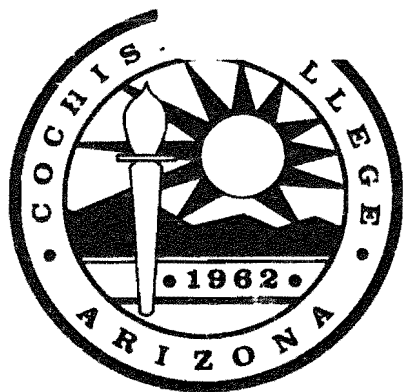


REGISTRAR'S OFFICE
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**Cochise
College**

**1975
76**

SERVING
COCHISE COUNTY,
ARIZONA

CATALOG and ANNOUNCEMENTS

Academic Year 1975-76

Cochise College

Douglas, Arizona 85607

Area Code 602

Telephone: 364-3451 432-5737

(Douglas) (Bisbee)

**Cochise College is accredited by
The North Central Association of
Colleges and Secondary Schools**

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Cochise College Calendar

1975-76

Fall Semester

August 18	Faculty Return to Campus
August 21-22	Fall Counseling and Registration
August 25	Classes Begin
September 1	Labor Day — Holiday
September 5	Last Day for Adding Classes
October 13	Columbus Day — Holiday
October 14-17	Mid-Semester Exams
October 31	Last Day to Drop Classes Without Possible Penalty
November 11	Veterans Day — Holiday
November 27-28	Thanksgiving Recess
December 15-19	Final Exams
December 19	Classes End
Dec. 22-Jan. 2	Christmas Vacation

Spring Semester

January 5	Faculty Return to Campus
January 12	Spring Registration
January 13	Classes Begin
January 19	Last Day for Adding Classes
February 16	Washington's Birthday — Holiday
March 1-5	Mid-Semester Exams
March 8	Last Day to Drop Classes Without Possible Penalty
March 22-26	Spring Recess
March 29	Classes Resume
May 10-13	Final Exams
May 13	Commencement
May 14	Faculty Checkout

Professional Pilot Calendar

The Professional Pilot Program does not operate on a standard semester basis. The Pilot Program is a continuing program and students may enter at any time at the discretion of the Aviation Department. The program leads to an Associate in Arts Degree. Refer to page 47 for complete details. Classes start July 7, 1975; January 5, 1976.

Airframe and Powerplant Calendar

A new class starts every 20 weeks, with starting dates as follows:

1975 — Oct. 13,

1976 — March 15, Aug. 2

The Associate in Science (two-year) Degree may be awarded at the completion of this concentrated 50-week program. Although starting dates are shown, entrance into this program may be accomplished at any time at the discretion of the Aviation Division.

GENERAL INFORMATION

History

Cochise College, a community college, was the second college organized under the act of the Twenty-Fourth Arizona State Legislature providing for district or county junior colleges. The establishment of the college district in 1961 and the funding for construction of the facility in 1962 represented a dedicated effort on the part of the citizens of Cochise County.

The College was first opened to students in September, 1964, serving both commuter and resident students by offering residence hall facilities, making it a service institution to the entire state.

The college campus is situated along Highway 80 approximately 16 miles east of the Bisbee-Lowell-Warren area and 7.5 miles west of Douglas. The 15-building campus is located on a 500-acre site.

The College district is controlled by the 17-member Arizona State Board of Directors for Junior Colleges and by a five-man Governing Board elected from precincts in Cochise County. It is financed by legislative appropriation and a countywide levy.

Accreditation and Transfer

Cochise College is accredited by the Arizona State Board of Directors for Community Colleges, and the North Central Association of Colleges and Secondary Schools. Students who complete appropriate lower division courses with a grade of C or better are accepted with full credit or transfer to the University of Arizona, Arizona State University, Northern Arizona University and all other universities and colleges in the nation.

Cochise College, working in close cooperation with the three Arizona universities, has developed transfer curriculum guides for most programs. These guides, available to students, detail required and elective courses in each curriculum area.

The College holds memberships in the Arizona Association of Junior Colleges, the Council of North Central Junior Colleges and the North Central Association of Colleges and Secondary Schools.

Philosophy of Education

Cochise College, as a comprehensive community college, is dedicated to the service of its community. The College makes education beyond the high school level available to students interested in, and capable of, benefiting from programs of higher education.

The quality and effectiveness of instruction offered by the College is important to those interested in higher education — students, teachers, administrators, alumni and the general public. The administration of the College facilitates instruction and leads its staff and students to personal and group fulfillment in their educational endeavors. Free communication, a free flow of ideas and feelings among the administration, the faculty, the students, the governing board and the community is essential for the realization of personal and institutional goals.

Aims and Objectives

The main aims and objectives of Cochise College:

1. To provide a program of general education which encompasses the common knowledge, skills and attitudes needed by each individual to be effective as a person, a member of a family, a worker and a citizen in our democratic society.
2. To assist each student to orient himself to adult and college life by providing a program of counseling which enables him to discover aptitudes and interests and helps in the choice of a vocation or further formal education.
3. To provide educational opportunity in several occupations for students who wish to prepare for immediate employment upon completion of the appropriate program. The programs are designed to enable students to achieve occupational competence and to provide them with opportunities for achieving skills for living in a contemporary society.
4. To offer studies during the first two years of college which may be used in transfer for the purpose of securing a bachelor's degree (the candidate for a bachelor's degree can transfer to the institution of his choice with full junior standing, after having successfully completed appropriate lower division studies during the first two full years of college).
5. To provide for the educational needs of mature and receptive adults whose interests and requirements lie in both cultural activities and occupational fields.
6. To make available other community services for the growth of the citizens of the county through lectures, forums, plays, concerts, art exhibits, and other cultural activities.
7. To provide a program of guided studies which will enable students in need of developmental work to pursue studies appropriate to individual needs and to promote honors study programs for students with superior academic capabilities.
8. To cooperate with other schools and colleges, with civic groups, with educational foundations and with private individuals and corporations in any proper endeavor likely to result in an educational advantage to the students of the College and the community.

Degree

By the authorization of the Arizona State Board of Directors for Community Colleges, Cochise College may confer the Associate degree on students completing 60 or more units in prescribed courses with a C average or better. In addition to the degree programs, special certificated programs are offered which require less than two years of studies.

Advisory Committee

In order that curricula leading directly to employment be developed in accordance with the needs of business, industry and the professions, Cochise College has invited a number of leaders in enterprises related to these curricula to advise the College staff on (1) the nature and extent of employment needs, (2) course content, (3) facilities and equipment needed, (4) the appropriateness of the curriculum content and the quality of the students receiving the degree or certificate.

To date the curriculum recommendations of several different citizen advisory committees have been implemented (see list under "Occupational Programs"). As additional needs are identified new advisory committees will be formed to assess the appropriateness, for Cochise College, of programs to meet these needs.

Continuing Education

For those who wish to continue their education and training but are unable to attend regular daytime classes at the main campus, Cochise College offers day classes, evening classes and extension classes each semester in the Sierra Vista area and many communities in Cochise County. (Additional details of the Fort Huachuca-Sierra Vista program are found in special section of this catalog, pages 113 thru 116.

