in the Hospitality Industry**

3 Credits (3 Lectures)

Concepts of the applied strategies of supervision within the hospitality industry including the management of a diverse workforce, leadership, and the regulatory environment of human resources management.

*Prerequisite: RDG100A or RDG100B.*

**HRM107 International Cuisines from Literature and Film**

1 Credit (.5 Lecture, .5 Recitation)

Exploration of the relationship between the meaning of food and cultures as expressed through literature and cinema.

**HRM121 Culinary Culture Workshop**

1 Credit (1 Recitation)

Renowned Classic and Nouvelle 20th century cuisine creations prepared with historical, aesthetic, artistic and cultural emphasis. Hands-on setup opportunities for students to prepare food and/or practice service skills. Satisfactory/unsatisfactory grading only. May be repeated four credits.

**HRM122 Culinary Culture Seminar**

.5 Credit (.5 Recitation)

Renowned Classic & Nouvelle 20th century cuisine creations prepared with historical, aesthetic, artistic and cultural emphasis. Hands-on setup opportunities for students to prepare food and/or practice service skills. Satisfactory/unsatisfactory grading available. May be repeated six credits.

**HRM123 Culinary Culture Series**

0.25 Credit (0.25 Recitation)

Renowned Classic and Nouvelle 20th century cuisine creations prepared with historical, aesthetic, artistic and cultural emphasis. Hands-on setup opportunities for students to prepare food and/or practice service skills. Satisfactory/unsatisfactory grading only. May be repeated six credits.

**HRM150 Dining and Beverage Service**

2 Credits (1.5 Lectures, 2 Labs)

An introduction to dining room service and beverage management. Note to student: 16 hours of supervised lab experience within the course will be scheduled outside of class meeting times at program catering events.

**HRM151 Culinary Practicum I**

2 Credits (4 Labs)

Development of steward skills under the supervision of a certified chef, where the student demonstrates competency in a variety of skills necessary at the introductory cook level.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*

**HRM152 Culinary Practicum II**

2 Credits (4 Labs)

Development of skills as a breakfast cook and vegetable cook under the supervision of a certified chef where the student demonstrates competency in a variety of skills necessary for becoming a certified chef.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*



### HRM153 Culinary Practicum III

3 Credits (6 Labs)

Development of skills as a butcher, broiler cook, and soup and sauce cook, under the supervision of a certified chef where the student demonstrates competency in a variety of skills necessary for becoming a certified cook.

*Prerequisites:* Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.

### HRM203 Introduction to Culinary Arts

3 Credits (2 Lectures, 3 Labs)

Introduction to sanitation, food products and equipment. Basic skills and cooking principles, procedures and techniques involved in small and large quantity food preparation and production. Note to student: 16 hours within the required supervised lab experience will be scheduled outside of class meeting times at program catering events.

*Corequisite:* RDG100A or RDG100B. *Approved for Tech Prep.*

### HRM205 HACCP Manager Certified Course

1 Credit (1 Lecture)

Managerial-level food safety and sanitation principles for food service management operations. May be taken four times for credit for certification.

*Prerequisites:* RDG100A or RDG100B.

### HRM207 Ethnic, Regional and Non-Western Food and Culture

3 Credits (3 Lectures)

The history of food and its impact on culture and customs of ethnic regional and non-Western peoples.

*Prerequisite:* RDG100A or RDG100B.

### HRM208 Hospitality Law

3 Credits (3 Lectures)

Common law and its application to the hospitality industry, including basic contracts, administrative law and government regulations, legal concerns resulting from the innkeeper-guest relationship, and the establishment and operation of a place of public accommodation.

*Prerequisite:* HRM100.

### HRM250 Professional Baking and Garde Manger

3 Credits (2 Lectures, 3 Labs)

Development of knowledge and skills in professional baking and garde manger.

## LITERATURE (LIT)

### LIT101 Introduction to Literature

3 Credits (3 Lectures)

A study of the four major literary genres: novel, short story, drama and poetry.

*Prerequisite:* RDG100A or RDG100B.

### LIT201 American Literature I

3 Credits (3 Lectures)

The chief literary works produced in America from the colonial period through the Civil War.

*Prerequisite:* RDG100A or RDG100B. *Corequisite:* ENG102.

### LIT202 American Literature II

3 Credits (3 Lectures)

Major literary works from the Civil War to present.

*Prerequisite:* RDG100A or RDG100B. *Corequisite:* ENG102.

### LIT203 English Literature I

3 Credits (3 Lectures)

The major English literary works from Old English to 1800.

*Prerequisite:* RDG100A or RDG100B. *Corequisite:* ENG102.

### LIT204 English Literature II

3 Credits (3 Lectures)

The chief English literary works from the Romance period to the modern period.

*Prerequisite:* RDG100A or RDG100B. *Corequisite:* ENG102.

### LIT205 World Literature I

3 Credits (3 Lectures)

Outstanding literary works from ancient times through the Renaissance that have had a wide appeal outside the countries in which they originated.

*Prerequisite:* RDG100A or RDG100B.

### LIT206 World Literature II

3 Credits (3 Lectures)

Outstanding literary works from 1650 to present day that have had a wide appeal outside the countries in which they originated.

*Prerequisite:* RDG100A or RDG100B.

### LIT233 American Ethnic Literature

3 Credits (3 Lectures)

Explores questions of American-ethnic identity as expressed through various literary forms written by a variety of American ethnic writers. Focuses on textual analysis and placing literary works into a socio-cultural, political, and/or historical context.

*Prerequisite:* ENG101. *Corequisite:* ENG102.

**LIT254A Literature and Film**

3 Credits (3 Lectures)

Analysis of the narrative mediums of literature and film through the study of select literary works and their film adaptations. This course examines the film as both an interpretation of a literary work of art, and as the unique product of the artistic, historical, and sociocultural forces that influenced its creation.

*Prerequisite: ENG102.*

**LIT254B Literature and Film**

3 Credits (3 Lectures)

Analysis of the narrative mediums of literature and film through the study of select literary works and their film adaptations. This course examines the film as both an interpretation of a literary work of art, and as the unique product of the artistic, historical, and sociocultural forces that influenced its creation. To receive credit for this course, the topic must vary significantly from LIT254A.

*Prerequisite: LIT254A and Consent of Instructor or Division Chair.*

**LIT291 Children's Literature for Educators**

3 Credits (3 Lectures)

Past and present literature, including fiction, poetry, and non-fiction, written specifically for children. The focus is how to effectively choose and use children's literature in educational contexts.

*Prerequisite: RDG100A or RDG100B. Corequisite: ENG102.*

**MANUFACTURING ENGINEERING TECHNOLOGY (MET)****MET110 Introduction to Quality Assurance**

3 Credits (2 Lectures, 3 Labs)

An introduction to quality assurance, quality improvement and quality improvement tools including: Statistical Process Control (SPC) software and hardware applications. Related topics include: International Standards Organization Quality Standards (ISO 9000) and Theory of Constraints (TOC). Writing technical papers with an oral presentation is included.

**MET120 Machine Trade Technology I**

3.5 Credits (2 Lectures, 3 Labs)

Principles and operations of machine tools in the shaping of metals, including the use of semi-precision and precision measuring tools, layout methods, lathes, and drill presses.

**MET121 Machine Trade Technology II**

3.5 Credits (2 Lectures, 3 Labs)

Theory, principles and applications of the machinery's handbook. Principles and operations of machine tools in processing metals or composites including advanced engine lathe, milling, and tool engineering in advanced level laboratory activities.

**MET127 Manufacturing Process and Materials**

3 Credits (3 Lectures)

Production processes, materials, techniques, systems and applications used in industry. Concepts, design, materials, processes, resources and systems of production management from manual, mechanized, automated, and integrated stages are presented.

**MET132 Fluid Power (Hydraulics-Pneumatics)**

3 Credits (2 Lectures, 3 Labs)

Theory, production, consumption, control and application of the transmission of energy through hydraulic and pneumatic components, including valves, actuators, pumps and circuits with application laboratory activities.

**MET220 Industrial Robotics/Automation**

3.5 Credits (2 Lectures, 3 Labs)

Basic configuration and operation of industrial robots with a survey of drive systems, controls, and sensors.

**MET221 Electro-Mechanical Technology**

3 Credits (2 Lectures, 3 Labs)

The study of mechanical concepts and basic electro-mechanical systems. The application of basic electronic circuits incorporating electro-mechanical and electro-optical transducers, and auxiliary devices.

*Prerequisite: ELC123.*

**MET222 Industrial Supervision and Management**

3 Credits (3 Lectures)

Psychological aspects and attitudes of supervisor/employee relations, productivity, safety consciousness, group morale leadership techniques, and policy interpretation for understanding the interface appropriate to industrial supervision and management principles.

**MET223 Machine Tool Technology I**

3.5 Credits (2 Lectures, 3 Labs)

Planning and producing advanced machine shop projects, including machine operations, horizontal milling, and heat treatment.



### **MET225 Manufacturing Engineering Technology Capstone**

*3.5 Credits (2 Lectures, 3 Labs)*

Advanced machining in manufacturing engineering processes, concept, design, engineering, and manufacture of a high tolerance sterling engine or suitable project with special emphasis on planning, problem solving, and machine processing.

*Prerequisites: MET223, MET228.*

### **MET226 Electro-Mechanical Systems**

*3 Credits (2 Lectures, 3 Labs)*

Diagnostics, troubleshooting, design, maintenance, schematic reading and preventive maintenance of electric, hydraulic, pneumatic and vacuum systems as these topics relate to industrial machines.

*Prerequisites: MET221, ELC220.*

### **MET228 Computer Aided Manufacturing I**

*4 Credits (2 Lectures, 4 Labs)*

Conventional machining and manufacturing techniques, including numerical control, computer numerical control, computer-aided machining operations, and machine programming instruction.

*Corequisites: MET120, MET121.*

### **MET230 Semiconductor I – Seminar**

*3 Credits (2 Lectures, 3 Labs)*

Overview and introduction to the semi-conductor industry, specifically related to Semi-conductor Manufacturing Technician Fab Cleanroom employment.

## **MASS COMMUNICATIONS (MSC)**

### **MSC101 Introduction to Mass Communication**

*3 Credits (3 Lectures)*

An introductory survey of the mass media, including newspapers, radio, and television, internet, advertising and film. The course examines how the media were developed as well as their impact upon today's society.

### **MSC102 Writing for the Print Media I**

*3 Credits (2 Lectures, 3 Labs)*

Beginning reporting with practice in organizing and writing the basic news story, using Associated Press style.

### **MSC104 Radio Programming and Production**

*3 Credits (2 Lectures, 3 Labs)*

Theory and practical application of roles and responsibilities included in operation of commercial radio stations.

### **MSC105 Broadcast News Writing**

*3 Credits (2 Lectures, 3 Labs)*

The procedures of gathering, preparing, and broadcasting news for radio and television media.

*Prerequisite: ENG101.*

### **MSC106 Introduction to Electronic Media**

*3 Credits (2 Lectures, 3 Labs)*

Theory and practical application of the many processes inherent in preparing and presenting programming via the electronic media. *Approved for Tech Prep.*

### **MSC107 Basic Script Writing**

*3 Credits (3 Lectures)*

Script theory and application in preparing a final, full-length script, emphasizing techniques for visual and oral media production.

*Prerequisites: ENG102, MSC101. Approved for Tech Prep.*

### **MSC108 Print Media Computer Applications**

*3 Credits (2 Lectures, 3 Labs)*

Graphic arts principles, with emphasis on application in the area of newspaper and magazine production.

### **MSC109 TV/Video Production**

*3 Credits (2 Lectures, 3 Labs)*

Review of basic video and television broadcasting equipment.

*Prerequisite: Enrollment in a CAC course with an MSC prefix or Consent of Instructor.*

### **MSC110 Publications**

*2 Credits (2 Lecture)*

Preparing copy and photographs for campus publications. May be taken four times for credit.

### **MSC113 Introduction to Photography**

*3 Credits (2 Lectures, 3 Labs)*

Photo craftsmanship and graphic techniques; cameras, lenses, exposure, focus, lighting, film development, and printing. *Approved for Tech Prep.*

### **MSC114 Advanced Black and White Photography**

*3 Credits (2 Lectures, 3 Labs)*

The use of different photographic materials, perspectives, and exposures.

*Prerequisite: MSC113. Approved for Tech Prep.*



## **MSC120 Graphic Design and Adobe InDesign**

3 Credits (3 Lectures)

Aesthetics and composition for publication and website design. Use of Adobe InDesign software, the professional standard, to create brochures, advertising, magazines and websites.

*Prerequisites: RDG100A or RDG100B, basic operating system and file management knowledge.*

## **MSC130 Digital Photograph and Photoshop**

3 Credits (3 Lectures)

Multiple elements of digital cameras and the software program Adobe Photoshop. Learn new computer skills, the aesthetic principles of photo composition and the fundamentals of manipulating photos by computer.

*Prerequisites: RDG100A or RDG100B, basic operating system and file management knowledge.*

## **MSC202 Writing for the Print Media II**

3 Credits (2 Lecture, 3 Labs)

Advanced reporting of feature stories, interviews, reviews, columns, and editorials.

*Prerequisite: MSC102*

## **MSC203 Theory of Broadcasting**

3 Credits (3 Lectures)

Review of current practices and legal issues in the broadcasting industry. Designed for students who wish to become professionals in broadcasting or related fields as well as for students who wish to be responsible consumers of broadcasting.

## **MSC210 Practicum – Broadcast Journalism**

1-3 Credits (2-6 Labs)

Development of application skills for broadcast journalism under the supervision of a mass communications instructor, practitioner or industry partner, where the student demonstrates competency in a variety of skills necessary for successful participation in the broadcast journalism field. May be taken four times for credit.

*Corequisite: MSC104, MSC108, MSC109 or MSC110.*

## **MSC211 Practicum – Journalism**

1-3 Credits (2-6 Labs)

Development of application skills for journalism under the supervision of a mass communications instructor, practitioner or industry partner, where the student demonstrates competency in a variety of skills necessary for successful participation in the journalism field. May be taken four times for credit.

*Corequisite: MSC104, MSC108, MSC109 or MSC110.*

## **MSC212 Practicum – Radio/TV Production**

1-3 Credits (2-6 Labs)

Development of application skills for radio/TV production under the supervision of a mass communications instructor, practitioner or industry partner, where the student demonstrates competency in a variety of skills necessary for successful participation in the radio/TV production field. May be taken four times for credit.

*Corequisite: MSC104, MSC108, MSC109 or MSC110.*

## **MATHEMATICS (MAT)**

### **MAT080 Pre-Algebra with Review**

5 Credits (5 Lectures)

Development of arithmetic skills for foundation in other mathematics courses, stressing number awareness and arithmetic processes.

### **MAT081 Pre-Algebra Standard**

4 Credits (4 Lectures)

Development of arithmetic skills for foundation in other mathematics courses, stressing number awareness and arithmetic processes.

### **MAT082 Basic Arithmetic**

3 Credits (3 Lectures)

Development of arithmetic skills as a foundation for other mathematics courses, stressing number awareness and arithmetic processes.

### **MAT086 Pre-Algebra**

3 Credits (3 Lectures)

A review of the fundamental concepts of algebra. This course provides a strong base for success in future algebra courses.

*Prerequisite: MAT082. Recommended: RDG091.*

### **MAT090 Introductory Algebra with Review**

5 Credits (5 Lectures)

The fundamental concepts of elementary algebra.

*Prerequisite: MAT081. Recommended: RDG091.*

### **MAT091 Introductory Algebra, Standard**

4 Credits (4 Lectures)

The fundamental concepts of elementary algebra.

*Prerequisite: MAT081. Recommended: RDG091.*

### **MAT092 Introductory Algebra**

3 Credits (3 Lectures)

A review of the basic skills of arithmetic and algebra, with the emphasis on developing sound algebraic and problem solving skills.

*Prerequisite: MAT086. Recommended: RDG091.*



### **MAT101 Essential Mathematics**

4 Credits (4 Lectures)

A review of the basic skills of mathematics with emphasis on developing sound mathematical skills in arithmetic, algebra, geometry and problem-solving.

*Prerequisite: MAT092 and RDG091.*

### **MAT102 Essential Mathematics Accelerated**

3 Credits (3 Lectures)

A review of the basic skills of mathematics needed prior to enrolling in a transfer-level mathematics course, with emphasis on developing sound mathematical skills through concepts of arithmetic, algebra, and geometry to develop computational and problem-solving skills.

*Prerequisite: MAT081. Recommended: RDG091.*

### **MAT120 Intermediate Algebra with Review**

5 Credits (5 Lectures)

Development of computational and manipulative skills in working with algebraic expressions and equations necessary for success in MAT151.

*Prerequisite: MAT091. Recommended: RDG091.*

### **MAT121 Intermediate Algebra, Standard**

4 Credits (4 Lectures)

Development of computational and manipulative skills in working with algebraic expressions and equations necessary for success in MAT151.

*Prerequisite: MAT091. Recommended: RDG091.*

### **MAT122 Intermediate Algebra Accelerated**

3 Credits (3 Lectures)

Development of computational and manipulative skills in working with algebraic expressions and equations necessary for success in MAT151.

*Prerequisite: MAT091. Recommended: RDG091.*

### **MAT140 College Mathematics with Review**

5 Credits (5 Lectures)

General mathematics including numeration systems, sets, algebra, trigonometry, probability and statistics.