Detailed announcements concerning extension classes are made at the beginning of each semester through special publications. Evening and Extension classes parallel day courses in prerequisites, course content, time devoted to preparation of assignments and examinations.

Students attend extension classes to prepare for a vocation, to gain a better education and to satisfy requirements for university transfer. Professors gear their teaching methods to adults and their problems, but the course content and requirements remain the same for day and evening classes. Some day students take a portion of their class load in the evening.

In addition to guidance through individual contacts with faculty members during their office hours, the Extension program provides specialized counseling and academic advisement. Information and appointments may be arranged by telephone. High school and college transcripts and/or counseling examinations are required for admission to a number of classes.

The requirements for the Associate degree are the same for part-time students as for full-time students, namely 60 passing units in the prescribed courses with a grade point average of 2.0 or better. Physical Education, however, is not required. Certificated programs have specialized requirements.

The Continuing Education effort in the northern part of Cochise county has been strengthened through appointment of a coordinator to serve the Benson, Wilcox, Sunsites, Bowie and San Simon areas. A coordinator has also been named for the Bisbee-Elfrida Douglas area. These will provide a closer link between the college and the people of these communities, another step in the College's effort to serve its entire community.

Cochise College Foundation

Cochise College Foundation, incorporated March 20, 1967, supports the educational objectives of Cochise College.

It has a countywide membership of 62 general members and a group of 15 men and women serving as officers and directors.

The Foundation, having received Internal Revenue Service qualification, is a recognized avenue for receipt of money, property or other things of value bequeathed or given for the benefit of the College whether for specific purposes or for general use.

The Foundation, in this role, has devoted some of such money received on a matching basis for construction of a rodeo complex on campus, as seed money for United Student Aid

Funds for loans to college students, to Cochise College Aviation Division for purchase of wrecked airplanes from private owners to be rebuilt as part of the laboratory work by Airframe and Powerplant students enrolled in the College, on a matching basis for construction of an Archaeology Resource Center, and for five \$600 scholarships for the 1975-76 college year.

Community Services

As a community college, Cochise College wishes to extend its educational services to the needs of the entire county. Community Services is that phase of the educational program which provides educational, cultural and recreational services over and beyond formalized classroom instruction.

With this in mind Cochise College provides a number of community services: a College speaker's bureau, offering faculty lectures without charge; a program of public events and cultural activities including lectures and forums; art exhibits, film series, a program of non-credit courses and community use of the Learning Resources Center.

Other community services include institutes, workshops and lectures to meet special needs of business, industry and the professions; community recreation, campus tours, public information and community participation in the College program through citizens' committees.

Learning Resources Center

The Learning Resources Center, one of the most modern resource buildings in the Southwest, was planned to meet the curricular needs of students and to provide optimum resources and facilities for college work. In addition to a large, open-stack reading and reference room, there are listening facilities, group study rooms, a lecture-exhibit room and an audio-visual section.

STUDENT AFFAIRS

ADMISSION

Prospective students are encouraged to visit the campus and discuss their educational objectives with the Admissions Officer. The Office of Admissions, in the Student Affairs Division on the west side of campus, is open throughout the year, Monday through Friday, 8:00 a.m. to 4:30 p.m. An appointment is preferable though not required.

All high school graduates are admitted to Cochise College. Those who have not graduated from high school will be admitted if they have reached the age of 19 on the first day of classes. Others who have not graduated from high school and are under age 19 may be admitted with high school equivalency examinations such as the GED.

ADMISSIONS PROCEDURE

A Letter of Admission is sent to each applicant after the College has received and approved the following:

1. Application for Admission
2. \$5.00 application fee for out-of-state students

Applicants who have received a Letter of Admission must then submit the following to complete the admission process:

3. Student Medical Record - Part I. This self-appraisal form is to be completed by the applicant and is required of all Classified-Full-time and Classified-Part-time students. The College reserves the right to require a physical examination when deemed necessary by the College Health Service or by a particular college instructional program.
4. High School Transcripts. Final high school transcripts are required of all applicants who have graduated from high school. Those who have not completed high school and who are age 19 or older are not required to submit transcripts. Applicants who are under the age of 19 and who have not graduated from high school are required to submit results of the GED examination or evidence of other high school equivalency. Persons applying for unclassified status need not submit high school transcripts. High school transcripts are to be sent directly by the sending institution to the Office of Admissions. Transcripts carried by the applicant will not be accepted.
5. College Transcripts. Applicants who have attended college elsewhere must submit a transcript of college work. College transcripts are to be sent directly by the sending institution to the Office of Admissions. Transcripts carried by the applicant will not be accepted.
6. Report of Physical Examination - Part II. Persons intending to enter the Nursing program, or those planning to participate in intercollegiate athletics must have this form completed by a licensed physician. Professional Pilot students are required to have a Class I or II physical examination by an FAA-approved physician. Special FAA medical forms will be supplied and used by the physician.

College entrance examinations, such as ACT or SAT, are no longer a requirement for admission. However, the college does administer the ACT on the national testing dates for October, February and July as a service to county students who wish to take the test.

HOUSING

Campus housing is available in Huachuca Hall for men and Chiricahua Hall for women. All single students are advised to live on campus if they are not commuting from the home of their parents, legal guardian or relative. A limited number of studio apartments for married students are also available. A room deposit of \$40 is required of all applicants who desire campus housing. The deposit is refunded, less any damage charges, when the student leaves the college. Applications for campus housing should be directed to: Coordinator of Student Activities and Housing, Cochise College, Douglas, Arizona 85607.

PROFESSIONAL PILOT PROGRAM

The Professional Pilot program requires a personal interview prior to acceptance to the program. Applicants are advised to complete all appropriate requirements for admission to the college. Upon receipt of the Letter of Admission, applicants for this program should make arrangements for a personal interview. Contact:

Chief Flight Instructor
Cochise College
Douglas, Arizona 85607
(602) 364-3451 or (602) 432-5737

Arrangements for interviews with the Chief Flight Instructor should be made prior to March 1 and November 1. Classes start July 7, 1975; January 5, 1976.

NURSING AND AVIATION PROGRAM DEPOSITS

Students accepted to these programs are required to submit non-refundable program deposits well in advance of program start dates:

Professional Pilot	\$100
Airframe-Powerplant Technology	\$ 50
Associate Degree Nurse	\$100

STUDENT CLASSIFICATION

Classified — Full-time students registered for 12 units or more

Classified — Part-time students registered for 1 to 11 units who intend to work toward a degree

Unclassified — Part-time students registered for 1 to 11 units who do not plan on working toward a degree

ABLE AND AMBITIOUS STUDENTS

Students who have completed a minimum of three (3) full years in a county high school and who are now attending high school as a classified senior, may attend Cochise College, subject to stipulations and policies of the respective high schools. Able and ambitious high school students wishing to attend college are required to complete an Application for Admission only.

RE-ADMISSION

Students who have been absent from Cochise College for a regular semester or longer, must apply for re-admission prior to the opening of the semester for which they wish to enroll.

SUMMER NEWSLETTER

The Office of Admissions sends a summer newsletter to all new and returning students in mid-July. This publication contains detailed information on counseling, registration, housing, orientation and other items of interest.

Residence Requirements

Residence in Local High School District

Students whose residence is in one of the high school districts comprising the Cochise College District are qualified to enroll at Cochise College according to "Admission Procedures and Policies," above.

Residence in High School Districts

Not Maintaining A Community College

Students who reside in a county not maintaining a junior college are eligible to attend Cochise College. Students from such areas must complete a residence statement at the time of registration. Their tuition will be paid by the county of residence.

Residence in Districts Maintaining A Community College

Students who are residents of districts maintaining a community college are not charged Out-of-County tuition.

Students from Outside State

Under an ordinance of the State Community College Board tuition waivers are no longer available to assist non-residents of the state to attend an Arizona Community College. (Scholarship monies, booster funds and certain federal program funds will still be available for non-state students).

RESIDENCY REGULATIONS

The Arizona State Board of Directors for Community Colleges has established the following residency requirements of the community colleges of Arizona in accordance with Sections 15-791 through 15-795, Arizona Revised Statutes, as amended

Persons Under 18 Years of Age

1. A person who is under 18 years of age and whose parent is not domiciled in Arizona is classified as an out-of-state person for tuition purposes.
2. A person who is under 18 years of age whose parent has moved to Arizona but has not established a domicile in the State one year prior to the first day of classes as published by the college for the semester for which the person is registering is classified as an out-of-state person for tuition purposes.
3. A person under 18 years of age has the domicile of the legal guardian if (a) a letter of guardianship of the person, issued by a court, is presented for inspection, and (b) the guardian has been domiciled in Arizona for one year or more immediately preceding the first day of classes.

4. A person under 18 years of age may be eligible for the status of **Emanipated Minor** for tuition purposes. To gain this status, the person must submit clear and convincing evidence that (a) he is self-supporting, (b) he is not living with his parent or guardian, and (c) there has been a complete severance of the parent relationship as to all legal rights and liabilities, including care, custody, control and support. After being granted this status, the person must then meet the same conditions required of persons 18 years or more for establishing Arizona domicile.
5. A person under 18 years of age has the domicile of the parent having legal custody when the parents have been divorced or legally separated. Legal custody must be verified by an inspection of a certified copy of the court order. Where the custody of a minor has been granted to one parent, but the minor has lived with and been supported by the other parent for one year or more next preceding the first day of classes as published by the college, a request may be made to be classified according to the domicile of the supporting parent.
6. A person under 18 years of age whose parent is a member of the Armed Forces of the United States and stationed in Arizona under military orders shall be entitled to classification as an in-state student. A student, while in continuous attendance toward the degree for which he is currently enrolled, shall not lose his in-state student classification when his parent is thereafter transferred on military orders.
7. Any unemancipated person who remains in this State when his parent, who had been domiciled in this State, moves from this State, shall be entitled to classification as an in-state student until attainment of the degree for which he is currently enrolled, so long as he maintains continuous attendance.
8. While the domicile of an unemancipated person shall be that of his parents or legal guardian, the date of his parents' establishing a domicile in this State shall be considered the date for determining the domicile of the person after he becomes emancipated.

Persons Aged 18 Years or More

9. A person aged 18 years or more whose parents are not domiciled in Arizona does not qualify for in-state status even though he has resided in Arizona the calendar year immediately preceding his 19th birthday. A person aged 18 years or more must present proof that domicile in the State of Arizona has been established (independently of the circumstance of attendance at an Arizona institution of learning) for one year immediately preceding the first day of classes.
10. No emancipated person has established a domicile in this State while attending any educational institution in this State as a full-time student, in the absence of a clear demonstration to the contrary.
11. A person from another state who has reached the age of majority in the state from which he originated may establish a domicile in Arizona subject to the requirements for establishing such domicile in this State.
12. A woman acquires the domicile of her husband as of the date of marriage. An out-of-state woman who marries a domiciliary of Arizona may have her classification for tuition purposes changed to in-state. A wife of an out-of-state person may not qualify for in-state classification, except, an in-state woman student who marries an out-of-state person may retain in-state classification while continuous attendance is maintained.
13. A person does not gain or lose in-state status by reason of his presence in any state or country while a member of the armed forces of the United States. Military personnel stationed in Arizona, their spouses and dependents shall be considered as in-state

residents during the time the member of the Armed Forces is stationed in Arizona. An unemancipated person whose parent is stationed in Arizona on military orders shall be entitled to classification as an in-state student and to retain this classification while in continuous attendance.

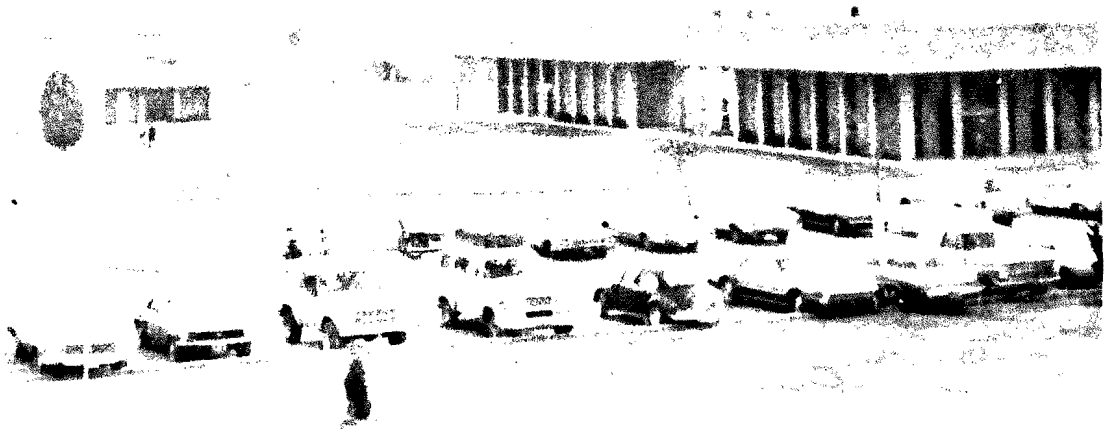
14. A member of the Armed Forces stationed in Arizona may obtain in-state status by establishing a domicile of one year's duration in Arizona.
15. An alien student attending on an F-1 (student) visa will be classified as out-of-state. A non-citizen holding a visa which permits establishing an Arizona domicile must meet the same requirements established for a citizen to qualify for in-state classification.
16. Out-of-state tuition is waived for students enrolling for no more than six units.

Veterans

Cochise College has been approved for veterans training under federal and Arizona statutes. All veterans should confer with the Coordinator of Veterans Affairs regarding educational benefits.

By Arizona Statute, in determining the admissibility to the community college of a veteran, honorably discharged, who has served in the armed forces of the United States for a minimum of two years and who was previously enrolled at a university or community college in Arizona. No failing grades by such veteran at any Arizona university or community college prior to his military service may be considered.