*Prerequisites: MAT121; RDG100A or RDG100B.*

### **MAT141 College Mathematics Standard**

4 Credits (4 Lectures)

General mathematics including personal finance, set theory, linear programming, exponential growth and decay, probability and statistics.

*Prerequisites: MAT101 or MAT121; RDG100A or RDG100B.*

### **MAT150 College Algebra with Review**

5 Credits (5 Lectures)

Accelerated algebra including topics such as equations, relations, functions, transformations, linear and quadratic functions and inequalities, systems of linear equations and inequalities, exponential and logarithmic functions, polynomials and rational functions, imaginary and complex numbers, and probability.

*Prerequisites: MAT121; RDG100A or RDG100B.*

### **MAT151 College Algebra Standard**

4 Credits (4 Lectures)

Accelerated algebra including topics such as equations, relations, functions, transformations, linear and quadratic functions and inequalities, systems of linear equations and inequalities, exponential and logarithmic functions, polynomials and rational functions, imaginary and complex numbers and probability.

*Prerequisites: MAT121; RDG100A or RDG100B.*

### **MAT152 College Algebra Accelerated**

3 Credits (3 Lectures)

Accelerated algebra including topics such as equations, relations, functions, transformations, linear and quadratic functions and inequalities, systems of linear equations and inequalities, exponential and logarithmic functions, polynomials and rational functions, imaginary and complex numbers, and probability.

*Prerequisites: MAT121; RDG100A or RDG100B.*

### **MAT171 Finite Mathematics Standard**

4 Credits (4 Lectures)

A study of mathematics focused on solving business-related problems by applying the concepts of algebra, linear programming, statistics, probability and finance.

*Prerequisites: MAT141 or MAT151; RDG100A or RDG100B.*

### **MAT172 Finite Mathematics Accelerated**

3 Credits (3 Lectures)

A study of mathematics focused on solving business-related problems by applying the concepts of algebra, linear programming, statistics, probability and finance.

*Prerequisites: MAT141 or MAT151; RDG100A or RDG100B.*

### **MAT182 Trigonometry Accelerated**

3 Credits (3 Lectures)

A study of trigonometry with an emphasis on problem solving and topics required for success in calculus.

*Prerequisites: RDG100A or RDG100B and MAT121.*

*Corequisite: MAT151.*

**MAT187 Pre-Calculus**

5 Credits (5 Lectures)

Coordination of topics from MAT151 and MAT181 to reinforce the student with an analytical approach to pre-calculus mathematics.

*Prerequisites: MAT121; RDG100A or RDG100B.*

**MAT201 Math for Elementary Teachers I**

3 Credits (3 Lectures)

Focuses on numbers and operations. Algebraic reasoning and problem solving are integrated throughout this course.

*Prerequisites: MAT140, MAT141 or MAT151; RDG100A or RDG100B.*

**MAT202 Math for Elementary Teachers II**

3 Credits (3 Lectures)

Focuses on measurement, geometry, probability and data analysis. Appropriate technologies, problem solving, reasoning, and proof are integrated throughout the course.

*Prerequisites: MAT140 or MAT141, MAT151; RDG100A or RDG100B.*

**MAT211 Brief Calculus, Standard**

4 Credits (4 Lectures)

Differential and integral calculus of elementary functions, including applications. Not open to students with credit in MAT221 or MAT231.

*Prerequisites: MAT151; RDG100A or RDG100B.*

**MAT212 Brief Calculus, Accelerated**

3 Credits (3 Lectures)

Differential and integral calculus of elementary functions, including applications. Not open to students with credit in MAT221 or MAT231.

*Prerequisites: MAT151, RDG100A or RDG100B.*

**MAT215 Math for Business Analysis**

4 Credits (4 Lectures)

A study of mathematics focused on solving business-related problems by applying the concepts of linear programming, statistics, probability and multi-variable calculus.

*Prerequisite: MAT211, RDG100A or RDG100B.*

**MAT221 Analytical Geometry and Calculus I**

4 Credits (4 Lectures)

An introduction to analytic geometry, differential calculus, integral calculus and related applications.

*Prerequisites: MAT187 or MAT151 and MAT182; RDG100A or RDG100B.*

**MAT231 Calculus with Analytic Geometry II**

4 Credits (4 Lectures)

Techniques of integration, improper integrals, applications of calculus, elements of analytic geometry sequences and series.

*Prerequisites: MAT221; RDG100A or RDG100B.*

**MAT241 Analytical Geometry and Calculus III**

4 Credits (4 Lectures)

Analytic geometry and differential and integral calculus. Emphasis placed on the concepts of vector-valued functions of several variables, multiple integration, and partial differentiation.

*Prerequisites: MAT231; RDG100A or RDG100B.*

**MAT262 Ordinary Differential Equations**

3 Credits (3 Lectures)

Ordinary differential equations including methods as Laplace Transformations with numerical methods with applications.

*Prerequisite: RDG100A or RDG100B. Corequisite: MAT241.*

**MUSIC HISTORY AND LITERATURE (MHL)****MHL100 Music Appreciation**

3 Credits (3 Lectures)

Music history and literature with emphasis on listening to and evaluating all types of music, noting the influence of the major composers and the media through which music is produced. Attendance at live musical events in a variety of venues will be encouraged. May be taken two times for credit.

*Prerequisite: RDG100A or RDG100B.*

**MHL207 Survey of Jazz/Popular Music**

3 Credits (3 Lectures)

Survey of popular music, noting unique musical styles of the associated composers and performers. Impact of popular music on social and historic events of the past century. May be taken two times for credit.

*Prerequisite: RDG100A or RDG100B.*

**MUSIC PERFORMANCE (MUP)****MUP104 College Choir**

1 Credit (3 Labs)

A large, mixed vocal ensemble designed to give students an opportunity to study and sing choral music from each era of Renaissance through the 21st century. Basic theory and musicianship are introduced. A repertoire of music selected by the instructor is prepared for performance in the community and college concerts. May be taken four times for credit.

*Prerequisite: Ability to match pitch.*



### **MUP107 Band**

*1 Credit (3 Labs)*

A performing organization open to Central Arizona College students and Pinal County residents. The ensemble performs a wide range of standard concert band literature, as well as lighter works. Experience is gained by performing concerts on campus. May be taken four times for credit.

*Prerequisite: Approval of Director.*

### **MUP109B Private Instruction: Brass**

*1 Credit (1 Recitation)*

Private instruction on a brass instrument that concentrates on proper tone production, articulation, technique, and performance of a variety of repertoire. May be taken four times for credit.

*Prerequisite: Consent of Instructor.*

*Recommended: MUP107 and/or MUP112.*

### **MUP109D Private Instruction: Percussion**

*1 Credit (1 Recitation)*

Private instruction on percussion instruments that concentrates on appropriate mallet selection, tone production, technique, and performance of a varied repertoire. May be taken four times for credit.

*Prerequisite: Consent of Instructor.*

*Recommended: MUP107 and/or MUP112.*

### **MUP109G Private Instruction: Guitar/Bass Guitar**

*1 Credit (1 Recitation)*

Private instruction on guitar/bass guitar that concentrates on learning to play and read music, chords and a varied repertoire. Student must supply instrument. May be taken four times for credit.

### **MUP109P Private Instruction: Piano Keyboard**

*1 Credit (1 Recitation)*

Performance of piano keyboard repertoire, technical skills, and keyboard theory including scales, progressions, transposition, improvisation and harmonization commensurate with student's level of achievement. May be taken four times for credit.

### **MUP109V Private Instruction: Voice**

*1 Credit (1 Recitation)*

Use of diction, posture, breathing and music theory skills for proper vocal production in the performance of a variety of styles of voice repertoire. May be taken four times for credit.

### **MUP109W Private Instruction: Woodwind**

*1 Credit (1 Recitation)*

Private instruction on a woodwind instrument that concentrates on proper tone production, articulation, technique, and performance of a varied repertoire. Consent of Instructor is required. Band and/or Jazz Band is recommended. May be taken four times for credit.

### **MUP110 Piano Class**

*2 Credits (3 Labs, 1 Recitation)*

Class instruction of piano keyboard repertoire, technical skills and keyboard theory including scales, progressions, transposition, improvisation, harmonization and ensemble, commensurate with student's level of achievement. May be taken four times for credit.

### **MUP112 Jazz Ensemble**

*1 Credit (3 Labs)*

A performing organization open to Central Arizona College students. The jazz styles of swing, rock, and Latin are studied and performed. An emphasis is placed on learning and developing improvisational skills. Experience is gained by performing for the college, schools and community. May be taken four times for credit.

*Prerequisite: Approval of Director.*

### **MUP115 Beginning Guitar**

*1 Credit (2 Labs)*

Class instruction in guitar performance. An introduction to reading music, playing chords, chord progressions and performing melodies on the guitar. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **MUP117 Jazz Choir**

*2 Credits (6 Labs)*

A carefully auditioned and selected group of musicians for the purpose of promoting and performing choreographed jazz and pop music in the vocal style. Occasional madrigal singing is incorporated for festival competition and ensemble singing technique. Singers represent the college as performers at public functions around the state, on campus, and in competitive vocal festivals. May be taken four times for credit.

*Corequisite: MUP104.*

### **MUP118 Bell Choir Ringers**

*1 Credit (3 Labs)*

An ensemble designed for the intermediate to advanced musician seeking to learn new instruments and study music specifically composed and arranged for handbells. Repertoire performed at public functions, as well as college concerts.

*Prerequisite: Approval of Director.*

**MUSIC TECHNOLOGY (MUT)****MUT100 Music Technology**

3 Credits (2 Lectures, 3 Labs)

Introduction to digital music studio production. Basics of digital audio and MIDI (Musical Instrument Digital Interface) for use in composing and arranging in the project studio environment. Hands-on experience in small studio design and set-up, microphone and analog mixer techniques, MIDI recording and programming, and digital audio recording and mixing. May be taken two times for credit.

**MUSIC THEORY AND COMPOSITION (MTC)****MTC100 Music Fundamentals**

3 Credits (3 Lectures)

Concepts of music theory taught through ear-training and written work to include time and notation of pitch through triads.

*Recommended: MUP110 or MUP109P.*

**MTC101 Theory of Music I**

4 Credits (4 Lectures)

Concepts of music theory taught through ear-training and written work to include structure of tonality through Roman numeral analysis.

*Prerequisite: MTC100. Recommended: MUP110 or MUP109P.*

**MTC102 Theory of Music II**

4 Credits (4 Lectures)

Concepts of music theory taught through ear-training and written work to include non-dominant seven chords and to conclude with ninth, eleventh and thirteenth chords.

*Prerequisite: MTC101. Recommended: MUP110 or MUP109P.*

**NURSING (NUR)****NUR119 Transition to Nursing**

2 Credits (2 Lectures)

This course is designed to provide novice-nursing students with tools and skills to successfully meet challenges presented during transition into the nursing program.

*Prerequisite: Admission to Nursing Program.*

**NUR121 Introduction to Nursing Transitions**

8 Credits (4 Lectures, 12 Labs)

Within the framework of transitions, focus on individuals and families in defined practice settings. Includes situational transitions of individual to nursing student role and the client's admission to and movement within the health care system as they proceed in health-illness and development transitions. Provides the opportunity for the practice of nursing in real and simulated structured situations.

*Prerequisite: Admission to Nursing Program.*

*Corequisites: ENG101, NUR126, PSY101.*

**NUR122 Nursing in Health Illness Transitions**

8 Credits (4 Lectures, 12 Labs)

Focus on individuals and families with commonly occurring health concerns across the lifespan. Identification and application of nursing therapeutics in defined practice settings to assist clients making health-illness and situational transitions.

*Prerequisites: ENG101, NUR121, NUR126,*

*PSY101, admission to Nursing Program.*

*Corequisites: NUR145, PSY203.*

**NUR126 Principles of Pharmacology and Drug Dosages**

2 Credits (2 Lectures)

Introduction to the principles of pharmacology as applied to health-related disciplines with a nursing focus. Discussion of pharmacological principles, lifespan considerations, legal, ethical, and cultural considerations. Introduction to patient education and drug therapy including over-the-counter and herbal remedies. Medication administration concepts and intensive study and practice in calculating dosages and concentrations of solutions used in health occupations.

*Prerequisite: Numerical Skills ASSET 41; admission to Nursing Program.*

**NUR145 Pharmacology**

3 Credits (3 Lectures)

Introduction and foundational study of drugs and therapeutic substances applied to most health-related disciplines. Includes classifications, prototypes, therapeutic action, side effects, interactions, and ethical-legal aspects of drug therapy. Medication administration concepts and dosage calculations are included. This course is a requirement for the Nursing Program and is open to other health professionals.

*Prerequisite: Admission to Nursing Program or Consent of Instructor.*



### **NUR150 NCLEX PN Completion**

*2 Credits (2 Lectures)*

Completion and review course for recent graduates of the first year of the RN program, designed to promote success on the National Council Licensure Examination (NCLEX-PN) for practical nurses.

*Prerequisites: BIO201, BIO202, NUR121, NUR126, NUR145, NUR122.*

*Corequisites: ENG102, PSY203.*

### **NUR221 Nursing in Developmental Transitions**

*8 Credits (4 Lectures, 12 Labs)*

Nursing care of the client across developmental stages in the life span. Gordon's functional health patterns, and Meleis transition theory are used as the framework to examine healthy and unhealthy transitions and nursing therapeutics, which promote healthy developmental transitions.

*Prerequisite: Completion of the first year of the Nursing Program or equivalent.*

*Corequisites: BIO205, NTR240, SOC100.*

### **NUR222 Nursing in Organizational Transitions**

*8 Credits (4 Lectures, 12 Labs)*

Focus on the client with complex health problems and nursing care within organizational settings.

*Prerequisites: NUR221, all previous required courses.*

*Corequisites: MAT121 or MAT150, humanities, physical education.*

### **NUR227 Clinical Pathophysiology**

*4 Credits (4 Lectures)*

Foundation for understanding the physiological effects of altered structure and/or function that may be experienced by individuals. Knowledge is built on concepts learned in prerequisite courses. Emphasis is placed on frequently encountered conditions occurring across the life span. Risk factors and contributing causes for these alterations are examined along with legal, ethical, and sociocultural implications where appropriate. Critical thinking is essential to professional nursing and is therefore emphasized throughout the course.

*Prerequisite: BIO202.*

### **NUR229 Nursing Transitions Bridge**

*3 Credits (3 Lectures)*

Conceptual background required for understanding Meleis' nursing theory of transitions, Gordon's functional health patterns, and other theories and models used in the Central Arizona College nursing curriculum. Required for all LPNs entering the second year of the nursing program who completed the first year at CAC or another Healing Community program prior to Fall 1999, or who are coming from an outside program.

*Prerequisites: Acceptance into the second year of the nursing program or Consent of Instructor.*

### **NUR230 Health and Physical Assessment for Nursing Practice**

*3 Credits (3 Lectures)*

Develops skills of nursing assessment of the health care client across the life span using effective communication, interview techniques and physical examination. Focused primarily on the adult client with discussion of variations in pediatrics and geriatrics.

*Prerequisite: NUR121 or Consent of Instructor.*

## **NUTRITION/DIETETICS (NTR)**

### **NTR090 WRMN'UP**

*1 Credit (1 Lecture)*

A brief refresher course for writing, reading, math and to help Nutrition and Dietetic Education Program students prepare for 100 level and above coursework. May be taken three times for credit.

### **NTR100 Contemporary Issues**

*1 Credit (1 Lecture)*

The investigation and utilization of current nutrition information and its impact on health and wellness.

### **NTR104 Nutrition**

*3 Credits (3 Lectures)*

An introductory study of the optimal diet for health and fitness, principles of basic nutrition, and nutritional needs throughout the life cycle.

### **NTR104A The Energy Nutrients**

*1 Credit (1 Lecture)*

The principles of basic nutrition including the digestion of food, how energy is produced and how the body utilizes proteins, carbohydrates and fats.

### **NTR104B Nutrition Guidelines**

*1 Credit (1 Lecture)*

Overview of energy, weight control, food and function.



## **NTR104C Nutrition for Growth and Maintenance**

*1 Credit (1 Lecture)*

Vitamins, minerals, and nutrition throughout the life cycle, including the first year of life, children, adolescents, pregnancy, lactation, adults and older adults.

## **NTR105 ServSafe Certification**

*1 Credit (1 Lecture)*

Applied course in food safety and sanitation to identify and analyze the factors which cause foodborne illnesses through the study of proper purchasing, preparation, handling, and storage.

## **NTR115 Healthy Edge 2000**

*1 Credit (1 Lecture)*

Nutrition basics for school food service employees that places particular emphasis on: the USDA School Meals Initiative; offering nutritious meals; and implementation of the Keys to Excellence. This course also satisfies the nutrition education – specialized training requirement of the School Nutrition Association Certification.

## **NTR118 Management of School Food Service Operations**

*2 Credits (2 Lectures)*

Basic management skills for school food service operations, including: menu planning, financial management, purchasing, procurement, and facility design.

## **NTR118A Menu Planning and Inventory Control**

*1 Credit (1 Lecture)*

Principles of menu planning and inventory control for school food service operations.

## **NTR120 Marketing of Food Service Programs**

*3 Credits (3 Lectures)*

Foundations of marketing and merchandising that effectively communicate the roles and responsibilities of school food service.

## **NTR120A Foundations of Marketing and Communications**

*1 Credit (1 Lecture)*

Principles of communication, marketing, merchandising and customer satisfaction as they are applied to a school food service operation.

## **NTR120B Marketing Plans for Healthy School Meals**

*1 Credit (1 Lecture)*

Applied concepts of communication and marketing via the development of a comprehensive marketing plan that promotes the school lunch program.