The student admitted or re-admitted to Cochise College under this statute is subject to progression, retention, graduation and other academic regulations and standards in this catalog.



View across campus.

TUITION, FEES AND OTHER CHARGES

The Cochise County Community College District Governing Board and the State Board of Directors for Community Colleges of Arizona have approved the schedule of charges for 1975-76 as shown below.

All semester fees must be paid in full at the time of registration, except that arrangements may be made to pay the room, board and tuition on a two-payment basis.

SEMESTER TUITION SCHEDULE

A. Full-time Students (12 or more units):

	<i>Per Semester</i>
1. Residents of Cochise County	No Charge
2. Military personnel and their dependents living in Cochise County	No Charge
3. Residents of counties without Community Colleges (home county pays Cochise County \$6.30 per semester)	No Charge
4. Residents of Counties with Community Colleges Graham, Maricopa, Mojave, Navajo, Pima, Pinal, Yavapai, Yuma	No Charge
5. Residents of other states, foreign countries	\$650

B. Part-time Students (1-11 units):

1. County residents including military personnel and their dependents	No Charge
2. Residents of other counties, states & foreign countries	
1 - 6 units	No Charge
7 - 11 units - Retroactive to one unit	\$54.00 per unit

C. Summer Session	\$15.00 per unit
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REGISTRATION FEE

A. Students carrying 10 or more units	\$100
B. Students carrying 1 to 9 units	40
C. Summer Session	10

SEMESTER ROOM AND BOARD

A. Room and Board Charges:

1. Regular students (17 weeks)	\$550
2. A & P students (10 weeks)	325
3. Professional Pilot students	
a. July 7 - Dec. 19, 1975, (24 weeks)	\$780
b. Jan. 5 - May 28, 1976, (20 weeks)	650

All full-time resident students who are single are advised to live in college housing and have their meals in the college dining hall. This does not apply to the commuting student who lives in his own home or with legal guardian or relatives. The board payment provides a seven (7) day meal ticket for the semester with 20 meals each week when classes are in session.

- B. Room Deposit** \$40
The room deposit of \$40, which does not apply toward room and board fees, is payable before registration.

C. Room and Board Payments

Students may make the full Room and Board payment for the semester at the time of registration or may pay on a two-payment basis as follows:

- (a) 50% of the room and board payment due upon registration for classes
(b) second 50% of the room and board payment due on or before the Monday of the Sixth (6th) week of college scheduled classes.

GRADUATION FEE

Every candidate for an Associate degree is required to pay a graduation fee of \$12; portions of this fee are used to cover the diploma and academic costume charges. Those completing certificate programs are not required to pay the \$12 fee. The graduation fee is to be paid when the student registers for his final semester.

FLIGHT TRAINING FEES

A. Basic Program Fees (Commercial License)

- | | |
|---|-------------------|
| 1. AT-80 Primary Flight and First Phase | |
| Commercial Pilot | \$785.00 |
| 2. AT-82 2nd Phase Commercial Pilot | 795.00 |
| 3. AT-86 Instrument Pilot | 645.00 |
| 4. AT-84 3rd Phase Commercial Pilot | 880.00 |
| TOTAL | \$3,105.00 |

B. Optional Fees

- | | |
|---|----------|
| 1. AT-88 Multi-Engine Pilot | \$390.00 |
| 2. AT-89 Flight Instructor | 430.00 |
| 3. AT-90a Air Transport Pilot Rating | TBA |
| AT-90b Air Transport Pilot Rating | TBA |
| 4. AT-92 Instrument Flight Instructor | 335.00 |

MISCELLANEOUS FEES

- | | |
|--|---------|
| Out of State Application Fee | \$5.00 |
| (This fee must accompany the Application for Admission) | |
| Late Registration | \$5.00 |
| Late Payment of Fees | \$5.00 |
| Change of Course fee | \$2.00 |
| Late Final Examination Fee, in any course | \$3.00 |
| (Only when permission of instructor is granted in advance) | |
| Credit by Examination (Per Semester Hour) | \$7.50 |
| CLEP Subject Examination per test | \$15.00 |
| Transcript fee — First Free, Each Additional | \$1.00 |
| Returned check fee (for each returned) | \$10.00 |

All refunds and deposits due students for any reason will be forfeited unless written application is submitted on or before June 15 of the academic year in which they are due. The Governing Board reserves the right to revise tuition, fees and other charges as may be required.

REFUNDS

Tuition

The following graduated scale for refunding of TUITION FEES for students who officially withdraw or are dismissed from the College applies to all students. The refund schedule is:

- 75% if withdrawal is prior to the seventh (7th) calendar day after college scheduled classes commence.
- 50% if withdrawal is between the eighth (8th) and fourteenth (14th) calendar day after college scheduled classes commence.
- 0% if withdrawal is the 15th day or thereafter.

Registration Fee

Registration fee is non-refundable after the first week of classes. Fifty percent (50%) refund is allowed if withdrawal is completed prior to the end of the first (1st) week of classes.

Room and Board

Students who officially withdraw from the Residence Halls before the completion of a 17-week semester will receive a refund of the unused portion of the payment as per the following schedule:

Withdrawal prior to Friday of:	Two-Payment Plan \$275.00	Full Semester Payment \$550.00
1st Week	136.00	411.00
2nd Week	110.00	385.00
3rd Week	84.00	359.00
4th Week	58.00	333.00
5th Week	32.00	307.00
6th Week	6.00	281.00
7th Week	-0-	255.00
8th Week	-0-	229.00
9th Week	-0-	203.00
10th Week	-0-	177.00
11th Week	-0-	151.00
12th Week	-0-	125.00
13th Week	-0-	99.00
14th Week	-0-	73.00
15th Week	-0-	47.00
16th Week	-0-	21.00
17th Week	-0-	-0-

Aviation Students

Students (Airframe and Powerplant, and Professional Pilot) who withdraw from the residence hall prior to the conclusion of a term or semester will receive refunds based on the same ratio used in computing the refund schedule for regular students.

Flight Fees

Any unused flight fees will be refunded in full

FINANCIAL AIDS - SCHOLARSHIPS

Cochise College offers a variety of financial aids to full-time and part-time students. Types of financial aids available are scholarships, grants-in-aid, Supplemental Educational Opportunity Grants, Basic Educational Opportunity Grants, campus employment, Cochise College loans, Nursing Loans and Scholarships, College Work-Study, Federally Insured Student Loans, National Direct Student Loans, Law Enforcement Loans and Grants, Migrant Opportunity Program, Bureau of Indian Affairs, athletic grants-in-aid and a limited number of scholarship fee waivers.