*Prerequisite: NTR120A.*

## **NTR120C Food Service Marketing: Monitoring and Evaluation**

*1 Credit (1 Lecture)*

Principles of achieving a high level of customer satisfaction in a school food service operation.

*Prerequisite: NTR120B.*

## **NTR121 Community Health Agencies**

*3 Credits (3 Lectures)*

An overview of community health agencies as a part of the health care delivery system and the roles of various agencies, institutions, and organizations within.

## **NTR123 Nutrition Throughout the Life Cycle**

*3 Credits (3 Lectures)*

The study of nutrition assessment and interventions throughout various stages of life with emphasis on factors influencing normal growth and development including nutrition, physical activity and socioeconomic factors.

*Prerequisite: NTR104 or NTR141 or NTR200.*

## **NTR123B Nutrition During Pregnancy and Birth to 2 Years**

*1 Credit (1 Lecture)*

Metabolic and physiological conditions present during pregnancy and lactation, and birth to two years with emphasis on factors influencing those conditions including nutrition, social pressures, and physical activity.

*Prerequisite: NTR104 or NTR141 or NTR200.*

## **NTR123C Nutrition for Children and Youth, Ages 2-18 Years**

*1 Credit (1 Lecture)*

Metabolic and physiological conditions present during childhood and adolescence with emphasis on factors influencing those conditions including nutrition, societal pressures, and physical activity.

*Prerequisite: NTR104 or NTR141 or NTR200.*

## **NTR123D Nutrition for Adult Years**

*1 Credit (1 Lecture)*

Metabolic and physiological conditions present throughout adulthood with emphasis on factors influencing those conditions including nutrition, socioeconomic pressures, and physical activity.

*Prerequisite: NTR104 or NTR141 or NTR200.*

**NTR125 Food Preparation and Culinary Presentation**

3 Credits (3 Lectures)

The principles of food preparation, culinary presentation and demonstration of foods.

**NTR125A Safety and Sanitation**

1 Credit (1 Lecture)

Introduction to bacteria, contamination, safety and storage, as it relates to food.

**NTR125B Food Preparation I: Fruits, Vegetables, Grains, Bakery and Dairy**

1 Credit (1 Lecture)

Measuring and preparation techniques for grains, batters and doughs, vegetables, fruits, and dairy.

**NTR125C Food Preparation II: Meats, Fats, Poultry, Fish, Eggs, Legumes, Nuts and Oil**

1 Credit (1 Lecture)

Measuring and preparation techniques for meats, fats, poultry, fish, eggs, legumes, nuts and oils.

**NTR125D Basic Skills of the Commercial Kitchen**

1 Credit (1 Lecture)

Basic principles of cooking and knife skills using standardized recipes, taste testing and food demonstrations.

**NTR126 Introduction to School Food Service**

3 Credits (3 Lectures)

An overview of the operations, history, development and current trends of child nutrition programs emphasizing the roles of the federal government, state government, local school food service departments, and students.

**NTR126A History and Regulations of School Food Service Programs**

1 Credit (1 Lecture)

A historical overview of the purpose and function of child nutrition programs and the role of government, students, and sponsors.

**NTR126B Operating School Food Service Programs**

1 Credit (1 Lecture)

Overview of the state and federal policies and procedures that are required in the operation and monitoring of child nutrition programs.

*Prerequisite: NTR126A.*

**NTR126C Procurement and Facility Design**

1 Credit (1 Lecture)

Principles of procurement and purchasing of food and equipment as well as facility layout and design for school food service operations.

**NTR127 Breastfeeding and Human Lactation**

1 Credit (1 Lecture)

This course presents an introduction to breastfeeding principles for the health care professional. It is the prerequisite to the Certified Breastfeeding Counselor course, and covers such topics as 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 Health Care for Nutrition Professionals**

3 Credits (3 Lectures)

Exploration of health care policy, ethics, counseling and concepts for the nutrition professional in the health care environment.

*Prerequisite: RDG100A or RDG100B.*

**NTR130 Diabetes Prevention**

1 Credit (1 Lecture)

An introduction to diabetes, risk factors for developing diabetes, detection methods and management techniques.

**NTR131 Introduction to Diabetes**

3 Credits (3 Lectures)

An introduction to diabetes: the types of diabetes; tools for management including healthy eating, physical fitness and pharmacological agents; glycemic control; physiological changes and psychosocial issues associated with complications; recommended therapies; the health care team and lifestyle modifications necessary for the prevention and/or treatment of diabetes and related chronic diseases.

**NTR131A Diabetes and Prevention**

1 Credit (1 Lecture)

An introduction to diabetes, types of diabetes, health care teams, care plan development, as well as prevention strategies including healthy eating, physical fitness, lifestyle and behavior modification skills.

**NTR131B Tools for Diabetes Management**

1 Credit (1 Lecture)

An introduction to diabetes management strategies, pertinent pharmacological agents, physiological changes and complications related to diabetes and glycemic control.



## **NTR131C Tools for Diabetes Treatment**

*1 Credit (1 Lecture)*

An introduction to psychosocial issues pertaining to diabetes, strategies for managing aspects of diabetes at home and in the workplace, coping skills, and the health care system's role in the treatment and management of diabetes.

## **NTR132 Meal Planning and Preparation for Diabetes**

*3 Credits (3 Lectures)*

An introduction to the economics of food and nutrition including budgeting, meal planning, and food preparation for diabetes; decision-making; budget preparation; time management; meal planning for diabetes management; food purchasing, storage, handling, preparation, cooking; recipe modification and food safety.

## **NTR132A Budgeting for Diabetes Management**

*1 Credit (1 Lecture)*

Budgeting basics including decision-making, budget preparation, and time management.

## **NTR132B Meal Planning for Diabetes Management**

*1 Credit (1 Lecture)*

Meal planning basics for diabetes management, with skills for utilization of the Diabetes Food Guide Pyramid and reading food labels, as well as techniques for purchasing healthy foods.

## **NTR132C Food Preparation for Diabetes Management**

*1 Credit (1 Lecture)*

An introduction to food preparation including principles of cooking, recipe modification, food storage, food handling, food preparation, and food safety.

## **NTR134 Healthy Weight for Kids**

*1 Credit (1 Lecture)*

An overview of the challenges and strategies that can help children achieve and maintain a healthy weight as a means to reduce the incidence of chronic health conditions, including diabetes, heart disease, and others.

## **NTR135 Healthy Weight for Adults**

*1 Credit (1 Lecture)*

An overview of the behavior management and treatment strategies that can help adults achieve and maintain a healthy weight as a means to reduce the incidence of chronic health conditions, including diabetes, heart disease, and others.

## **NTR136 Management of Gestational Diabetes**

*1 Credit (1 Lecture)*

An overview of gestational diabetes, management techniques, potential complications, nutritional management, and strategies for monitoring.

## **NTR137 Carbohydrate Counting**

*1 Credit (1 Lecture)*

A-Z guide to carbohydrate counting for people with diabetes addressing the basic concepts as well as more advanced issues related to tight blood glucose control.

## **NTR141 Nutrition and Wellness**

*4 Credits (3 Lectures, 3 Labs)*

Concepts, procedures, and techniques to achieve the optimal diet for health and fitness, principles of basic nutrition, nutritional needs throughout the life cycle and a scientific investigation into one's own personal health and wellness status.

*Prerequisite: RDG100A or RDG100B.*

## **NTR141D Nutrition and Wellness Lab**

*1 Credit (3 Labs)*

A scientific investigation into one's own personal health and wellness status.

## **NTR142 Applied Food Science**

*3 Credits (3 Lectures)*

Applied scientific principles of food preparation and production.

*Prerequisite: RDG100A or RDG100B.*

## **NTR150 Dining and Beverage Service**

*2 Credits (1.5 Lectures, 2 Labs)*

An introduction to dining room service and beverage management.

## **NTR151 Culinary Practicum I**

*2 Credits (4 Labs)*

Development of steward skills under the supervision of a certified chef, where the student demonstrates competency in a variety of skills necessary at the introductory cook level.

*Prerequisites: Cook Level 1 certificate; additional requirements established by the American Culinary Federation Educational Institute.*



### **NTR152 Culinary Practicum II**

*2 Credits (4 Labs)*

Development of skills as a breakfast cook and vegetable cook under the supervision of a certified chef where the student demonstrates competency in a variety of skills necessary for becoming a certified chef.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*

### **NTR153 Culinary Practicum III**

*3 Credits (6 Labs)*

Development of skills as a butcher, broiler cook, and soup and sauce cook, under the supervision of a certified chef, where the student demonstrates competency in a variety of skills necessary for becoming a certified cook.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*

### **NTR157 Foundations of Dietetic Internships**

*1 Credit (1 Lecture)*

This course provides the foundation required to successfully complete a dietetic internship by identifying rotation facilities and Registered Dietitian facilitator. The course emphasizes the legal and ethical aspects specific to internships for nutrition professionals.

### **NTR191 Nutrition Counseling Skill Development**

*3 Credits (3 Lectures)*

Comprehensive skill development of step-by-step nutrition counseling.

*Prerequisites: RDG100A or RDG100B, NTR141 or NTR104 and NTR141D.*

### **NTR200 Human Nutrition**

*3 Credits (3 Lectures)*

Scientific principles of human nutrition. Emphasizes nutrient metabolism, the relationships between diet and disease and the importance of nutrition in health promotion and disease prevention.

*Prerequisite: RDG100A or RDG100B.*

### **NTR220 Community Nutrition Field Experience**

*2 Credit (2 Practicums)*

Applied concepts of nutrition screening and assessment in public health and community settings.

*Prerequisites: NTR141 or NTR104 and NTR141D; and NTR123, NTR127.*

### **NTR222 Nutrition Assessment**

*3 Credits (3 Lectures)*

The anthropometric, biochemical, clinical, dietary, and behavioral evaluation and assessment of nutritional status throughout the life cycle.

*Prerequisites: NTR104 or NTR141; NTR123, NTR129.*

### **NTR223 Food Service Management**

*3 Credits (3 Lectures)*

Current management theories related to institutional food service emphasizing quality improvement and evaluation of service, meal planning, recipe development, safe and sanitary food procurement and production methods, facility layout and design, staffing, marketing, and financial management through effective human relations, leadership, communication, and professional development.

*Prerequisites: NTR104 or NTR141; NTR105; NTR123 or NTR126 or NTR129.*

### **NTR223A Institutional Food Service**

*1 Credit (1 Lecture)*

The food service industry, menu planning, food quality, and nutrient evaluation.

*Prerequisites: NTR104 or NTR141; NTR105; NTR123 or NTR126 or NTR129.*

### **NTR223B Food and Kitchen Management**

*1 Credit (1 Lecture)*

Aspects of food service from receiving and storage to food delivery and evaluation of dietary services.

*Prerequisites: NTR104 or NTR141; NTR105; NTR123 or NTR126 or NTR129.*

### **NTR223C Nutrition Financial Management**

*1 Credit (1 Lecture)*

Purchasing of quality foods, budgets, labor, and kitchen layout and design.

*Prerequisites: NTR104 or NTR141; NTR105; NTR123 or NTR126 or NTR129.*

### **NTR228 Dietetic Seminar**

*2 Credits (2 Lectures)*

Overview of the profession of dietetics, the roles and responsibilities of dietetic professionals, and how to review, research, and report statistical and scientific information to a variety of audiences.

*Prerequisites: COM100 or COM206; ENG101, NTR104 or NTR141; NTR123, NTR129, NTR222, and NTR240.*



## **NTR229 Dietary Managers Internship**

3 Credits

Supervised application of food production, food service management, and nutritional care principles in clinical and community environment.

*Prerequisites:* NTR157, NTR223, and NTR240.

## **NTR230 Dietetic Technician Internship**

6 Credits (300 practicum hours)

The application of nutrition assessment, disease prevention and medical nutrition therapy principles throughout the life cycle.

*Prerequisites:* NTR222, NTR223, NTR228, NTR229.

## **NTR231 Prevention and Management of Diabetes**

3 Credits (3 Lectures)

Presentation of the human body and its functions, the physiological changes caused by hyperinsulinemia and hyperglycemia, with specific emphasis on complications affecting the major organ systems, techniques for prevention including monitoring and testing of glycemic control, insulin delivery, and oral medications as well as presentation of gestational diabetes and carbohydrate counting.

*Prerequisites:* NTR131 and NTR132 or NTR132B.

## **NTR231A Anatomy and Physiology of Diabetes**

1 Credit (1 Lecture)

Presentation of the human body and its functions and the physiological changes caused by hyperinsulinemia and hyperglycemia in diabetes.

*Prerequisites:* NTR131 or NTR131A, NTR131B, and NTR131C.

## **NTR231B Managing Complications of Diabetes**

1 Credit (1 Lecture)

Pathophysiology of hyperinsulinemia and hyperglycemia with emphasis on complications affecting the major organ systems.

*Prerequisites:* NTR131 or NTR131A, NTR131B, and NTR131C; NTR132 or NTR132B.

*Recommended:* NTR141.

## **NTR231C Preventing Complications of Diabetes**

1 Credit (1 Lecture)

Techniques for prevention including monitoring and testing of glycemic control, insulin delivery, and oral medications as well as presentation of gestational diabetes and carbohydrate counting.

*Prerequisites:* NTR131 or NTR131A, NTR131B and NTR131C; NTR231A, and NTR231B.

## **NTR232 Culture, Behavior and Coping Skills for Diabetes**

3 Credits (3 Lectures)

Customs, cultures, psychosocial issues, and counseling techniques as they relate to food, knowledge, attitudes and behaviors of diabetes and disease prevention.

*Prerequisite:* NTR231.

## **NTR232A Food and Culture**

1 Credit (1 Lecture)

Customs and cultures as they relate to food as well as to knowledge, attitudes and behaviors of wellness and disease prevention.

## **NTR232B Psychosocial Impact of Diabetes**

1 Credit (1 Lecture)

An introduction to the emotional and lifestyle changes required when an individual has diabetes and the role of the family and community to provide support.

*Prerequisites:* NTR131 or NTR131A, NTR131B and NTR131C; NTR231 or NTR231B and NTR231C.

## **NTR232C Changing Behaviors**

1 Credit (1 Lecture)

Counseling techniques as they relate to food, knowledge, attitudes and behaviors of wellness and disease prevention.

## **NTR233 Diabetes Prevention Field Experience**

1 Credit (2 Labs)

Practical application of strategic assessment and intervention techniques in all stages of diabetes, for prevention and management in order to lower health risks, prevent complications, and/or prolong life.

## **NTR240 Clinical Nutrition**

3 Credits (3 Lectures)

The role of nutrition in the prevention and treatment of diseases.

*Prerequisites:* NTR104 or NTR141; NTR129 or NUR121.

## **NTR241 Human Nutrition and Wellness**

4 Credits (3 Lectures, 3 Labs)

Scientific principles of human nutrition. Emphasizes nutrient metabolism, the relationships between diet and disease and the importance of nutrition in health promotion and disease prevention and a scientific investigation into one's own personal health and wellness status.

*Prerequisite:* RDG100A or RDG100B.



### **NTR250 Professional Baking and Garde Manger**

*3 Credits (2 Lectures, 3 Labs)*

Development of knowledge and skills in professional baking and garde manger.

### **NTR251 Basic Baking and Garde Manger Practicum IV**

*4 Credits (8 Labs)*

Development of skills in basic baking as a pantry cook and garde manger under the supervision of a certified chef, where the student demonstrates competency in a variety of skills necessary for becoming a certified cook.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*

### **NTR252 Advanced Food Preparation Culinary Practicum V**

*4 Credits (8 Labs)*

Skill development for sauté and lead cook under the supervision of a certified chef, where the student demonstrates competency in a variety of skills necessary for becoming a certified cook.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*

### **NTR253 Culinary Seminar**

*1 Credit (1 Lecture)*

Development of skills in producing a variety of food products, preparing items appropriate for buffet presentation, and familiarity with a variety of current topics and techniques important to the culinary arts.

*Prerequisites: Cook Level I certificate; additional requirements established by the American Culinary Federation Educational Institute.*

### **NTR272 The Certified Breastfeeding Counselor**

*2 Credits (2 Lectures)*

This course, a collaborative effort between clinical and public health lactation professionals in the state of Arizona, was designed to provide the necessary skills to educate and support the breastfeeding mother. It provides greater details about breastfeeding issues and special challenges/situations. Students completing NTR127 and NTR272 receive a certificate of achievement as Certified Breastfeeding Counselor and also meet the education prerequisites in lactation management of both the International Board of Lactation Consultant Examiners (IBLCE) and the Breastfeeding Support Consultants (BSC) Pilot Project.

*Prerequisite: NTR127.*

### **NTR291 Eating Coach**

*1 Credit (1 Lecture)*

The Eating Coach Certification teaches participants how to develop techniques to coach clients in weight management. The course is specially designed for health and fitness professionals who are working with clients or groups in weight management and those who want to increase their knowledge in weight management techniques & tools. Satisfactory/unsatisfactory grading available.

## **OFFICE AUTOMATION SYSTEMS (OAS)**

### **OAS101 Keyboard – Alphabetic**

*1 Credit (3 Labs)*

Type alphabetic material using the touch technique.

### **OAS103 Keyboard – Speed/Accuracy**

*1 Credit (3 Labs)*

Improve keyboarding skills of alphabetic and numeric material using the touch technique.

### **OAS104 Ten-Key Pad**

*1 Credit (3 Labs)*

Key numeric data using correct touch technique on the computer numeric ten-key pad. May be taken two times for credit.

### **OAS125 Proofreading and Editing for Business**

*3 Credits (3 Lectures)*

Improvement of one's ability to analyze and correct written business communication with emphasis on proofreading methods; marking and correction of errors in treatment and usage; consistency of fact and use of references.

*Prerequisite: ENG100.*

## **OPERATING ENGINEERS (OEC)**

### **OEC121 Introduction to Construction**

*5 Credits (5 Lectures)*

Construction safety, CPR and first aid as well as basic construction fundamentals.

*Prerequisite: Students must be accepted into the Operating Engineers Program.*

### **OEC122 Equipment Structure and Function I**

*5 Credits (5 Lectures)*

Basic instruction in the principles, functions and operations of paving equipment.

*Prerequisite: OEC121.*



## **OEC123 Equipment Structure and Function II**

5 Credits (5 Lectures)

Additional instruction in the operation and maintenance of paving equipment. Basic instruction in reading blueprints and plans.

*Prerequisite:* OEC122.

## **OEC124 Equipment Structure and Function III**

5 Credits (5 Lectures)

Additional instruction in paving operation, excavation and surveying concepts/skills.

*Prerequisite:* OEC123.

## **OEC125 Diesel Engines I**

5 Credits (5 Lectures)

Additional instruction in crane operation and rigging techniques, surveying concepts and skills.

*Prerequisite:* OEC121.

## **OEC126 Diesel Engines II**

5 Credits (5 Lectures)

A review of engine theory and all subsystems. Introduction to disassembly, inspection, measuring, reconditioning procedures and application of precision tools as they relate to diesel engines. The use of technical reference manuals and safety is emphasized. A continuation of diesel fuel systems.

*Prerequisite:* OEC125.

## **OEC127 Plant Wiring I**

5 Credits (5 Lectures)

Introduction batch plant electrical system set-up and maintenance.

*Prerequisite:* OEC121.

## **OEC128 Plant Wiring II**

5 Credits (5 Lectures)

Diagnose, troubleshoot and repair electrical apparatus of a batch plant.

*Prerequisite:* OEC121.

## **OEC129 Transmissions and Hydraulics**

5 Credits (5 Lectures)

Introduction to principles of hydraulic systems and hydraulic power train and clutch maintenance and repair.

*Prerequisite:* OEC121.

## **OEC130 Auto Electric**

5 Credits (5 Lectures)

Basic instruction in the principles, functions and operation of vehicle electrical systems.

*Prerequisite:* OEC121.

## **OEC131 Welding I**

5 Credits (5 Lectures)

Basic instruction in the purposes, equipment and skills needed in making welding repairs on heavy equipment.

*Prerequisite:* OEC121.

## **OEC132 Welding II**

5 Credits (5 Lectures)

Intermediate-level knowledge and skill in welding techniques used on heavy equipment.

*Prerequisite:* OEC121.

## **OEC133 Paving**

5 Credits (5 Lectures)

Principles of asphalt paving and compaction. Safety and preventive maintenance emphasized with numerous demonstrations.

*Prerequisite:* OEC121.

## **OEC134 Introduction to Crane and Riggings**

5 Credits (5 Lectures)

Basics of crane operation and load charts. Emphasis on safety, nomenclature, hand signals, and preventive maintenance. Demonstrations of rough terrain and track-mounted hydraulic cranes.

*Prerequisite:* OEC121.

## **OEC135 Crane Certification and Review**

3 Credits (3 Lectures)

Review of basic operating procedures, safety regulations, and proper rigging practices for a variety of crane types (mobile truck, small hydro, large hydro, conventional, crawler track-type) to prepare students to take the CCO National Certification exam.

*Prerequisite:* Consent of Instructor.

## **OEC221 Construction Material Processes**

5 Credits (5 Lectures)

Principles and processes needed for the production of various construction materials for the aggregate industry.

*Prerequisites:* OEC121.

## **OEC222 Grade Planing and Earthwork I**

5 Credits (5 Lectures)

Introduction of basic excavation principles, calculations and diagrams for heavy equipment construction.

*Prerequisite:* OEC121.

## **OEC223 Grade Planing and Earthwork II**

5 Credits (5 Lectures)

Review basic excavation principles and apply advanced calculations, diagrams and construction plans.

*Prerequisite:* OEC121.



## **OEC224 Grade Planing and Earthwork III**

*5 Credits (5 Lectures)*

Review survey equipment operation and apply advanced excavation theory.

*Prerequisite: OEC121.*

## **PHILOSOPHY (PHI)**

### **PHI101 Introduction to Philosophy**

*3 Credits (3 Lectures)*

Representative problems and theories regarding the nature of reality and the acquisition of knowledge. Examination and development of personal philosophical positions.

*Prerequisite: RDG100A or RDG100B.*

### **PHI103 Introduction to Logic**

*3 Credits (3 Lectures)*

Techniques for reasoning inductively and deductively, avoiding fallacies, and using language informatively. Application of techniques for development, analysis and evaluation of arguments.

*Prerequisite: RDG100A or RDG100B. Corequisite: ENG102.*

### **PHI105 Introduction to Ethics**

*3 Credits (3 Lectures)*

Major philosophical theories about how people ought to live. Development of personal positions on several moral issues.

*Prerequisite: RDG100A or RDG100B. Corequisite: ENG102.*

### **PHI112 World Religions**

*3 Credits (3 Lectures)*

A survey of the great world religions, focusing on the founders, history, system of beliefs, concepts of God/gods, private and public worship, and sacred scriptures of each of the following world religions: Hinduism, Buddhism, Taoism, Confucianism, Shintoism, Zoroastrianism, Jainism, Sikhism, Judaism, Christianity, and Islam.

*Prerequisite: RDG100A or RDG100B.*

## **PHYSICAL EDUCATION (PED)**

### **PED100 History and Philosophical Foundations of Sport and Physical Education**

*3 Credits (3 Lectures)*

The historical and philosophical foundations of sport and physical education, current and future directions of instruction, administration, and research.

### **PED102 The Management of Sports**

*3 Credits (3 Lectures)*

A comprehensive overview of sport management; fundamentals and history; structure, policy and the governance of sport; sport economics and finance; port marketing; professional relations in sport; and careers in sport management.

*Corequisite: RDG100A or RDG100B.*

### **PED103 Foundations of Exercise**

*3 Credits (3 Lectures)*

Fundamentals of basic biomechanics, motor learning/control/development, health-related exercise testing and prescription, exercise physiology, exercise metabolism, physiology of training/training effect, basic nutrition and basic sports psychology, to facilitate assessment of health and sports-related fitness.

### **PED104 Anatomical Kinesiology**

*3 Credits (3 Lectures)*

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.

### **PED108 Introduction to Athletic Training**

*3 Credits (3 Lectures)*

Basic concepts of the prevention and treatment of athletic injuries and the primary importance of appropriate rehabilitation.

*Corequisite: RDG100A or RDG100B.*

### **PED109A Athletic Training Practicum I**

*3 Credits (2 Lectures, 3 Labs)*

An introduction to practical work experience in the athletic training setting.

*Corequisite: PED108.*

### **PED109B Athletic Training Practicum II**

*3 Credits (2 Lectures, 3 Labs)*

Clinical application of practical work experience in the athletic training setting.

*Prerequisite: PED109A.*



## PHYSICAL EDUCATION ACTIVITY (PAC)

### **PED109C Athletic Training Practicum III**

*3 Credits (2 Lectures, 3 Labs)*

Clinical application of practical work experience in the athletic training setting.

*Prerequisite: PED109B.*

### **PED109D Athletic Training Practicum IV**

*3 Credits (2 Lectures, 3 Labs)*

Clinical application of practical work experience in the athletic training setting. May be taken four times for credit.

*Prerequisite: PED109C.*

### **PED112 Introduction to Strength Training**

*3 Credits (3 Lectures)*

A comprehensive guide to the design, implementation and supervision of strength and conditioning programs for the individual who is preparing for a career in strength and conditioning, or other sports medicine specialties.

*Corequisite: RDG100A or RDG100B.*

### **PED202 Team Sports Officiating I**

*3 Credits (3 Lectures)*

Fundamentals of officiating techniques, including theory and mechanics of basketball, football and soccer. Theory and mechanics are based on Arizona Interscholastic Association rules.

*Corequisite: RDG091.*

### **PED203 Team Sports Officiating II**

*3 Credits (3 Lectures)*

Fundamentals of officiating techniques including theory and mechanics of baseball, softball, and volleyball. Theory and mechanics are based on Arizona Interscholastic Association rules.

*Corequisite: RDG091.*

### **PED206 Directed Laboratory Experience**

*2 Credits (1 Lecture, 3 Labs)*

Introduction to the profession of physical education/recreation through orientation and instructionally-related experiences. May be taken four times for credit.

### **PED209 Introduction to Rehabilitation Techniques**

*3 Credits (3 Lectures)*

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: PED108.*

### **PAC100 Strength and Conditioning for Varsity Sports**

*1 Credit (3 Labs)*

Design, implementation and supervision of pre-season, in-season and off-season strength and conditioning programs for the varsity athlete. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

*Corequisites: PAC121, PAC122, PAC123, PAC125 or PAC126.*

### **PAC101A Basic & Beginning Techniques of Golf**

*1 Credit (3 Labs)*

The basic elements of the game of golf, the rules of golf, golf course etiquette and basic golf play. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC101C Basic & Beginning Techniques of Tennis**

*1 Credit (3 Labs)*

The basic skills of the game of tennis, the rules of tennis, tennis court etiquette and general play. May be taken two times for credit. Satisfactory/unsatisfactory grading available.

### **PAC101E Basic & Beginning Techniques of Aerobic Dance**

*1 Credit (3 Labs)*

The basic skills of rhythmic aerobic dance and aerobic exercise. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC101F Basic & Beginning Techniques of Swimming**

*1 Credit (3 Labs)*

The basic skills of swimming and breath control. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC101J Basic & Beginning Techniques of Weight Training**

*1 Credit (3 Labs)*

The basic lifts and explanation of muscle groups affected. Satisfactory/unsatisfactory grading available. May be taken two times for credit.



### **PAC101K Basic & Beginning Techniques of Stretch and Tone**

*1 Credit (3 Labs)*

A slow and relaxed form of stretching where breathing (pranayama) and positions (asanas) are performed. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC101L Basic & Beginning Techniques of Karate**

*1 Credit (3 Labs)*

The art of Chinese karate emphasizing defense techniques against basic kicks, punches, and grab attacks. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC101M Basic & Beginning Techniques of Basketball**

*1 Credit (3 Labs)*

The basic skills of the game of basketball, the rules and techniques for basketball as well as general basketball play. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC101R Aerobic Weight Training I**

*1 Credit (3 Labs)*

Basic circuit weight training in conjunction with an aerobic exercise such as running in place, rope jumping, or using exercise bikes. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC101S Beginning Hiking**

*2 Credits (1 Lecture, 3 Labs)*

Recreational hiking in the desert and mountains using basic knowledge and skills to achieve physical enhancement and mental stimulation at a low strenuous level. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC101T Step Aerobics I**

*1 Credit (3 Labs)*

Aerobic conditioning by use of steps with hand weights used for upper body tone and floor work for abdominals. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC102A Intermediate Golf**

*1 Credit (3 Labs)*

A concentrated approach to golf skills with emphasis on individual skill level. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC102C Intermediate Tennis**

*1 Credit (3 Labs)*

The intermediate skills of the game of tennis, the rules of tennis, tennis course etiquette and general play with emphasis on individual skill development. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC102E Intermediate Aerobic Dance**

*1 Credit (3 Labs)*

The intermediate skills of rhythmic aerobic dance and aerobic exercise set to music where dance steps are learned along with a total body workout and accompanied by use of free weights, ropes, and super-sets in the weight room. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC102F Intermediate Swimming**

*1 Credit (3 Labs)*

The intermediate skills of swimming using various strokes. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC102J Intermediate Weight Training**

*1 Credit (3 Labs)*

Lifting programs for use throughout the life cycle. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC102K Intermediate Yoga and Fitness**

*1 Credit (3 Labs)*

Asanas (positions) and pranayama (breathing) where students learn to control their bodies while stretching and holding yoga positions at a medium strenuous level. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC102L Intermediate Karate**

*1 Credit (3 Labs)*

Intermediate martial art forms and techniques; the study of anatomy, physiology, and physics as related to karate. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC101L.*

### **PAC102S Intermediate Hiking**

*2 Credits (1 Lecture, 3 Labs)*

Recreational hikes in the desert and mountains using expanded compass and map reading skills to achieve higher levels of physical enhancement and mental stimulation at a medium strenuous level. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC101S.*



## **PAC103 Special Activity (Adaptive)**

*1 Credit (3 Labs)*

A special physical education activity class for the student who is unable to participate in the regular physical education program. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC104 Police Officer Physical Training**

*3 Credits (2 Lectures, 3 Labs)*

Advanced principles of aerobic exercise, strength development, and flexibility, emphasizing methods for stress reduction, value of nutrition awareness, and development of individual exercise programs.

*Prerequisite: Acceptance to Central Arizona Regional Law Officers' Training Academy Program (CARLOTA) Program.*

## **PAC106 Aerobics and Weight Training**

*2 Credits (1 Lecture, 3 Labs)*

Fundamental skills and principles of weight training and aerobics. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC110 Physical Fitness for Senior Adults**

*1 Credit (3 Labs)*

Create adaptive physical activity for older adults and establish guidelines for individual nutrition, diet, and personal goals. Satisfactory/unsatisfactory grading available. May be taken four times for credit. Students are advised to seek permission from their doctors before beginning the program.

## **PAC111 Water Aerobics**

*1 Credit (3 Labs)*

Aquatic exercise emphasizing stretching techniques, endurance, flexibility, and toning for swimmers and non-swimmers. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

## **PAC112 Introduction to Scuba Diving**

*1 Credit (.5 Lecture, 2 Labs)*

The elemental knowledge and skills needed to safely gain experience in the diving environment and, ultimately, to dive independently. Course is taught in a classroom and confined water (pool) setting by an instructor certified by the Professional Association of Diving Instructors (PADI). Within one year of successful completion of this course, the student may take the Open Water Diver Check-Out Dives through certified PADI dive shops worldwide per their fees and conditions. Student must be at least 15 years of age, sign an Assumptions of Risk statement, meet medical fitness standards, have sufficient swimming competency, and be aware of fee requirements. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC113 Total Body Conditioning**

*1 Credit (3 Labs)*

Total body workout through aerobic exercise. This course covers upper body conditioning and abdominal conditioning, stretching techniques, safety, diet and nutrition. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

## **PAC114 Aerobox**

*1 Credit (3 Labs)*

Aerobic workout using kickboxing techniques. This course covers upper and lower body conditioning through use of weaving and bobbing techniques, stretching techniques, safety, and diet and nutrition. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

## **PAC115 Jazzercise**

*1 Credit (3 Labs)*

Current dance techniques and exercise choreographed to music; includes warm-up, 30-minute aerobic workout, muscle toning and strengthening exercises, with stretching segment during cool-down. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

## **PAC121 Theory and Practice of Basketball I**

*2 Credits (6 Labs)*

Fundamental techniques of team play and strategy in the sport of basketball. Includes mechanics of basketball, rules and total body conditioning. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC122 Theory and Practice of Baseball I**

*2 Credits (6 Labs)*

Fundamentals of baseball, including techniques of team play, rules, conditioning and mechanics of baseball. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC123 Theory and Practice of Track and Field I**

*2 Credits (6 Labs)*

Fundamentals and techniques of track and field events, including psychological aspects, training and styles used in track and field events. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC125 Theory and Practice of Softball I**

*2 Credits (6 Labs)*

Fundamentals of softball, including techniques of team play, rules, conditioning and mechanics of softball. Satisfactory/unsatisfactory grading available. May be taken two times for credit.



### **PAC126 Theory and Practice of Cross Country I**

*2 Credits (6 Labs)*

Fundamentals of racing strategies, mechanics of cross country, rules, conditioning and cross training are emphasized. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC131 Aquatics A La Carte**

*1 Credit (3 Labs)*

Varied aquatic exercises for the development/maintenance of strength, flexibility and/or cardiovascular endurance using water as the supporting medium via activities such as stretching and breathing to music in shallow and/or deep water utilizing a combination of water Pilates/aerobics, water Pilates/yoga, deep end splash and interval training activities. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC132 Deep End Splash**

*1 Credit (3 Labs)*

Aquatic exercise for the development/maintenance of cardiovascular endurance using water as the supporting medium via activities such as stretching and breathing to music in deep water. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC133 Introduction to Aquatic Therapy**

*1 Credit (3 Labs)*

An introduction to aquatic therapies using water as the supporting medium, ideal for those needing to reduce land-based activities. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC134 Senior Splash**

*1 Credit (3 Labs)*

Aquatic exercise for the development/maintenance of cardiovascular endurance specific to seniors and late adulthood, using water as the supporting medium via activities such as stretching and breathing to music in shallow and/or deep water. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC135 Surf and Turf**

*1 Credit (3 Labs)*

Diverse land and water-based exercises and dances for the development/maintenance of flexibility, range of motion, strength and cardiovascular endurance through a variety of aquacise and weight training activities. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC136 Water Kickboxing**

*1 Credit (3 Labs)*

Aquatic exercise for the development/maintenance of cardiovascular endurance using water as the supporting medium via punching, kicking, stretching and breathing to music in shallow and/or deep water. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC137 Water Pilates and Aquacise**

*1 Credit (3 Labs)*

Aquatic exercise for the development/maintenance of cardiovascular endurance using water as the supporting medium via activities such as stretching and breathing to music in shallow and/or deep water. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC138 Water Pilates and Yoga**

*1 Credit (3 Labs)*

Aquatic exercise for the development/maintenance of flexibility, range of motion, balance and cardiovascular endurance using water as the supporting medium via activities such as stretching and breathing to music in shallow water. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC200 Advanced Competition/Fitness Swimming**

*2 Credits (1 Lecture, 3 Labs)*

This class is designed to improve/master rhythmic breathing along with stroke coordination, speed- and flip-turns, distance swimming and endurance training, water entries, diving starts, and/or other skills as desired by students to further enhance skills for competition or fitness swimming. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

### **PAC201E Advanced Aerobic Dance**

*2 Credits (1 Lecture, 3 Labs)*

Aerobic dance techniques with the addition of running and use of weights and ropes to help increase capacity for fitness; individualized instruction supplemented with current aerobic tapes. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

### **PAC201J Advanced Weight Training**

*2 Credits (1 Lecture, 3 Labs)*

Development of an individualized program based on student needs or special interest. Satisfactory/unsatisfactory grading available. May be taken two times for credit.