APPLICATION PROCEDURE

To apply for any type of financial aids, with the exception of FLEP grants and loans, students must

1. Complete the Family Financial Statement (FFS) of the American College Testing Program (ACT). Designate Cochise College as a recipient (Code 0089), send the Family Financial Statement to ACT with the appropriate fee for processing. Allow four weeks for processing.
2. Send the Institutional Data Sheet (IDS), to the Cochise College Financial Aids Officer. The Institutional Data Sheet serves as the initial application for all types of financial aid. Applications for all types of financial aid will be accepted and evaluated after March 1, only insofar as available funds permit. These forms may be obtained from local high school counselor, from the American College Testing Program, P.O. Box 1000, Iowa City, Iowa 52240, or Cochise College.
3. Complete the Basic Educational Opportunity Grant Application and submit in the self-contained envelope. These applications may be obtained from your local high school counselor or Cochise College.

FINANCIAL AIDS COMMITTEE: The committee is composed of eight members including the Financial Aids Officer (who acts as chairman), a fiscal officer from the Office of Business Affairs, four faculty members and two students appointed by the Student Senate. It is the function of this committee to screen certain specified applications and determine recipients of these awards.

SCHOLARSHIPS AND GRANTS-IN-AID

Both new and returning full-time students are eligible for scholarships and grants-in-aid. Scholarships are awarded to graduates of Cochise County high schools and are made possible by the support of interested groups and individuals.

Three methods of selection are utilized as follows:

1. Recipients are chosen by the donor.
2. Selection is made by the Financial Aids Officer.
3. Selection is made by the Financial Aids Committee of Cochise College.

GRANTS

Grants-in-aid are available in the areas of athletics, art, music and journalism. Athletic grants are administered by the coaching staff. Recipients of music and art fee waivers are selected by the Division of Humanities & Fine Arts and awards administered through the Financial Aids Officer.

FEE WAIVER GRANTS: Available to freshmen applicants graduating from high schools throughout the state who express a desire to attend college. Grants are in the amount of the prevailing rate of the semester registration.

Grants are renewable the second semester for a total of two semesters, contingent upon continuous full-time enrollment and maintenance of a 2.0 (C) grade-point average. The only qualifications for eligibility are residency in the State of Arizona and a desire to attend college.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG): This is a continuation of the program formerly known as the Educational Opportunity Grant (EOG) program. It consists of a federal program of grant aid (not repayable) to deserving students with exceptional financial need. A requirement of this program is that Supplemental Educational Opportunity Grants cannot be awarded in amounts of more than 50% of the total award given any student. This generally means the recipient must have received a college scholarship or must be willing to accept a National Direct Student Loan of an amount equal to the SEOG amount.

BASIC EDUCATIONAL OPPORTUNITY GRANTS (BEOG): This program is legislated to serve all undergraduate students from families which are unable to contribute \$1,400 of annual support to their educational costs. Such students are entitled to the difference between the amount a family can reasonably contribute and \$1,400, regardless of the institution they plan to attend.

NURSING SCHOLARSHIP GRANTS: This program consists of grant aid (not repayable) for student pursuing a course of study leading to an Associate Degree in nursing. This aid is limited to students with exceptional financial need. Nursing students applying for financial aid are considered for both Nursing Student Loans and Nursing Scholarship Grants.

LOANS

NATIONAL DIRECT STUDENT LOANS (NDSL): This is a continuation of the program formerly known as the National Defense Student Loan program. Loans are available yearly to all qualified students. The amount of the loan award is determined by the student's need. Interest at a low rate (currently 3%) commences nine months after the borrower is no longer an officially enrolled student. Repayment to the College is made in monthly installments. Deferment while engaged in educational pursuits is available and certain cancellation factors may be used after completion of college.

NURSING STUDENT LOANS (NSL): Repayable loans are available to students enrolled in the College of Nursing. Nursing students are not eligible for the National Direct Student Loans. Interest at a low rate (currently 3%) commences nine months after the borrower is no longer an officially enrolled student. Repayment to the College is made in monthly installments. Up to 50% of the loan may be cancelled at the rate of 10% per year for each full year of professional nursing employment. The amount of the loan award is determined by the student's need.

THE LAW ENFORCEMENT EDUCATION PROGRAM: Loans are available to full-time students enrolled in a program directly related to law enforcement. Loans awarded to students may be cancelled at the rate of 25% per year for full-time service in public law enforcement. Otherwise, loans carry 7% interest and must be repaid in ten years or at a rate of

\$50 per month, whichever is the shorter time period. Tuition grants are available to full-time employees of a publicly-funded law enforcement agency who are enrolled in courses which are job-related. Students need not be degree candidates, but the courses must be creditable toward a degree. Grants may be made for tuition and mandatory fees related to the courses taken.

FEDERALLY INSURED STUDENT LOANS (FISL): This loan is based on financial need and students applying for this loan must submit the ACT Family Financial Statement.

OTHER STUDENT LOAN FUNDS: In addition to the loan funds referred to above, several organizations and individuals have made contributions to the Student Loan Fund for distribution by the college. These include memorials to Miss Melinda Fredley, Mrs. Kathleen Evans, Mrs. Marie Whatcott, Dr. T. C. Johnston, John Wilson, N. F. Womer. Other funds have been contributed by The Altrusa Club, Martin Gentry, and Joseph Refsnes.

SCHOLARSHIPS

AIRESEARCH MFG. CO.: Number and amount of scholarship varies.

AMERICAN COORDINATING COUNCIL FOR POLITICAL EDUCATION: Provides four scholarships in the amount of \$50 each per year; two scholarships each semester to worthy applicants.

AMERICAN LEGION OF BISBEE: Two scholarships in the amount of \$200 each.

ARIZONA ASSOCIATION OF TEACHERS OF MATHEMATICS: Provides a \$100 grant-in-aid to a bi-cultural freshman determined to have need.

ARIZONA BANK — Douglas: Provides \$100 in a scholarship to this institution. The award is made each year to an entering freshman graduate of Douglas High School.

ARIZONA CATTLE GROWERS ASSOCIATION: Number and amount of scholarship varies.

ARIZONA TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION, INC.: Provides a scholarship up to \$300 to this institution.

ARMED FORCES COMMUNICATION AND ELECTRONICS ASSOCIATION: The Arizona Chapter has presented \$500 to the college scholarship fund in order to provide five scholarships to deserving students. The AFCEA scholarship fund at the college originated in 1969.

ASSOCIATED STUDENT SCHOLARSHIPS — MIKE BREWSTER SCHOLARSHIP FUND: Scholarship set up as a living memorial to Michael Brewster.

BENSON WOMAN'S CLUB: An annual award, the exact amount to be determined by the donor.

BISBEE AMERICAN LEGION AUXILIARY UNIT 16: Annual award of \$100-\$200 to a Bisbee High School girl graduate. Recipient must be majoring in any of the following fields: (1) Nurse, (2) Teacher, (3) Business. She must be in the top one-third of her class and the daughter of a Legionnaire or Veteran.

MICHAEL BIALKOWSKI: An award made to the College with the amount of the scholarship to be determined by the donor.

BISBEE BUSINESS & PROFESSIONAL WOMAN'S CLUB: Two scholarships of \$60 are made to a Bisbee High School student. Financial Aids Committee chooses the recipient with the following requirements set by the donor: (1) Financial Need, (2) Scholarship.