## **PAC201N Aerobics**

*2 Credits (1 Lecture, 3 Labs)*

A variety of exercises that stimulate lung activity, such as running, swimming, cycling, and jogging. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC201S Advanced Hiking**

*2 Credits (1 Lecture, 3 Labs)*

Advanced hiking skills with a high strenuous level of physical endurance and mental stimulation. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC102S.*

## **PAC207 Lifeguard Training**

*1 Credit (3 Labs)*

Minimum skills necessary for qualification as a non-surf lifeguard as stipulated in the American Red Cross Lifeguard Training Certification program. Satisfactory/unsatisfactory grading available. May be taken two times for credit. A water proficiency test will be given at the beginning of the course.

*Prerequisites: Adult CPR and Standard First Aid certification; water proficiency test.*

## **PAC208 Rifle Marksmanship**

*1 Credit (3 Labs)*

The fundamentals of marksmanship as encountered in competitive rifle shooting events, with emphasis on safety, proper care, and maintenance of firearms. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

## **PAC209 Water Safety Instructor**

*2 Credits (1 Lecture, 3 Labs)*

This course trains instructor candidates to teach American Red Cross (ARC) Water Safety Courses, the ARC Infant and Preschool Aquatics Program and the ARC Learn to Swim Program. A five-hour ARC Fundamentals of Instructor Training course is embedded within this course to familiarize instructor candidates to the history, structure, activities, policies and procedures of the American Red Cross. 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 available. May be taken three times for credit.

*Prerequisite: Lifeguard Training, Adult CPR and Standard First Aid certifications.*

## **PAC221 Theory and Practice of Basketball II**

*2 Credits (6 Labs)*

Advanced techniques of team play and strategy in the sport of basketball. Includes advanced mechanics of basketball and total body conditioning. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC121 or Consent of Instructor.*

## **PAC222 Theory and Practice of Baseball II**

*2 Credits (6 Labs)*

Advanced techniques of baseball including techniques of team play, rules, conditioning and mechanics of baseball. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC122 or Consent of Instructor.*

## **PAC223 Theory and Practice of Track and Field II**

*2 Credits (6 Labs)*

Advanced techniques of track and field events including psychological aspects, training and styles used in track and field events. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC123 or Consent of Instructor.*

## **PAC225 Theory and Practice of Softball II**

*2 Credits (6 Labs)*

Advanced techniques of softball, including techniques of team play, rules, conditioning and mechanics of softball. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC125 or Consent of Instructor.*

## **PAC226 Theory and Practice of Cross Country II**

*2 Credits (6 Labs)*

Advanced techniques of racing strategies, mechanics of cross country, rules, conditioning and cross training for cross country racing. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC126 or Consent of Instructor.*



### **PAC230 Arizona Seals Swimming Academy I**

2 Credits (6 Labs)

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the United States. This course emphasizes the fundamentals of swimming with a focus on a comfort in water. Structured practice sessions will include stroke development, stroke proficiency, endurance training, resistance exercise, and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Short-course program I. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: Student must meet minimum water proficiency eligibility criteria.*

### **PAC231 Arizona Seals Swimming Academy II**

2 Credits (6 Labs)

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the United States. This course emphasizes the fundamentals of swimming with a focus on a comfort in water. Structured practice sessions will include stroke development, stroke proficiency, endurance training, resistance exercise, and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Short-course program II. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: Student must meet minimum water proficiency eligibility criteria.*

### **PAC232 Arizona Seals Swimming Academy III**

2 Credits (6 Labs)

The Arizona Seals is a USA Swimming-sanctioned swim team and maintains membership with USA Swimming, the National Governing Body for swimming in the United States. This course emphasizes the fundamentals of swimming with a focus on a comfort in water. Structured practice sessions will include stroke development, stroke proficiency, endurance training, resistance exercise, and flexibility. Seminars on the importance of a healthy lifestyle will be incorporated. Modeled after the USA Swimming Age-Group Swim Program. Long-course program Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: Student must meet minimum water proficiency eligibility criteria.*

### **PAC233 Aquatic Therapy**

2 Credits (1 Lecture, 3 Labs)

Development of an individualized aquatic therapy program based on student needs or special interest, ideal for those needing to reduce land-based activities. Satisfactory/unsatisfactory grading available. May be taken four times for credit.

*Prerequisite: PAC133.*

## PHYSICAL EDUCATION HEALTH (PEH)

### **PEH101 Personal Health**

3 Credits (3 Lectures)

The significance of physical, mental, emotional, and social health to the individual and society, with a study of community health programs and their relation to the national situation, and special emphasis on health problems of the individual.

*Corequisite: RDG100A or RDG100B.*

### **PEH102 First Aid/CPR**

2 Credits (2 Lectures)

A study of first aid dealing with fractures, dislocations, wounds, hemorrhages, poisoning, drowning, and cardiopulmonary respiration. Students can receive Standard First Aid and Adult CPR Red Cross certification.

*Corequisite: RDG091.*

### **PEH110 Lifetime Fitness and Wellness**

3 Credits (3 Lectures)

An introduction to a complete and personalized, lifetime fitness and wellness program with thorough discussion on lifestyle management, wellness and well-being, health- and skill-related components of fitness, behavior modification, nutrition, body composition, weight management, stress management, cardiovascular and cancer risk reduction, exercise and aging, prevention of sexually transmitted diseases, substance abuse control, injury prevention and personal safety.

*Prerequisite: RDG100A or RDG100B.*

### **PEH111 Nutrition for Health, Fitness and Sport**

3 Credits (3 Lectures)

Nutrition, exercise and health-related fitness; nutrition, exercise and sports-related fitness; effects of dietary supplements and ergogenic aids on health and athletic performance; human energy/metabolic systems; the essential nutrients and the recommended nutrient intakes for fitness and sport; body weight and composition for health and sport; weight maintenance, weight loss and weight gain through proper nutrition and exercise for health and sport; and sport-specific training and nutrition.

**PEH200 Sports Safety Training/CPR/AED for the Professional Rescuer**

3 Credits (3 Lectures)

Sports-related injury prevention such as soft tissue and skeletal injuries, first aid and emergency steps for breathing and cardiac care. May be taken four times for credit.

**PEH203 Group Fitness Instructor Methods**

3 Credits (3 Lectures)

Group exercise teaching skills. Assessing group fitness status; designing and modifying safe and effective classes based on group needs; monitoring exercise intensity and group performance; codes, laws, procedures and scope of practice. American Council on Exercise (ACE) preparation course for the Group Fitness Instructor Certification Exam.

*Prerequisites:* PED103, PED104, PEH111, PEH200 and RDG100A or RDG100B.

**PEH204 Personal Training Methods**

3 Credits (3 Lectures)

Assessing client health, medical and fitness status; designing/modifying and implementing safe and effective physical activity programs using goal setting and exercise science principles; codes, laws, procedures and scope of practice. American Council on Exercise (ACE) preparation course for the Personal Trainer Certification Exam.

*Prerequisites:* PED103, PED104, PEH111 and PEH200 and RDG100A or RDG100B.

**PHYSICAL EDUCATION  
VARSITY SPORTS (PEV)****PEV110 Rodeo Sports Events I**

2 Credits (1 Lecture, 3 Labs)

Development of skills in one or more of the following rodeo events: steer wrestling, calf roping, team roping, bull riding, bareback riding, saddle bronc riding, barrel racing, goat tying, or break-away roping. Satisfactory/unsatisfactory grading available. May be taken four times for credit. For members of the intercollegiate rodeo team.

**PEV201 Varsity Basketball I**

1 Credit (3 Labs)

For members of the intercollegiate varsity basketball team. May be taken two times for credit.

**PEV202 Varsity Baseball I**

1 Credit (3 Labs)

For members of the intercollegiate varsity baseball team. May be taken two times for credit.

**PEV203 Varsity Track and Field I**

1 Credit (3 Labs)

For members of the intercollegiate varsity track and field team. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

**PEV205 Varsity Softball I**

1 Credit (3 Labs)

For members of the intercollegiate varsity softball team. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

**PEV206 Varsity Cross Country I**

1 Credit (3 Labs)

For members of the intercollegiate varsity cross country team. May be taken two times for credit.

**PEV211 Varsity Basketball II**

1 Credit (3 Labs)

Intercollegiate varsity basketball with application of theory in NJCAA events. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

*Prerequisite:* PEV201 or Consent of Instructor.

**PEV212 Varsity Baseball II**

1 Credit (3 Labs)

Intercollegiate varsity baseball with application of theory in NJCAA events. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

*Prerequisite:* PEV202 or Consent of Instructor.

**PEV213 Varsity Track and Field II**

1 Credit (3 Labs)

Intercollegiate varsity track and field with application of theory in NJCAA events. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

*Prerequisite:* PEV203 or Consent of Instructor.

**PEV215 Varsity Softball II**

1 Credit (3 Labs)

Intercollegiate varsity softball with application of theory in NJCAA events. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

*Prerequisite:* PEV205 or Consent of Instructor.

**PEV216 Varsity Cross Country II**

1 Credit (3 Labs)

Intercollegiate varsity cross county with application of theory in NJCAA events. Satisfactory/unsatisfactory grading available. May be taken two times for credit.

*Prerequisite:* PEV206 or Consent of Instructor.



## PHYSICS (PHY)

### PHY100 Physical Universe

4 Credits (3 Lectures, 3 Labs)

The basic principles of physics and chemistry and their application in science, technology, and everyday life. Emphasis is on the fundamental behavior of matter and energy in physical systems with concepts presented and applied at the mathematical level of elementary algebra.  
*Prerequisites:* MAT091; RDG100A or RDG100B.

### PHY201 College Physics I

4 Credits (3 Lectures, 3 Labs)

Non-calculus treatment of the principles of mechanics, waves, and sound.  
*Prerequisites:* MAT151 and MAT182, or MAT187; RDG100A or RDG100B.

### PHY202 College Physics II

4 Credits (3 Lectures, 3 Labs)

Non-calculus treatment of the principles of electricity, magnetism, and light with a brief introduction to thermodynamics and modern physics.  
*Prerequisites:* PHY201, MAT151 and MAT182, or MAT187; RDG100A or RDG100B.

### PHY261 University Physics I: Mechanics

4 Credits (3 Lectures, 3 Labs)

Calculus-based approach to the principles of physics covering motion, Newton's laws, work, energy, momentum, rotational motion, fundamentals of statics and dynamics, oscillatory motion, waves, and sound.  
*Prerequisites:* MAT221; RDG100A or RDG100B.

### PHY262 University Physics II: Electricity and Magnetism

4 Credits (3 Lectures, 3 Labs)

Calculus-based treatment of the principles of physics covering electricity and magnetism, light, and thermodynamics.  
*Prerequisites:* PHY261, MAT221; RDG100A or RDG100B.  
*Corequisite:* MAT231.

## POLITICAL SCIENCE (POS)

### POS090 Citizenship Preparation

3 Credits (3 Lectures)

Overview of the history and government of the United States to prepare adult learners for the INS naturalization examination.  
*Prerequisite:* Pre-test to determine existing skill level in oral and written English, and to evaluate deficiencies and determine specific needs.

### POS101 American Politics

3 Credits (3 Lectures)

The theory, organization, politics, function, and problems of the federal system 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.  
*Prerequisite:* RDG100A or RDG100B.

### POS103 Arizona Constitutional Government

1 Credit (1 Lecture)

Constitution and government of the state of Arizona. Meets the Arizona government requirement for teacher certification.  
*Prerequisite:* RDG100A or RDG100B.

### POS104 Contemporary Issues in World Politics

3 Credits (3 Lectures)

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:* RDG100A or RDG100B.

## PSYCHOLOGY (PSY)

### PSY100A Introduction to Psychology I

3 Credits (3 Lectures)

Principles and theories of human behavior in motivation, emotion, cognition, learning, and memory and intelligence.  
*Prerequisite:* RDG100A or RDG100B.  
*Corequisite:* PSY100B for transfer students.

### PSY100B Introduction to Psychology II

3 Credits (3 Lectures)

Principles and theories of human behavior regarding: cognition, intelligence, motivation, emotion, gender, sexuality, personality, health and stress, psychological disorders, therapeutic interventions, social behavior, attitudes, culture and human relations.  
*Prerequisite:* RDG100A or RDG100B.  
*Corequisite:* PSY100A for transfer students.

### PSY101 Introduction to Psychology

3 Credits (3 Lectures)

Principles and theories of human behavior are introduced in lectures on the history of psychology, the scientific discipline applied to psychology, the physiology of the brain, the nervous and endocrine systems, organs involved in the perceptual processes, and states of consciousness. Also covered are lectures on cognition, creativity, memory, conditioning and human development.  
*Prerequisite:* RDG100A or RDG100B.

**PSY200 Social Psychology**

3 Credits (3 Lectures)

Principles of sociology and psychology with emphasis on the individual and his/her reciprocal interaction with groups, basic psychological factors, social attitudes, language and communication, society and cultures, small groups and their relation to the individual, leadership and group dynamics.

*Prerequisites:* PSY100A and PSY100B or PSY101; RDG100A or RDG100B.

**PSY202 Psychology of Abnormality**

3 Credits (3 Lectures)

Theories of normality and abnormality, models of psychopathology, classification and treatment of mental disorder, and principles of various forms of psychotherapy.

*Prerequisite:* PSY100A and PSY100B or PSY101.

**PSY203 Developmental Psychology**

3 Credits (3 Lectures)

Emphasizes physical, social, cognitive and personality development within an individual. Provides an understanding of the transition of life from conception to death.

*Prerequisite:* ENG101, PSY101; RDG100A or RDG100B.  
*Corequisite:* ENG102.

**PSY204 Introduction to Experimental Psychology**

4 Credits (3 Lectures, 3 Labs)

The scientific method in psychology emphasizing research ethics, alternatives to experimentation, experimental designs, analysis of research results, and writing research reports along with laboratory experiments, quasi-experiments and demonstrations.

*Prerequisites:* ENG101; PSY100A and PSY100B or PSY101; PSY208; RDG100A or RDG100B.

**PSY205 Personality and Social Adjustment**

3 Credits (3 Lectures)

Writing/critical inquiry regarding principles of mental health applicable to human behavior and everyday social interaction; gathering, interpreting, and evaluating information; class discussion of alternative points of view; careful introspection; developing fair-minded and empathic understanding of "self"; "other"; and current social issues; and awareness of assumptions and unexamined ideas about human behavior.

*Prerequisites:* ENG 101; RDG100A or RDG100B.  
*Corequisite:* ENG102.

**PSY208 Introduction to Statistics**

3 Credits (3 Lectures)

Descriptive statistics, probability and application, probability distributions of random variable, and inference and statistical decision-making.

*Prerequisite:* MAT120.

**READING (RDG)****RDG090 Introduction to College Literacy**

4 Credits (3 Lectures, 3 Labs)

Focuses on the simplest meaning of words, sentences and short passages. Emphasizes the improvement of basic vocabulary and word recognition techniques, spelling and resource usage. Also explores the similarities and differences in various print genres.

*Prerequisites:* English speaking proficiency.

**RDG091 College Vocabulary**

4 Credits (4 Lectures)

Required for students with a Reading ASSET score between 33 and 36 OR a Reading COMPASS score between 47 and 65. Designed to improve basic reading, vocabulary and comprehension skills. Focuses on interpreting the relationship between words and ideas, with emphasis on word parts, etymologies, and context clues.

*Prerequisite:* RDG090 or appropriate reading placement score.

**RDG100A Reading for Reasoning  
RDG100B Reading for Reasoning**

3 Credits (3 Lectures)

Required for students with an appropriate assessment score and students who have completed RDG091 with a grade of "C" or better. Focus is on reading comprehension and critical reading skills. Also covered are note-taking, study, and test-taking skills.

*Prerequisite:* RDG091.

**RDG200 Analytical Reading and Reasoning**

3 Credits (3 Lectures)

Variety of methods to systematically, analytically, and logically examine a written passage. Activities include evaluating written materials, reaching logical conclusions, and/or making valid judgments or inferences from them.

*Prerequisite:* RDG100A or RDG100B.



## REAL ESTATE (REA)

### REA122 Real Estate Principles and Practices

6 Credits (6 Lectures)

A basic course in the principles of real estate including estates, real estate code, commissioner's rule 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 licensing of real estate sales personnel. Satisfactory/unsatisfactory grading available.