BISBEE HIGH SCHOOL STUDENT BODY ASSOCIATION: Number and amount of scholarship varies.

BISBEE LIONESSE CLUB: Number and amount of scholarship varies.

BISBEE ROTARY CLUB: An annual award with the amount varying each year.

BISBEE WOMAN'S CLUB: Annual award is made for a Bisbee High School girl graduate.

DEL BOHMFALK MEMORIAL SCHOLARSHIP: This scholarship has been provided as a memorial to one of Cochise County's veteran members of the Sheriff's Department, the late Del Bohmfalk. Scholarship will be for \$100 per semester, to be awarded on recommendation of Cochise County Sheriff to person showing leadership potential who meets the following criteria: (1) Police Science major, (2) resident of Cochise County, (3) shows academic promise, (4) maintains a cumulative grade point average of 2.8.

BOWIE YUCCA GARDEN CLUB: Annual amount for this award is determined by the donor. Recipients generally must be a graduate of Bowie High School.

BUENA HIGH SCHOOL SCHOLARSHIPS: Number and amount of scholarship varies.

BUSHMASTERS CLUB OF BISBEE: A scholarship presented to Cochise College for Bisbee High School graduates. Amount of scholarship varies.

BUSHMASTERS CLUB OF DOUGLAS: Three scholarships in the amount of \$150 each awarded annually. Recipients must be graduates of Douglas High School. Applicants names are proposed by the donor.

RAY DIAMOS BUSTAMANTE SCHOLARSHIP: A memorial scholarship established by Mrs. A. D. Kerson in July, 1971. This award is made to needy students. There are three scholarships.

CLUB ALBA: Two annual scholarships in the amount of \$200 each.

COCHISE COLLEGE ACTIVITIES SCHOLARSHIP: This scholarship based on the following criteria: (1) Faculty advisors will recommend recipients; (2) Scholarships will be awarded at the end of the semester for activity during the semester.

COCHISE COLLEGE PROFESSIONAL ASSOCIATION AWARDS: These three awards, two to outstanding sophomore graduates and one to an outstanding continuing freshman in the amount of \$150 each, are based on (1) scholastic ability, (2) contributions to Cochise College, (3) leadership.

COCHISE COLLEGE FOUNDATION SCHOLARSHIPS: Five scholarships totaling \$3,000 for the 75-76 school year. Scholarships are based solely on academic achievements, (grade point average), through the first 3½ years of high school. A list of students who meet the minimum scholarship requirement of 3.2 (B+) submitted by the high school counselor to the Financial Aids Officer. Selection made by the Financial Aids Officer after review of all applicants. The five eligible recipients each awarded a \$300 scholarship used in first semester at Cochise College. The recipients received an additional \$300 scholarship in the Spring semester if final grades in the Fall semester were 3.2 or above.

COCHISE COUNTY INDEPENDENT INSURANCE AGENTS: Provides three \$200 scholarships to needy college students.

COCHISE COUNTY MEDICAL SOCIETY: Provides three \$100 scholarships to the Nursing School at Cochise College to be used for students residing in Cochise County.

COPPER CITY WOMAN'S CLUB: Provides two scholarships of \$50 each to a Bisbee High School graduate.

COPPER QUEEN MINER'S UNION Local No. 551: Four scholarships are awarded in the amount of \$300 each.

DOUGLAS AMERICAN LEGION FRED HILBURN UNIT No. 11: This is an annual scholarship established for one boy and one girl graduate of Douglas High School. Amount of award is \$200 for each student to cover a two-year college period. Recipients must receive highest graded score of achievement for Americanism.

DOUGLAS ART ASSOCIATION: A \$50 award is made annually to a Douglas High School graduate. The recipient must be an Art Student and is chosen by the Douglas Art Association Board of Directors from a list of qualified students submitted by the Financial Aids Officer.

DOUGLAS BUSINESS AND PROFESSIONAL WOMEN'S CLUB SCHOLARSHIP: Number and amount of scholarship varies.

DOUGLAS ELKS LODGE No. 955: Douglas Elks Lodge awards six scholarships in the amount of \$160 each.

DOUGLAS EVENING LIONS CLUB: This is a scholarship of \$150 established in July 1970. The following requirements are stipulated by the donor: (1) The recipient must be a Douglas High School graduate, (2) must be a Sophomore at Cochise College, (3) Equal value is placed on scholarship and need.

DOUGLAS GEM AND MINERAL CLUB: The amount of this annual scholarship varies. Recipient is selected by the donor.

DOUGLAS HIGH SCHOOL PRINT CLUB SCHOLARSHIP: Number and amount of scholarship varies.

DOUGLAS JUNIOR WOMEN'S CLUB: Scholarship in the amount of \$100.

DOUGLAS KIWANIS: Two scholarships of \$180 each awarded annually by Douglas Kiwanis Club.

DOUGLAS HIGH SCHOOL PRINT CLUB SCHOLARSHIP: Number and amount of scholarship varies.

DOUGLAS JUNIOR WOMEN'S CLUB: Scholarship in the amount of \$100.

DOUGLAS KIWANIS: Two scholarships of \$180 each awarded annually by Douglas Kiwanis Club.

DOUGLAS MUSIC CLUB: Recipients are chosen by donor. This is an annual scholarship with the amount varying yearly.

DOUGLAS NOBLEMEN CLUB: A two-year scholarship in the amount of \$250. The recipient receives \$125 per year.

DOUGLAS REPUBLICAN WOMEN SCHOLARSHIP: An annual scholarship awarded to a recipient. Amount of this scholarship varies yearly.

DOUGLAS TELEVISION COMPANY: Annual awards are made by the Douglas Television Company with recipients selected by Douglas High School Counselors. Scholarships go to Douglas High School graduates.

ELIZABETH GRAY MEMORIAL SCHOLARSHIP FUND: A scholarship fund established by Mr. and Mrs. Henry D. Clark as a living memorial to Mr. Clark's sister, Elizabeth Gray. The awards are made to sophomore students registered in the Associate Degree Nursing Program.

MEL ENGELSTAD BUSINESS SCHOLARSHIP FUND: Eligibility requirements are as follows: (1) Student must be majoring in Business and willing to join Phi Beta Lambda before receiving the grant and remain a member in good standing, (2) Must be capable of maintaining a GPA (Grade Point Average) of 2.5 or above, (3) The sponsor of Phi Beta Lambda will interview and approve student before the selection becomes final.

FIRST NATIONAL BANK OF ARIZONA: Three annual scholarships are awarded by First National Bank. Requirements are: (1) Scholarship, (2) Need, (3) Must be residents of Arizona, (4) Must be majoring in Business, (5) Should be second-year students.

FORT HUACHUCA OFFICERS AND CIVILIANS WIVES' CLUB: Number and amount of scholarship varies.

FUTURE NURSES CLUB: Number and amount of scholarship varies.

GARDANIER SCHOLARSHIP: An annual scholarship awarded to worthy recipients.

GUNTER MEMORIAL RODEO SCHOLARSHIP: Awarded on recommendation of Rodeo Club sponsor, \$75 per semester.

HEIDELBURG OFFICERS WIVES CLUB: New scholarship of \$500 awarded directly to donor-selected recipient.

HEIDELBURG SERGEANTS-MAJORS ASSOCIATION: New scholarship of \$400 awarded directly to donor-selected recipient.

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.: Scholarship of \$300 to be used over a two-year period. The recipient must meet the following requirements: (1) Must be a graduate of a Cochise or Santa Cruz County High

School, (2) Must be enrolled in the Electronics Technology Program, or plan to transfer to a four-year college or university to pursue an upper division major in an engineering scientific field, (3) must maintain a grade point average of 3.0 (B) or better during the first year to maintain eligibility for assistance during the second year.

KINGMAN ELKS LODGE No. 468: Number and amount of scholarship varies.

KIWANIS CLUB OF BISBEE: Number and amount of scholarship varies.

MECHA CLUB COCHISE COLLEGE: The amount of the scholarship varies.

BARBARA AND MARIE LEITCH SCHOLARSHIP: Number and amount of scholarship varies.

MILDRED C. LEWIS MEMORIAL SCHOLARSHIP: Recipient must be a Douglas High School graduate and a Music major. Funds for the scholarship are administered by the Douglas Music Club.

HAZEL MONNETT SCHOLARSHIPS: Registration fee scholarships. Awarded to recipients recommended by the Cochise College Faculty Women's Association. Number of scholarships varies from year to year.

PAUL LIME PLANT: This is a yearly award made to Cochise College in the amount of \$200. Two scholarships in the amount of \$100 each are provided.

PROCUREMENT DIVISION SCHOLARSHIP FUND — FORT HUACHUCA: Number and amount of scholarship varies.

NAACP CHAPTER, SIERRA VISTA: Recipients each receive \$250 for school year.

NCO AND SPECIALISTS' WIVES CLUB: Scholarship of \$500 is provided annually.

SAN JOSE COMMUNITY ASSOCIATION: Two scholarships in the amount of \$200 each.

SAN SIMON FIRE DEPARTMENT SCHOLARSHIP: Number and amount of scholarship varies.

SARAH MARLEY SCHOOL SCHOLARSHIP: This scholarship is relative to students enrolled in the Teacher Aide program at Cochise College. Number and amount of scholarship varies.

SIERRA VISTA LIONS CLUB: Two scholarships in the amount of \$200 each.

SIERRA VISTA WOMEN'S CLUB: Annual \$200 scholarship awarded a worthy recipient chosen by the Cochise College Financial Aids Committee. Following criteria used in determining the recipient: (1) Buena High School graduate; (2) Need.

SPANISH CLUB OF COCHISE COLLEGE: Annual scholarship of \$180 provided over a two-semester period. Recipient is chosen by the club. Recipient must be a Douglas High School graduate, majoring in Spanish at Cochise College.

TOMBSTONE HIGH SCHOOL: Scholarship of \$250 provided to donor-selected recipient.

TUSCON HIGH SCHOOL: Amount of scholarship varies.

UNITED PRESBYTERIAN WOMEN: An award made by the United Presbyterian Church Women for two worthy Cochise College Students. The total of the award is \$250 for two scholarships of \$125 each.

UNITED STEELWORKERS OF AMERICA Local No. 6305: These are two, two-year scholarships in the amount of \$200. The recipients must meet the following criteria: (1) Recipient must be a Douglas High School graduate, (2) Need, (3) Must be a child of a member of the Steelworkers Union.

UPPER DIVISION SCHOLARSHIP: The eligibility requirements are: (1) Each student must be either Black, Chicano, Puerto Rican or American Indian, (2) Each student must be a citizen of the United States, (3) Each student must be in the second year of a two-year transfer program and anticipates completing the requirements for the Associate Degree by the end of the academic year.

VESTA CLUB SCHOLARSHIP RANK: Number and amount of scholarship varies.

VETERANS OF FOREIGN WARS JAMES MURPHY POST No. 836 AND AUXILIARY: A new scholarship to be presented for the first time in Fall '75 semester. Donor to select recipient, a graduate of the Bisbee High School. Scholarship in amount of \$300, to be presented in two payments.

VOITURE No. 160 40 ET 8 NURSING SCHOLARSHIP: Number and amount of scholarship varies.

XI LAMBDA CHAPTER BETA SIGMA PHE: An annual scholarship in the amount of \$180. Recipient is chosen by donor.

ACADEMIC SCHOLARSHIPS: Are available to freshmen applicants graduating from high schools within Cochise County. Scholarships are in the amount of \$90 or the prevailing rate of the semester registration fee.

Scholarships are renewable the second semester for a total of two semesters, contingent upon continuous full-time enrollment and maintenance of a 2.5 (B-C) grade-point average. Qualifications for eligibility include a desire to attend college and rank within the top 40% of the student's graduating class.

CAMPUS EMPLOYMENT

Jobs are available in various areas. Applications are screened by the Financial Aids Officer. Students are then referred to the Cooperative Education Department for interviews and job placement.

COLLEGE WORK-STUDY: This is a program for full or part-time students from low-income families who need employment to help defray educational expenses. Awards are made to deserving students who demonstrate financial need. Students generally are employed on a part-time basis, however, students may work on a full-time basis if approval is received from the Financial Aids Officer. The minimum basic pay rate is the existing federal minimum hourly wage rate. Students are interviewed after being declared eligible and then placed in jobs through the Cooperative Education Department.

Counseling

Each entering student is assigned a counselor who will assist him in planning his educational program and in his general growth and adjustments to college life. Career choice

and related course sequence is of particular concern. Careful attention is offered each student to aid him in implementing the program of his choice.

An educational planning interview is available to the individual student before enrollment in the college and during each succeeding semester. Through preparation and experience, counselors are able to offer guidance and counseling services which include a carefully-coordinated curriculum, advantageous registration procedures, advice on adjustments to college and assistance in the solution of many other personal problems.

Testing

Although educational and vocational testing do not constitute the final answer, testing is useful in helping the student explore educational and vocational choices as well as helping the student gain personal insight into individual strengths and abilities. To supplement the group and individual counseling, Cochise College has a testing program in the areas of academic ability, aptitude, achievement, skill, interest and personality. Special testing is required for Nursing applicants. Students interested in testing should see a counselor in the Division of Student Affairs.

Career Information Services

Cochise College has developed an extensive occupational information system. This includes broad coverage of colleges and universities (both state and national) to which a student may transfer. The service also encompasses military, vocational and trade school. The information includes entrance requirements, majors offered, courses offered, expenses and general information about the institutions. Career information is available in the Division of Student Affairs.

The main body of this service consists of job descriptions and related information for more than 36,000 occupations. Included are job descriptions, work performed, working conditions, training requirements, personal qualifications, method of entry, employment outlook, earnings, social and psychological factors and references for further information.