### REA124 Introduction to Contract Writing

1 Credit (1 Lecture)

A required course prior to real estate license activation.

### REA220 Real Estate Review

2 Credits (2 Lectures)

An update on real estate law and Commissioner's Rules and Regulations. Meets state law requirement for 24 hours of instruction to renew real estate licenses.

## RECREATION (REC)

### REC100A Country Western Dance I

1 Credit (.5 Lecture, 2 Lab)

Introduction to counts, positions and patterns of rhythm two-step, progressive two-step and waltz. Dance floor etiquette. May be taken four times for credit.

### REC100B Country Western Dance II

1 Credit (.5 Lecture, 2 Lab)

Extending basic patterns of rhythm two-step, progressive two-step and waltz. May be taken four times for credit.

*Prerequisite:* REC100A.

### REC101 Recreation, Leisure and the Quality of Life

3 Credits (3 Lectures)

The conceptual foundations of recreation, play and leisure from cultural, historical, philosophical, physiological, psychological and sociological perspectives, and the significance of recreation, play and leisure on life quality. *Corequisite:* RDG100A or RDG100B.

### REC102 Leisure and Society

3 Credits (3 Lectures)

Analysis of the human relationship to leisure; a survey of the historical, environmental, philosophical, political, psychological and socioeconomic foundations for the development of systems that provide leisure programs. *Corequisite:* RDG100A or RDG100B.

### REC108 Recreation Practicum

3 Credits (2 Lectures, 3 Labs)

The special duties and problems of aides and supervisors of recreation programs, with a weekly seminar on campus; six hours in observation and participation in assigned situations.

### REC111 Dance I: Cha-Cha

1 Credit (.5 Lectures, 2 Labs)

Cha-cha is an eight count dance which most people count as a four count unit that repeats in either direction. Side together is danced on counts four-and-one. Break steps are danced on counts two and three. Cuban motion is used in cha-cha, which is hip motion initiated by using the inside edge and ball of the foot during weight transfer of the feet. May be taken four times for credit.

### REC112 Country Western Two-Step

1 Credit (.5 Lectures, 2 Labs)

To expand this dance as introduced in Country and Western Dance I, students are able to focus on one dance from the basic step and supplement with more complex patterns. Two-step is considered a smooth dance, making fluid forward progress counterclockwise around the dance floor. May be taken four times for credit.

### REC113 Country and Western Dance: East Coast Swing

1 Credit (.5 Lectures, 2 Labs)

Enhancement of swing dance repertoire by focusing on one dance from the basic step and supplementing with more complex six- or eight-count stationary, circular or slotted step patterns. May be taken four times for credit.

### REC203 Leisure Delivery Systems

3 Credits (3 Lectures)

Foundations for the development, management and organization of the public, nonprofit, and private sectors of the leisure services profession and industry.

*Corequisite:* RDG100A or RDG100B.

### REC220 Introduction to Nonprofit Youth and Human Service Agencies

3 Credits (3 Lectures)

Introduction to the nonprofit youth and human service agency sector, its unique structure and its role in the delivery of services, the economy, and society at large.

*Prerequisite:* REC101.

### REC230 Program Planning

3 Credits (3 Lectures)

Foundations for effective leisure and recreation program planning in the public, nonprofit and private sectors.

*Prerequisite:* REC101.



## **REC250 Leadership in Recreation**

*3 Credits (3 Lectures)*

Theories and strategies for leadership in recreation and tourism settings, including communication skills, group dynamics, motivation processes, and supervisory skills.

*Prerequisite: REC101.*

## **SCHOOL BUSINESS OFFICIALS (SBO)**

### **SBO124 Budget and Finance for School Business Officials**

*2 Credits (2 Lectures)*

Budgetary process in Arizona public schools and an understanding of the preparation of the required state budget forms.

### **SBO124A School Business Officials Budget and Finance**

*3 Credits (2 Lectures, 3 Labs)*

Budgetary process in Arizona public schools with a practical application in the preparation of the required state budget forms.

### **SBO125 Purchasing for School Business Officials**

*2 Credits (2 Lectures)*

Principles, processes and requirements of school district procurement and materials management that transfers directly to the school business office. Overview of the rules, regulations and statutes that apply to school district procurement.

### **SBO125A School Business Officials Purchasing**

*3 Credits (2 Lectures, 3 Labs)*

An overview of the rules, regulations and statutes that apply to school district procurement and materials management.

### **SBO126 Introduction to School Food Service**

*2 Credits (2 Lectures)*

History and development of School Food Service Programs throughout the United States; roles of the federal and state government, local school food service department and students. See NTR126.

### **SBO126A School Business Officials Food Service Operations**

*3 Credits (2 Lectures, 3 Labs)*

This course provides the student with a working knowledge of operational requirements within the National Child Nutrition Program.

### **SBO127 Risk Management for School Business Officials**

*2 Credits (2 Lectures)*

Risk management process, including types of insurance coverage needed by schools and the risk financing options available. Implementation of different types of loss control and safety programs. Alternatives to mitigate loss exposures.

### **SBO127A School Business Officials Risk Management**

*3 Credits (2 Lectures, 3 Labs)*

An overview of the risk management process, including types of insurance coverage needed by schools and the risk financing options available.

### **SBO128 School Business Management for School Business Officials**

*2 Credits (2 Lectures)*

Responsibilities, duties, leadership skills and management techniques for the school business manager. Legal issues affecting public education.

### **SBO128A School Business Officials Management**

*3 Credits (2 Lectures, 3 Labs)*

An overview of the responsibilities, duties, leadership skills and management techniques for the school business manager.

### **SBO130 Accounting for School Business Officials**

*2 Credits (2 Lectures)*

Working knowledge of accounting principles as applied in public school accounting covering an orientation to school finance, financial accounting, payroll and fixed assets, and audit requirements. Includes an overview of Arizona School Budget laws. This course is meant to be an overview.

### **SBO130A School Business Officials Accounting**

*3 Credits (2 Lectures, 3 Labs)*

An orientation to school finance, financial accounting, payroll and fixed assets, and audit requirements.

### **SBO131 Maintenance and Operations for School Business Officials**

*2 Credits (2 Lectures)*

Basic knowledge of facilities operations and maintenance. Discussion of budget and funding sources, construction planning, and introduction to government regulations and mandated programs.



### **SBO131A School Business Officials Maintenance and Operations**

*3 Credits (2 Lectures, 3 Labs)*

An overview of construction planning, facilities operations and maintenance including government regulations and mandated programs.

### **SBO132 Personnel for School Business Officials**

*2 Credits (2 Lectures)*

Basic knowledge of the fundamentals and role of personnel/human resources department for classified and certified personnel in the public schools.

### **SBO132A School Business Officials Personnel**

*3 Credits (2 Lectures, 3 Labs)*

An overview of the role of the personnel/human resources department for classified and certified personnel in the public schools.

### **SBO133 Information Systems for School Business Officials**

*2 Credits (2 Lectures)*

Knowledge, understanding, and ability to grasp the scope of functioning in an automated environment beyond the technical and physical aspects of running a computer. May be taken two times for credit.

### **SBO133A School Business Officials Information Technology**

*3 Credits (2 Lectures, 3 Labs)*

An overview of Information Technology layouts and applications as they relate to school administrative functions.

### **SBO134 Transportation for School Business Officials**

*2 Credits (2 Lectures)*

The transportation course provides the student with the knowledge, understanding and ability to grasp the scope of the management, planning, operations and logistics of transportation administration.

### **SBO134A School Business Officials Transportation**

*3 Credits (2 Lectures, 3 Labs)*

An overview of the management, planning, operations and logistics of transportation administration.

### **SBO190 School Business Officials Practical Lab**

*1 Credit (2 Labs)*

A one credit lab to apply skills learned in the SBO 2-credit modules. A separate lab must be taken for each 2-credit module previously completed. May be repeated for credit. *Prerequisites: SBO124, SBO125, SBO126, SBO127, SBO128, SBO130, SBO131, SBO132, SBO135 or SBO134.*

### **SBO201 School Business Officials Maintenance and Operations Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing a maintenance and operations plan for public schools. Satisfactory/unsatisfactory grading only.

### **SBO202 School Business Officials Employee Benefits Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on role of employee benefits as applied to public schools. Satisfactory/unsatisfactory grading only.

### **SBO203 School Business Officials Information Systems Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing an opportunity to review and evaluate information systems in public schools. Satisfactory/unsatisfactory grading only.

### **SBO204 School Business Officials Budget and Finance Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on budget and finance systems in public schools. Satisfactory/unsatisfactory grading only.

### **SBO205 School Business Officials Purchasing for Users Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing and maintaining a purchasing system for public schools. Satisfactory/unsatisfactory grading only.

### **SBO206 School Business Officials Food Service Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on food service programs in public schools. Satisfactory/unsatisfactory grading only.

### **SBO207 School Business Officials Risk Management Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing general information on risk management plans for public schools. Satisfactory/unsatisfactory grading only.

**SBO208 School Business Officials Legislation Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing and maintaining information about legislative issues regarding public schools. Satisfactory/unsatisfactory grading only.

**SBO210 School Business Officials Fixed Assets Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing and maintaining a fixed assets plan for public schools. Satisfactory/unsatisfactory grading only.

**SBO211 School Business Officials Energy Management Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing and maintaining an energy management plan for public schools. Satisfactory/unsatisfactory grading only.

**SBO212 School Business Officials Personnel Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on the role of hiring, training and keeping qualified personnel as applied to public schools. Satisfactory/unsatisfactory grading only.

**SBO213 School Business Officials Office Technology Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on office technology for public schools. Satisfactory/unsatisfactory grading only.

**SBO214 School Business Officials Capital Financing Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on capital financing for public schools. Satisfactory/unsatisfactory grading only.

**SBO215 School Business Officials Student Attendance Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on student attendance policies for public schools. Satisfactory/unsatisfactory grading only.

**SBO218 School Business Officials Business Management Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Workshop provides an overview to those individuals who are currently in school business management or those entering into the profession. Satisfactory/unsatisfactory grading only.

**SBO220 School Business Officials Grant Accounting/Reporting Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on grants management in public schools. Satisfactory/unsatisfactory grading only.

**SBO224 School Business Officials Financial Coding & Reporting Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

In-depth workshop dealing with the allowable state chart of accounts for school districts, as well as proper coding and reporting guidelines to meet both state and internal needs. Satisfactory/unsatisfactory grading only.

**SBO225 School Business Officials Students FIRST Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Workshop covers the major programs offered to school districts within the state sponsored Students FIRST program. Satisfactory/unsatisfactory grading only.

**SBO230 School Business Officials Payroll Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing and maintaining a payroll system as it applies to public schools. Satisfactory/unsatisfactory grading only.

**SBO234 School Business Officials Financial Data Analysis Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Workshop providing a wide array of information concerning analyzing financial data and how a school district might utilize data to improve its operations. Satisfactory/unsatisfactory grading only.

**SBO240 School Business Officials Accounts Payable Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on accounts payable systems in public schools. Satisfactory/unsatisfactory grading only.



### **SBO244 School Business Officials Transportation Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on transportation systems as applied to public schools. Satisfactory/unsatisfactory grading only.

### **SBO250 School Business Officials Audit Compliance Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on audit compliance in public schools. Satisfactory/unsatisfactory grading only.

### **SBO254 School Business Officials Fund Accounting Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on fund accounting for public schools. Satisfactory/unsatisfactory grading only.

### **SBO260 School Business Officials Auxiliary/Student Activity Funds Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on developing and maintaining an auxiliary and student activity fund plans for public schools. Satisfactory/unsatisfactory grading only.

### **SBO270 School Business Officials GASB 34 Seminar/Workshop**

*.05 Credit (0.5 Lecture)*

Comprehensive workshop providing information on Governmental Accounting Standards Board (GASB) 34 for public schools. Satisfactory/unsatisfactory grading only.

## **SIGN LANGUAGE (SLG)**

### **SLG091 Introduction to American Sign Language I**

*3 Credits (3 Lectures)*

Basic core vocabulary of 350+ signs and the manual alphabet for the beginning student of sign language. Problems of daily living associated with deafness. Current and past trends in education of the deaf.

### **SLG092 Introduction to American Sign Language II**

*3 Credits (3 Lectures)*

Extended vocabulary of 490+ words and practice to accelerate the speed and accuracy of signing in both expressive and receptive communication.

*Prerequisite: SLG091.*

### **SLG101 American Sign Language I**

*4 Credits (4 Lectures)*

Introduction to deaf culture and the vocabulary and sentence structures of American Sign Language. Mastery of receptive and expressive basic communication skills.

*Prerequisite: RDG100A or RDG100B.*

### **SLG102 American Sign Language II**

*4 Credits (4 Lectures)*

Expanded American Sign Language knowledge, vocabulary and performance skills. Refinement of receptive and expressive skills.

*Prerequisite: SLG101.*

### **SLG201 American Sign Language III**

*4 Credits (3 Lectures, 2 Labs)*

A comprehensive study of the history of deafness, schools for the deaf, and the evolution of American Sign Language. Class taught in American Sign Language.

*Prerequisite: SLG102.*

### **SLG202 American Sign Language IV**

*4 Credits (3 Lectures, 2 Labs)*

A comparison study to analyze linguistic differences and similarities of American Sign Language to English. Taught in American Sign Language and English.

*Prerequisite: SLG201.*

## **SOCIOLOGY (SOC)**

### **SOC100 Introduction to Sociology**

*3 Credits (3 Lectures)*

The systematic study of human behavior as shaped by group life, and the social systems and structures created by human beings.

*Prerequisite: RDG100A or RDG100B.*

### **SOC102 Contemporary Issues in Society**

*3 Credits (3 Lectures)*

An analysis of contemporary social problems resulting from social change, both technical and cultural, with an emphasis on issues related to workplace changes and unemployment, social diversity, crime and violence, mass media, family structures, technology, health care, the interconnectiveness of global issues and other current issues in society.

*Prerequisite: RDG100A or RDG100B.*

### **SOC200 Racial and Ethnic Minorities**

*3 Credits (3 Lectures)*

Examines race and ethnicity in American society from the sociological perspective.

*Prerequisites: SOC100, ENG101; RDG100A or RDG100B.*

*Corequisite: ENG102.*



## **SOC203 Marriage and the Family**

*3 Credits (3 Lectures)*

A comprehensive examination of marriage and the family as a cultural unit and a social institution. Topics of study include role definitions, gender, the dynamics of courtship and love, sexual values, sexual behavior, mate selection, procreation, parenting, divorce, and the impact of race, ethnicity, and socioeconomic status on marriage and families.

*Prerequisite: RDG100A or RDG100B.*

## **SOC212 Gender in Society**

*3 Credits (3 Lectures)*

Examination of the similarities and differences between the sexes and the behaviors associated with gender roles derived from socialization across the life span and the role of social institutions, including the media and the family, social class, and race and ethnicity in the construction of gender and gender roles.

*Prerequisites: ENG 101; RDG100A or RDG100B.*

## **SOC240 Sociology of Education**

*3 Credits (3 Lectures)*

Diversity of theoretical approaches and issues in education and the application of this knowledge to the understanding of education and schooling. May be taken in conjunction with EDU221.

*Prerequisite: SOC100.*

## **SOC250 Family Violence**

*3 Credits (3 Lectures)*

Examination of family violence and the major theories of family violence and its practical implications.

*Prerequisite: RDG100A or RDG100B.*

## **SOC265 Aging in America**

*3 Credits (3 Lectures)*

Theories and methodologies related to the social aspects of aging, including the characteristics, experiences, needs and problems of the aging.

*Prerequisite: RDG100A or RDG100B.*

## **SPANISH (SPA)**

### **SPA101 Elementary Spanish I**

*4 Credits (4 Lectures, 1 Lab)*

The basic skills of understanding, speaking, reading, and writing Spanish with a survey of cultural materials from Spanish-speaking countries.

*Prerequisite: RDG100A or RDG100B.*

### **SPA102 Elementary Spanish II**

*4 Credits (4 Recitations)*

Refinement of basic communication skills in Spanish, emphasizing reading, writing, speaking, and listening exercises. Survey of cultural norms, beliefs and traditions from Spanish speaking areas.

*Prerequisite: SPA101 or 70% minimum score on SPA101 Skills Assessment Exam.*

### **SPA115 Conversational Spanish I**

*2-3 Credits (2-3 Recitations)*

Basic knowledge of Spanish to understand and speak the language, with grammatical explanations kept to a minimum so that the student learns primarily through pattern practice.

### **SPA116 Conversational Spanish II**

*2-3 Credits (1 Lab, 2-3 Recitations)*

Development of Spanish speaking and listening skills at the novice level, with grammatical explanations kept to a minimum, so that students learn primarily through pattern practice, repetition and practical application. SPA 116 is a continuation of SPA 115.

*Prerequisite: SPA115 or assessed competency.*

### **SPA201 Intermediate Spanish I**

*4 Credits (4 Recitations)*

Development of reading, writing, speaking and listening skills and proficiency at the novice intermediate level. Continuation of understanding, appreciation and sensitivity to aspects of Hispanic cultures.

*Prerequisite: SPA102 or 70% minimum on SPA102 Skills Assessment Exam.*

### **SPA202 Intermediate Spanish II**

*4 Credits (4 Recitations)*

Continued development and practice in speaking, listening, reading and writing skills at an intermediate level. Continued study of aspects of culture of Spanish speaking areas and people. Review of grammar and introduction to the subjective mood, with required readings and writings.

*Prerequisite: SPA201 or a score of 70% on an SPA201 Skills Assessment Exam.*



## TECHNOLOGY (TEC)

### TEC129 Computer Skills for Technicians

3 Credits (2 Lectures, 3 Labs)

Practical use of computer software in industrial and technological applications. An introduction to word processing, spreadsheets, database, presentation and Internet.

### TEC130 A+ Certification Preparation

10 Credits (6 Lectures, 8 Labs)

Basic knowledge and skills necessary to perform as an entry-level PC technician in a company's information technology department. Successful students will be able to determine their readiness to take Comp TIA's A+ Certification test.

Corequisite: OAS101.

## THEATER (THE)

### THE100 Theater Appreciation

3 Credits (3 Lectures)

Survey of theater, including the origins of drama, influence of significant plays, contributions of the actor, director, designer, and playwright and their impact on various cultures and civilizations. Evaluation of stage and filmed versions of plays and how society influenced the development and creation of plays.

Prerequisite: RDG100A or RDG100B.

### THE101 Beginning Acting I

3 Credits (2 Lectures, 3 Labs)

An introduction to acting for students with little or no acting experience. Explore the fundamentals of acting through physical expression, improvisation and performance of short scenes within the classroom.

Prerequisite: RDG100A or RDG100B.

### THE102 Beginning Acting II

3 Credits (2 Lectures, 3 Labs)

Continuing study of the fundamentals of acting with emphasis on script analysis, character analysis and the rehearsal process through the performance of two or three short scenes.

Prerequisite: THE101.

### THE103 Introduction to Technical Theater

3 Credits (2 Lectures, 3 Labs)

Developing an awareness for theater safety, exploring production organization and management, and introduction to basic technical design concepts. Stage lighting production is examined to include the types of lighting instruments used for theater performances and computerized lighting control along with an examination of basic sound design and technology for theater. Students apply skills learned in the course by performing the technical aspects for selected events occurring in the Pence Center for the Performing and Visual Arts during the semester.

Prerequisite: RDG100A or RDG100B.

### THE104 Stagecraft

3 Credits (2 Lectures, 3 Labs)

Basic backstage techniques in building, painting and rigging of scenery. Operation of stage lighting, sound and curtain equipment. Practical experience in set construction and technical production for events in the Pence Center for the Performing and Visual Arts. May be taken two times for credit.

Prerequisite: RDG100A or RDG100B.

### THE105 Basics of Theatrical Lighting Design

3 Credits (2 Lectures, 3 Labs)

Basic processes of stage lighting design for theater and concerts. Emphasis on creative aspects and the technology needed to implement a design. Examines color theory, script analysis, projections and special effects.

Prerequisite: RDG100A or RDG100B.

### THE110 Stage Combat

3 Credits (2 Lectures, 3 Labs)

Students will use physical movement to learn stunt fighting that will include hand-to-hand combat and the possible use of rapier, rapier and dagger, or quarterstaff.

Prerequisite: RDG100A or RDG100B.

### THE112 Introduction to the Performing Arts

2 Credits (1 Lecture, 3 Labs)

Students meet once per week to explore the theater as an art form. Students work 28 hours over the course of the semester behind the scenes of a theatrical production to gain first-hand experience and attend one live theater production. May be taken four times for credit.

Prerequisite: RDG100A or RDG100B.

**THE113 Theater Workshop: Stagecraft**

2 Credits (6 Labs)

Production experience in technical theater as a member of one or more of the technical activities for college theater productions. Positions are stage lighting, sound reinforcement and recording, properties, costumes, scenic artist, multimedia graphics design or set construction. May be taken four times for credit.

*Prerequisite: RDG100A or RDG100B.*

**THE115 Introduction to Cinema**

3 Credits (2 Lectures, 3 Labs)

Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements.

*Prerequisite: RDG100A or RDG100B.*

**THE116 Contemporary Cinema**

3 Credits (2 Lectures, 3 Labs)

Survey of various styles and genres of current motion picture films, including criticism of aesthetic and technical elements.

*Prerequisite: RDG100A or RDG100B.*

**THE117 Theater Workshop: Drama**

2 Credits (6 Labs)

Participation as an actor, understudy or assistant to the director in the semester's production. Actors are selected by audition. Participation as an assistant to the director is based on availability of a position. May be taken four times for credit.

*Prerequisite: RDG100A or RDG100B.*

**THE203 Intermediate Acting I**

3 Credits (2 Lectures, 3 Labs)

Continuing study of the fundamentals of acting with emphasis on movement and voice. In addition to performing in scenes and/or one-act plays, students learn two monologues to further prepare them for auditioning.

*Prerequisite: THE102.*

**THE204 Intermediate Acting II**

3 Credits (2 Lectures, 3 Labs)

Continuing study of the fundamentals of acting with emphasis on career and further training opportunities. In addition to performing in scenes and/or one-act plays, students learn two monologues to further prepare them for auditioning.

*Prerequisite: THE203.*

**UPHOLSTERY (UPH)****UPH100 Upholstery Basics**

2 Credits (1 Lecture, 3 Labs)

Overview of the upholstery process, with hands-on experience in the use of tools and sewing machines; preparation of furniture for upholstery; fabric selection and measurement; cushion construction and installation of padding and covers. Satisfactory/unsatisfactory grading available. May be repeated for credit.

**WELDING (WLD)****WLD110 Survey of Welding Processes**

3 Credits (2 Lectures, 3 Labs)

Fundamental welding processes and procedures, including basic shield arc, oxy-acetylene, tungsten inert gas, and metal inert gas welding. *Approved for Tech Prep.*

**WLD120 Oxy-Acetylene Welding**

3 Credits (2 Lectures, 2 Labs)

The fundamentals of oxy-acetylene welding including equipment use and safety procedures in brazing, cast iron, silver soldering, running all-directional beads and machine cutting.

**WLD121 Shielded Metal Arc Welding I**

3 Credits (2 Lectures, 3 Labs)

The fundamentals of arc welding with emphasis on running beads in all positions, identification of electrodes, hand flame cutting with the torch, and identification of metal. *Approved for Tech Prep.*

**WLD122 Shielded Metal Arc Welding II**

3 Credits (2 Lectures, 3 Labs)

Advanced arc welding with emphasis on out-of-position welding, basic destructive and non-destructive testing, arc air cutting and gouging, and machine cutting.

*Prerequisite: WLD120 or WLD121.*

**WLD125 Pipe Welding I**

3 Credits (2 Lectures, 3 Labs)

Specifications for welding piping systems, cross country pipelines, petroleum and chemical industrial lines, and structural uses.

*Prerequisite: WLD122.*

**WLD128 Blueprint Reading for Welders**

3 Credits (3 Lectures)

The fundamentals of reading and interpreting welding symbols and blueprints as they pertain to the area of welding technology.

**WLD221 Gas Tungsten Arc Welding**

*3 Credits (2 Lectures, 3 Labs)*

The manipulative techniques of both arc and acetylene welding; the theory, operation, safety, care, and maintenance of the G.T.A.W. equipment; and the use of torches, flowerets, electrodes, metals (both ferrous and non-ferrous), and joint design.

*Prerequisite: WLD120.*

**WLD222 Gas Metal Arc Welding**

*3 Credits (2 Lectures, 3 Labs)*

Short-circuiting, spraying, and globular transferring of ferrous and non-ferrous metals and flux-cored welding in the flat and horizontal positions, with emphasis on proper use and care of equipment, and safety procedures.

*Prerequisites: WLD120, WLD121.*

**WLD223 Automatic and Semi-Automatic Welding**

*3 Credits (2 Lectures, 3 Labs)*

Development of the necessary skills to enter the welding industry, including TIG and MIG techniques.

*Prerequisite: WLD221.*

**WLD225 Shielded Metal Arc Welding III**

*3 Credits (2 Lectures, 3 Labs)*

Use of the E-7018 electrodes in the flat and horizontal welding position, with emphasis on basic joints placed in out-of-position welding, AWS D1-1 guided bend test, and destructive methods.

**WLD227 Welding Design and Fabrication**

*3 Credits (2 Lectures, 3 Labs)*

Welding design, layout, fabrication processes, with the class being job-shop oriented and emphasis placed on specific individual and group projects with the Consent of Instructor. May be taken two times for credit.



## STUDENT ACCOMPLISHMENTS

Central students continue to make their mark in the classroom, in the community, and in the nation. Among the many student accomplishments, **Phi Theta Kappa** national honor society has recognized Central Arizona College's district chapter for major increases in membership at the college's three campuses. The college's **Alpha Theta Delta** chapter received the Platinum Award, the highest designation the society can bestow for recruitment and growth. The award was presented in recognition of Central's 20 percent increase in membership among its chapters at the college's Signal Peak, Aravaipa, and Superstition Mountain Campus had the largest ever enrollments in an academic year in PTK.

Central continued to show athletic dominance, as the college won four national championships: one each in **men's and women's track and field** and **men's and women's cross country**. The **women's basketball** team finished third in the nation, and was recognized for having one of the highest grade point averages in the nation. Seven Central athletes were also recognized as **NJCAA Academic All Americans**, and 44 were named **NJCAA All-Americans**.

Six Central Arizona College students were named **All-Arizona Academic Scholars**, and **Erica Flores** was named to the first team. Second team members included **Diane Garcia**, **Stacey McGee**, **Gary Reyes** and **Jason Taylor**. **Catherine (Kitty) Carlisle** was placed on the third team.

Two Central Arizona College students, **Ramon Estrada** and **Carol Verdugo**, won a \$1,000 scholarship from the **Coca-Cola Scholars Foundation**. They are among 10 Arizona students and 400 nationally who received the scholarships, which was based upon their demonstrated academic success and their participation in community service endeavors.

Seven Central Arizona College business students brought home nearly a dozen trophies from the 36th annual **Phi Beta Lambda** state leadership conference. Prizes included two first-place trophies, three second-place trophies and two third-place awards. Five students advanced to the national competition. The college's chapter of the business organization received second-place awards as a Gold Seal chapter and in competition for the largest chapter in the state.

## STAFF DEVELOPMENT/AWARDS

Throughout the year, Central employees are recognized for outstanding achievement and are put into leadership positions throughout higher education.

Some of these accomplishments include **Gladys Christensen**, president of the Pinal County Community College District Governing Board, elected chair of the **Association of Community College Trustees** nominating committee for a three-year term.

**Gloria Ann Guzman**, the secretary of the Pinal County Community College District Governing Board, was re-elected to a seat on the board of directors of the **Association of Community College Trustees** and to a fifth one-year term as vice chair of the **Association of Latino Community College Trustees**.

**Linda Heiland**, executive director of curriculum learning and assessment support services, received the **Chair Academy's 2006 Exemplary Leader Award**.

**Teresa Verbout**, public information and marketing director, was named **Volunteer of the Year** by the **Pinal County United Way**.

For faculty, **The George Fridell Teaching Excellence Award** was presented to **Dorie Goldman-Riveria**, English professor; **Terri Ackland**, English professor; and **Gayle Haro**, Hospitality Restaurant Management/Culinary arts professor; **Sam Weiss**, Central Arizona regional Law Officer Training Academy program director; and **Wayne Rodgers**, Custodial programs professor.

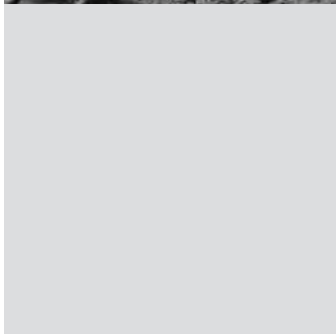
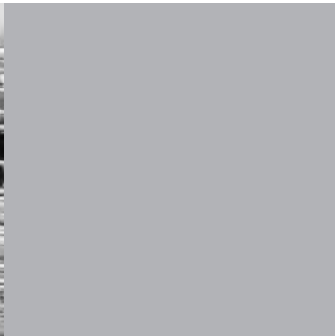
Seven Central Arizona College faculty members were named "**Who's Who Among America's Teachers**" including, **Vaun Day**, business administration; **Dixie Kullman**, human anatomy, physiology and microbiology; **Karen Ollerton**, agriculture; **Marjorie Schiller**, special education; **Vickie Young-Chiverton**, early childhood education; **Deborah Balmer**, preceptor in early-childhood education; and **Michael Kim**, professor of custodial maintenance.

Central's **Barbara Magenheimer**, nursing professor, and **Paula Calcaterra**, RN MSN, Central's director of nursing, are among the first educators in the country to become certified as nurse educators by the **National League of Nursing**.

**Cynthia Collings**, computer information systems professor, received a special award as outstanding local chapter adviser **Phi Beta Lambda**.



# GENERAL INFORMATION





BOARD OF GOVERNORS



**Richard Gibson**  
District 1

**Gladys Christensen**  
District 2

**Rita Nader**  
District 3

**Gloria Ann Guzman**  
District 5  
ACCT Board of Directors

*District 4 Office was vacant at the time of publication.*

COLLEGE ADMINISTRATION

**Terry A. Calaway, Ed.D.**  
College President

**Dennis A. Jenkins, M.B.A.**  
Senior Vice President of Finance and Community  
Development/Chief Financial Officer

**Susan L. Shaw, Ph.D.**  
Senior Vice President, College Services/  
Chief Operating Officer

**Graciela Figueroa, M.Ed., M.B.A.**  
Vice President of Governmental Relations

**Linda Heiland, M.Ed.**  
Associate Vice President of Institutional Effectiveness  
and Academic Quality/Chief Academic Officer

**Doris Helmich, Ed.D.**  
Associate Vice President, Student Development/  
Chief Student Development Officer

**Jim Kimsey, M.A.**  
Associate Vice President for Human Resources

**John Irvine, M.A.**  
Academic Dean/  
Campus Executive Officer, Signal Peak Campus

**Jim Lamb, M.S.**  
Academic Dean/  
Campus Executive Officer, Aravaipa Campus

**Bob Salmon, M.P.A.**  
Academic Dean/Campus Executive Officer,  
Superstition Mountain Campus

**Ruth Carlson, M.S.N.**  
Associate Dean for Nursing

**Steve Gonzales, M.A.**  
Associate Dean for Academic Services

**Al Larson, M.P.A.**  
Associate Dean Career and Technical Education

**Frank Puglia, M.B.A.**  
Associate Dean of Florence Center/  
Arizona State Prison

**Martha Muñoz, M.Ed.**  
Special Assistant to the President

**Russell Banta, B.S., C.P.A.**  
Executive Director of Accounting  
Services/Comptroller

**William Brown, M.B.A.**  
Executive Director, Planning, Research  
and Knowledge Systems

**Victor Gomez, M.Ed.**  
Executive Director of  
Central Arizona College Foundation

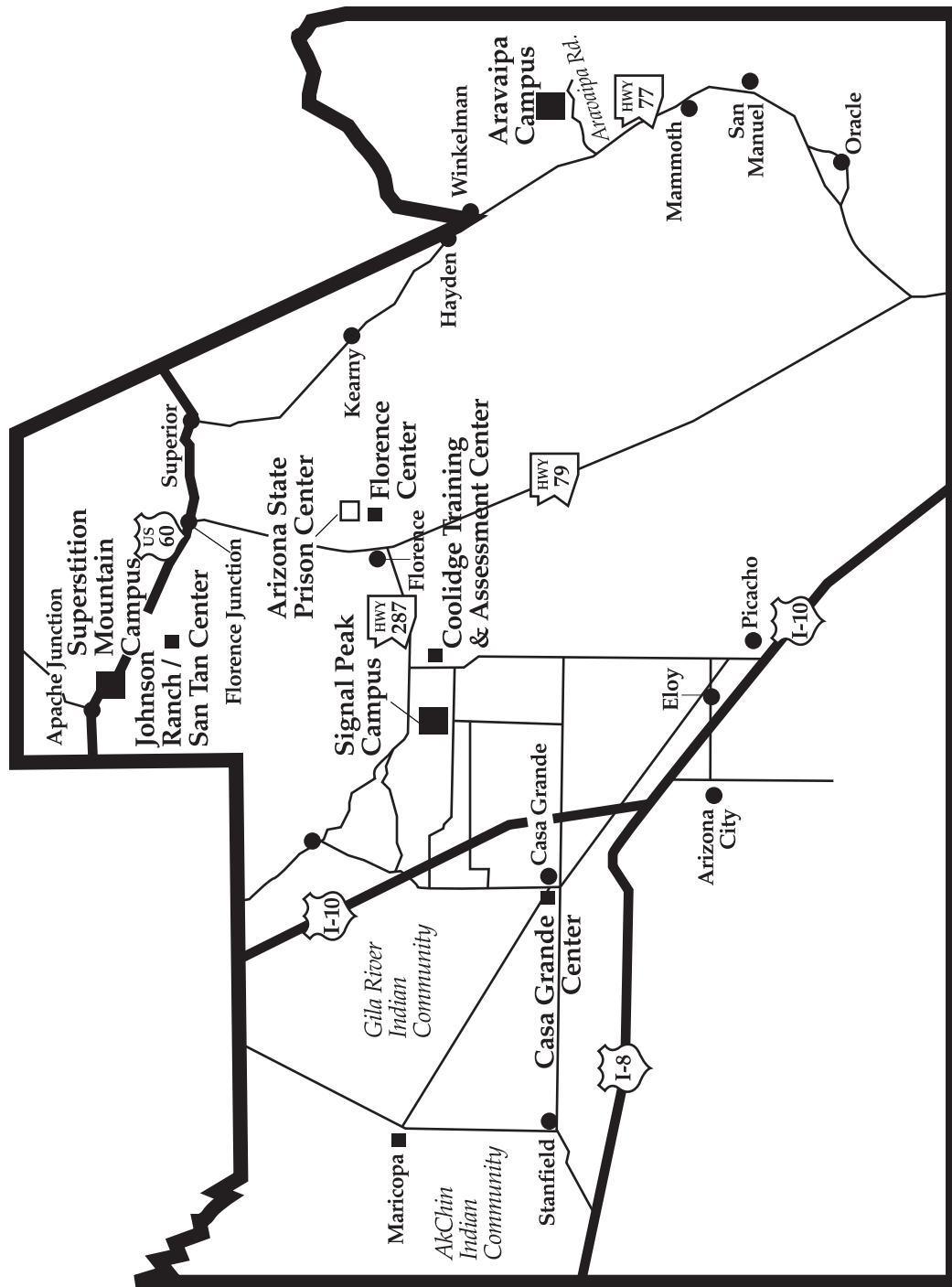
**Edward Harter, Ph.D.**  
Executive Director/Chief Information Officer

**Richard King, M.S.**  
Executive Director of Multi Media Services

**Paul Vander Waal**  
Executive Director of Facilities

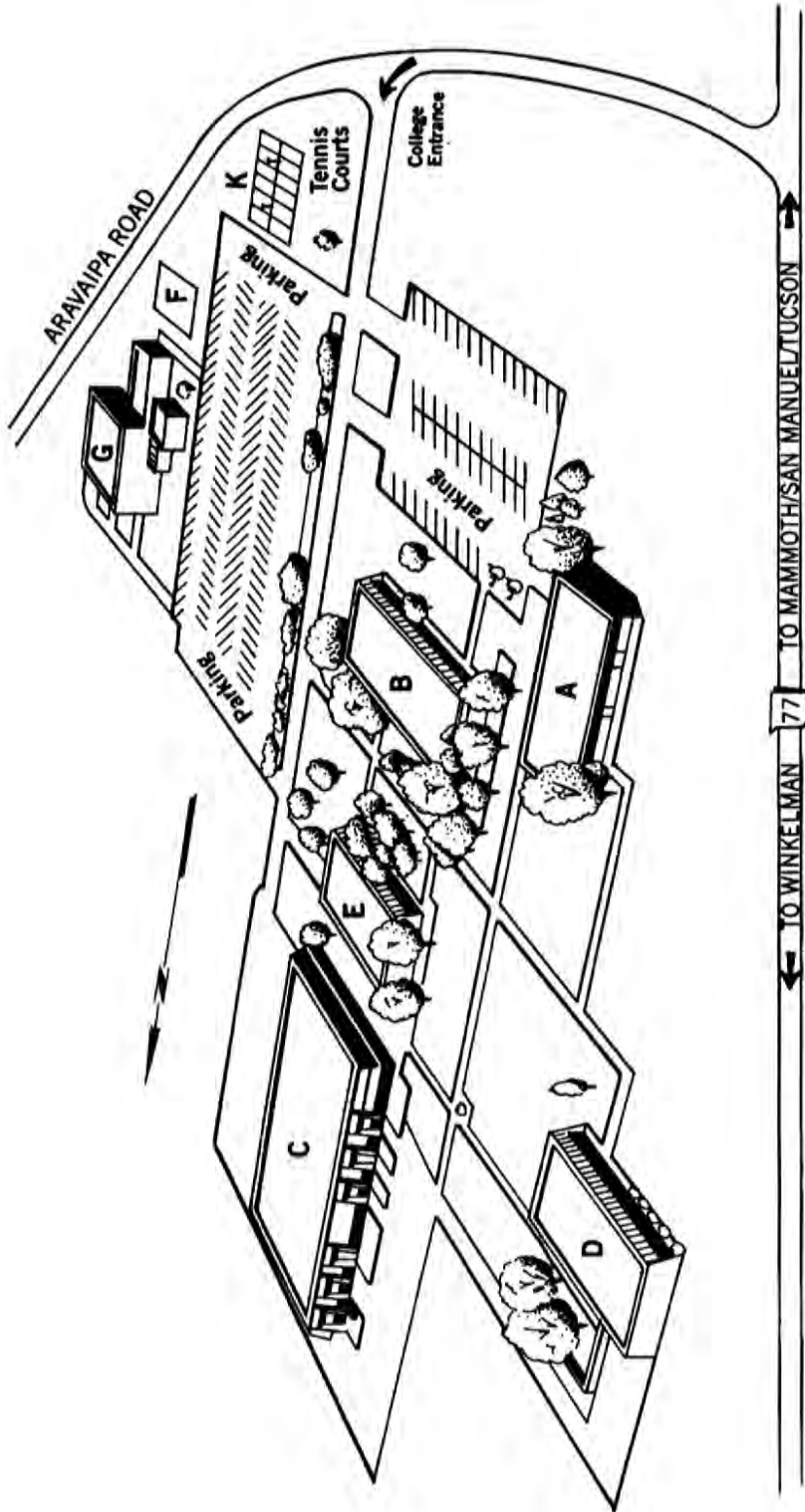


PINAL COUNTY MAP





ARAVAIPA CAMPUS MAP



ARAVAIPA CAMPUS

- A - Administration - Admissions
- B - Library, Services, Business & Art
- C - Technology Shops
- D - Student Center, Cafeteria
- E - Classrooms
- F - Children's Playgroup
- G - Multi-Purpose Facility
- K - Tennis Courts



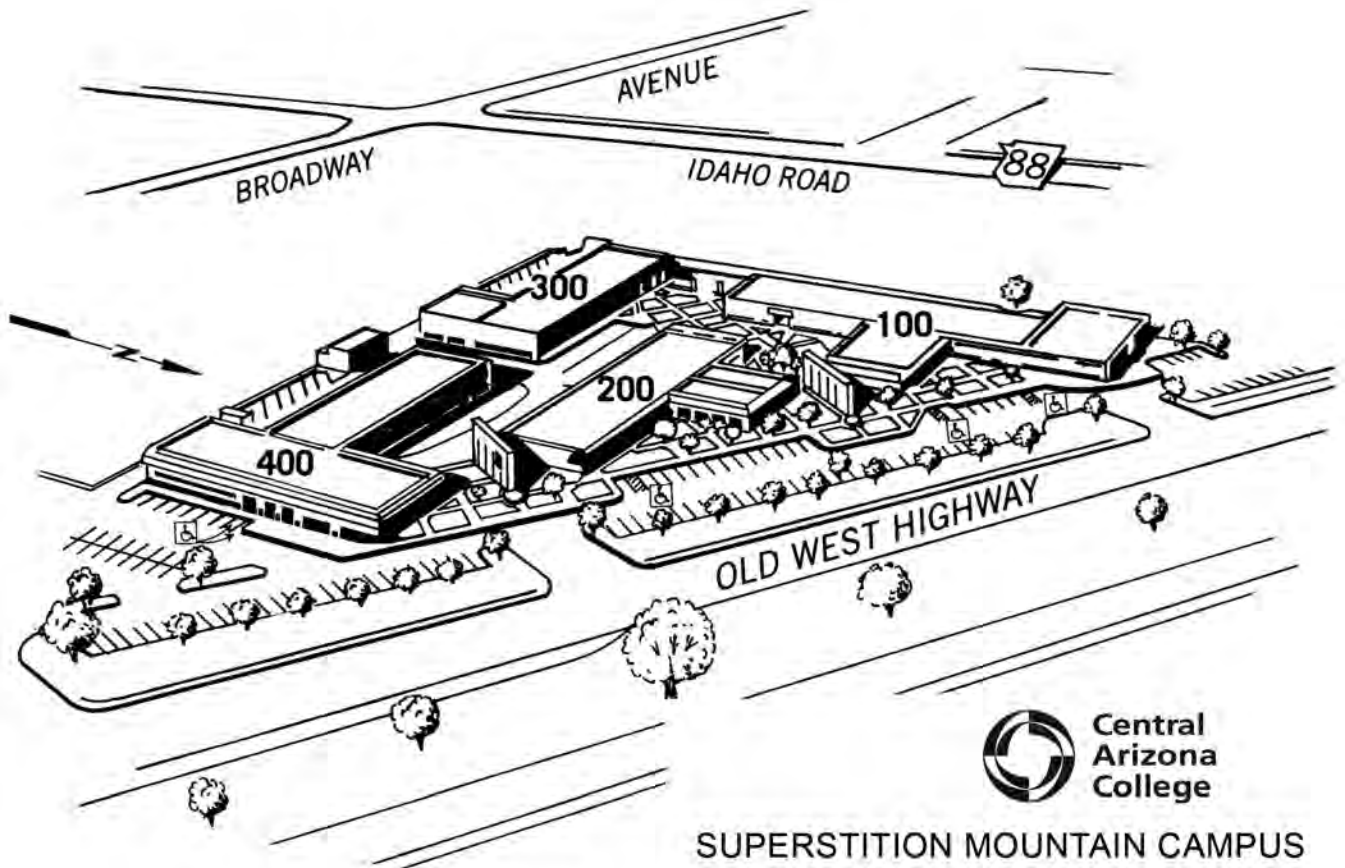
**SIGNAL PEAK CAMPUS MAP**

|   |   |   |  |
|---|---|---|--|
| A | Residence Life Tower/Student Housing          | P | Don P. Pence Center for Visual & Performing Arts |
| C | Residence Life/Student Housing                | S | C. Leroy Hoyt Hall Science/Engineering Building  |
| E | Filberto Rudolfo Ortiz Building               | T | Gloria R. Sheldon University Center              |
| G | George Young Activity Center                  | U | Central Plant, Shipping & Receiving              |
| H | James T. O'Neil Administration Hall           | V | Paul Pearce Center for Technological Studies     |
| I | Mel A. Everingham Student Center              | W | Leslie A. Wakefield Center for Health & Home     |
| L | Library & Communications                      |   |  |
| M | Student Services Center                       |   |  |
| N | Bradley Sizer Jr, Center for Business Studies |   |  |
| O | Interactive Learning Center                   |   |  |





SUPERSTITION MOUNTAIN CAMPUS MAP



|     |                                  |     |   |      |                     |
|-----|----------------------------------|-----|---|------|---------------------|
| 110 | Administration Office            | 151 | Science Lab   | 420  | Pottery             |
| 111 | Bookstore                        | 152 | Science Lab   | 421  | Art Storage         |
| 113 | Classroom                        | 153 | Classroom   | 423  | Draw/Paint          |
| 120 | Classroom                        | 211 | Classroom   | 424  | Student Lounge      |
| 121 | HOC Office                       | 212 | Classroom   | 425  | CNA                 |
| 122 | Faculty Offices                  | 213 | Tutoring Lab  | 436/ |                     |
| 123 | Classroom                        | 214 | Library/Learning Center                               | 438  | Locker Rooms        |
| 124 | Classroom                        | 311 | Classroom   | 440  | Classroom           |
| 125 | Student Management Room          | 312 | Classroom   | 442  | Classroom           |
| 126 | Classrooms                       | 313 | Classroom   | 443  | Classroom           |
| 127 | Classrooms                       | 314 | Classroom   | 444  | Multipurpose Room   |
| 130 | Faculty Offices                  | 321 | CAC Net 2   | 445  | Physical Education  |
| 131 | Faculty Offices                  | 322 | CAC Net 1   | 451  | Receiving & Storage |
| 134 | Faculty/Staff<br>Conference Room | 323 | Science Lab   |      |                     |
| 135 | Classroom                        | 331 | Health Science Lab                                    |      |                     |
| 140 | EMT/FSC                          | 332 | Health Science Lab                                    |      |                     |
|     |                                  | 410 | Office Continuing<br>Education (CALL)/<br>ELDERHOSTEL |      |                     |



## FACULTY AND STAFF

- Abril, Larry**, Facilities Technician I, SPC
- Ackland Terri**, English, SPC  
B.A., University of California, Davis  
M.A., Arizona State University
- Adamavich, Carol**, Preceptor, ECE, District/SPC  
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- Adams, Rick**, System Support Specialist, District/SPC  
A.G.S., Central Arizona College
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M.A., University of Arizona
- Alexander, S. Leslie**, Social and Behavioral Sciences, SMC  
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M.Ed., University of Illinois  
M.C., Arizona State University  
Ph.D., University of Illinois  
N.C.C., National Board of Certified Counselors
- Almendarez, Anne**, Secretary III, SPC
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B.B.A., National University
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M.B.A., Chapman University
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Ph.D., Arizona State University
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M.Ed., Northern Arizona University
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M.A., Cleveland State University  
Ed.D., University of Texas at Austin



## GENERAL INFORMATION

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M.E., California State University, Northridge

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**Casey, Martin**, Plumbing, ASP

Certificate, IBR School

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A.G.S., Glendale Community College

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M.S., University of Phoenix

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**Crosby, John**, Computer Information Systems, ASP

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**Dagnino, Jose**, Assistant Director of Financial Aid,  
District/SPC

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LRC Technician, AVC
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Secretary II, SPC
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Professor of Building Construction, AVC
- Johnson, James, 1969-1983**  
Professor of Music, SPC
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Professor of Science, SPC
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Professor of English, SPC
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District Director of Student Records & Registrar, SPC
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Professor of Psychology, SPC
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Professor of Cement, ASP
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# GENERAL INFORMATION

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ACADEMIC CALENDAR

FALL 2007

|   |                     |   |                      |
|---|---------------------|---|----------------------|
| In-service Day  | Aug. 14 (T)         | Veteran's Day – College Closed  | Nov. 12 (M)          |
| Faculty on Campus   | Aug. 14-17 (T-F)    | Early Spring Registration Begins<br><i>(Continues through January 15th)</i>       | Oct. 15 (M)          |
| Final Registration<br><i>(No registration after 1 p.m. on Saturday)</i>   | Aug. 16-18 (Th-Sat) | Last Day to Withdraw from<br>Semester-length Classes                              | Nov. 21 (W)          |
| Semester Begins   | Aug. 20 (M)         | Thanksgiving Break – College Closed<br><i>(No classes after 5 p.m. Nov. 21st)</i> | Nov. 22-23 (Th-F)    |
| Class Changes / Add-Drop  | Aug. 20-24 (M-F)    | Last Day of Class Instruction   | Dec. 7 (F)           |
| Labor Day – College Closed  | Sept. 3 (M)         | Final Exams   | Dec. 10-13 (M-Th)    |
| Faculty Development Day/<br>Priority Advising and Registration Day<br><i>(No Classes/College Services Open)</i> | Sept. 28 (F)        | Semester Ends   | Dec. 13 (Th)         |
| Low Grade Warning Week  | Oct. 1-5 (M-F)      | Grades due in Registrar's Office<br>by 11 a.m.                                    | Dec. 17 (M)          |
| 45-Day Census   | Oct. 3 (W)          | Winter Break – College Closed   | Dec. 24-Jan. 1 (M-T) |
| Last Day to Apply for Dec. Graduation   | Oct. 8 (M)          |   |                      |
| Mid Term Week   | Oct. 8-12 (M-F)     |   |                      |

SPRING 2008

|  |                     |  |                   |
|--|---------------------|--|-------------------|
| In-service Day   | Jan. 8 (T)          | Last Day to Apply for May Graduation                 | March 3 (M)       |
| Faculty on Campus  | Jan. 8-11 (T-F)     | Spring Break – College Closed                        | March 17-21 (M-F) |
| Final Registration<br><i>(No registration after 1 p.m. on Saturday)</i>              | Jan. 10-12 (Th-Sat) | Last Day to Withdraw from<br>Semester-length Classes | April 18 (F)      |
| Semester Begins  | Jan. 14 (M)         | Last Day of Class Instruction                        | May 2 (F)         |
| Class Changes / Add-Drop   | Jan. 14-18 (M-F)    | Final Exams  | May 5-8 (M-Th)    |
| Martin Luther King, Jr. Day –<br>College Closed                                      | Jan. 21 (M)         | Semester Ends  | May 8 (Th)        |
| Low Grade Warning Week   | Feb. 25-29 (M-F)    | Grades due in Registrar's Office<br>by 11 a.m.       | May 12 (M)        |
| 45-Day Census  | Feb. 27 (W)         | <b>Commencements</b>                                 |                   |
| Faculty Development Day  | Feb. 29 (F)         | Aravaipa Campus, 6:30 p.m.                           | May 9 (F)         |
| Priority/Fall Advising/Registration Day<br><i>(No Classes/College Services Open)</i> |                     | Superstition Mountain Campus, 11 a.m.                | May 10 (Sat.)     |
| Mid-Term Week  | March 3-7 (M-F)     | Signal Peak Campus, 7 p.m.                           | May 10 (Sat.)     |

SUMMER 2008

|  |                  |   |              |
|--|------------------|---|--------------|
| Final Summer Registration<br><i>(No registration after 6 p.m. on Thursday)</i> | May 20-22 (T-Th) | Second Summer Session Begins                          | July 1 (T)   |
| Memorial Day – College Closed  | May 26 (M)       | Independence Day – College Closed                     | July 4 (F)   |
| First Summer Session Begins  | May 27 (T)       | Second Summer Session Ends<br><i>(8-week classes)</i> | July 17 (Th) |
| Class Changes/Add-Drop   | May 27-29 (T-Th) | Grades Due in Registrar Office<br>by 11 a.m.          | July 24 (Th) |
| First Summer Session Ends<br><i>(5-week classes)</i>                           | June 26 (Th)     | Summer Session Ends<br><i>(10-week classes)</i>       | July 31 (Th) |
| Grades Due in Registrar Office<br>by 11 a.m.                                   | July 5 (Th)      |   |              |



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