Placement

The Career Placement Office in the Division of Student Affairs, will assist graduates in meeting contacts and arranging interviews with prospective employers in their fields of specialization. A counselor will assist students in making application for admission to a four-year college or university if they have completed a transfer program.

Health Services

The College offers a well-equipped campus health center directed by a full time registered nurse. In cases of illness or injury, students are referred to the local doctor of their choice for diagnosis and treatment. Consultation with the home-town family doctor of resident students is also afforded.

Residence Hall Living

Residence hall living is an integral part of the student's total educational experience at Cochise College. The College considers it important that students live in an atmosphere which stimulates academic achievement and provides the opportunity for meaningful experiences for all students.

The College maintains campus housing for resident students. Each residence hall is under the supervision of a qualified housing officer who is assisted by trained student resident assistants. All resident students have the opportunity of participating in student government activities as provided by each residence hall council.

Apartment Housing

The College maintains an apartment housing complex for married students. Each apartment is completely furnished and includes wall-to-wall carpeting, individual room air conditioning and heating controls, electric stove, garbage disposal, telephone and television connections.

Additional advantages include laundry facilities and trash pickup. The expenses for an apartment include a \$50.00 deposit which is refundable less any damage charges when the unit is vacated, and \$125.00 per month rent. All utilities and benefits with the exception of telephone service are included in the \$125.00 monthly rent.

Housing Admission

Students who are interested in the residence halls or married student apartments may write or call the Coordinator of Housing, Student Union, Cochise College, Douglas, Arizona, 85607.

Housing Regulations

General

All students are advised to live in college residence halls or in the home of parents, guardians or relatives if they are commuting students. All residence hall students are required to participate in the college food service facilities and must sign a room and board contract. If students are under 18, a parent or guardian must also sign. Three (3) meals are served each day except Sunday, when only two (2) meals are served.

A student must submit a room deposit of \$40.00 with the housing contract and be admitted to the College before a room assignment may be made.

Adjustments in room rates are not made in periods of over-assignment and the College may reassign rooms from time to time to insure the general welfare of students and the economical operation of residence halls.

The College holds no responsibility for the loss, theft or damage to the personal effects of resident students.

The College reserves the right to:

- (a) deny or cancel room assignments in the interest of health, discipline or academic standards.
- (b) cancel housing applications when all residence hall rooms have been assigned to earlier applicants.
- (c) hold residence hall students financially responsible for all losses and damage in assigned rooms.

Huachuca and Chiricahua Halls will be closed through Thanksgiving, Christmas, semester break and spring vacations. All students will be expected to leave unless special permission is obtained. Those enrolled in the Aviation programs will be expected to leave when their classes terminate or for any of the breaks listed above.

Student Activities

The College encourages participation in extra-curricular activities, campus organizations and intramural and intercollegiate athletics to promote leadership, student relationships and social development.

Student Union

The "living room" of the campus offers an opportunity for students to socialize with fellow students, faculty and administration in an informal atmosphere. Meeting rooms as well as comfortable lounges, a billiard room, game room, TV viewing area and various dining facilities augment the services to the student by the College. The office of the Coordinator of Student Activities is located in this building.

The dining room services provided by the Cochise College Student Union include a "rathskeller-style" snack bar, a private dining facility, and a large well-equipped dining room capable of seating 500. Resident students are offered a well-balanced menu featuring popular foods. Seasonal buffets, steak nights and other unique monotony-breakers create a "second home" atmosphere in our Student Union.

Activities

Most campus activities are the responsibility of student clubs and organizations. During the year a full schedule of activities is planned for the student body by the students.

Student activities include Apache Day, Athletic Events, Band, Choir, Billiards Tournaments, College Rodeo, Cultural Film Series, Drama Productions, Hawaiian Luau, Informal Dances, Intramural Sports, Parents Day, Public Events Series, Red and White Ball, Student Orientation Program, Las Vegas Night, Rock Concerts, Lectures, Picnics, Weekend Trips, Popular Film Series, Happenings, Snowball Dance.

Public Events Board

A subsidiary of the Associated Student Senate, the Public Events Board performs important programming functions for the Students. The PEB is made up of a chairman and 12 members who have an expertise in some area of public events programming. The chairman is elected by all-school election each spring. The PEB schedules dances, selects Sunday night movies, plans mid-week "happenings". With the cooperation of faculty consultants, the PEB administers the Public Events Series. This series includes cultural events such as films and art exhibits in addition to appearances by popular personalities and groups.

Food Committee

The Food Committee is comprised of student, faculty and food service representatives who work to produce the best in food quality, service and sanitation.

Organizations

Student organizations attempt to appeal to and satisfy every student's needs and interests. Students of similar interests may get together and form a club in which fellow students can participate in a specialized activity.

Organizations include Alpha Eta Rho (Aviation), Amerind Club, Associated Women Students, Baptist Student Union, Beta Phi Gamma (Journalism Honorary), Campus Crusade for Christ, Cheerleaders, Delta Epsilon (DECA), Drama Club, Freshman Class Officers, Heliograph (Newspaper), International Club, Latter-day Saints Student Association, M.E.C.H.A., Spanish Club, Nurses Club, Phi Beta Lambda (Secretarial), Residence Hall Councils, Red Key Club (Leadership Honorary), Rodeo Club, Songleaders, Sophomore Class Officers, Starchuters, Women's Recreation Association (WRA), Veteran's Club, Judo Club, Isimuss (Honorary Society), Political Science Specialists, Newman Club.

ACADEMIC PROCEDURES AND POLICIES

Academic Council

The enforcement, interpretation and waiving of academic requirements are a responsibility of the Academic Council. Membership includes the Dean of Instruction, the Dean of Special Projects, the Dean of Student Affairs, the Assistant Dean for Occupational Education, the Assistant Dean for Continuing Education, the Assistant to the Director of the Fort Huachuca-Sierra Vista Center, appointed faculty members and two students appointed by the Student Senate. The president of the College is an ex-officio member. Student petitions for the waiver of academic regulations may be presented to the Academic Council through the student's counselor.

Classification of Students

FRESHMEN:	Students with fewer than 28 passing units of college credit.
SOPHOMORES:	Students with 28 or more passing units of college credit.
FULL-TIME STUDENTS:	Students carrying 12 or more units during the semester.

Grading System

Grades are earned in each course and the grade is recorded on the student's permanent record. Grade definitions are as follows:

- A — SUPERIOR (4.0)
- B — GOOD (3.0)
- C — AVERAGE (2.0)
- D — POOR (1.0)
- F — FAILURE

WF — WITHDREW FAILING Indicates withdrawal from the class after Friday of the ninth week with below a C in the course. A grade of WF is computed in the student's grade point average as an F, or failure.

W — WITHDREW Indicates a student has withdrawn from the course before Friday of the ninth week, or that he was earning a grade of C or better if the withdrawal was after the Friday defined above. A grade of W is not computed in the student's grade point average.

I — INCOMPLETE Indicates that for a justifiable reason (serious illness, etc.) the student failed to complete all requirements for the course. Failure to make up an incomplete during the succeeding semester will result in change from the grade of I to an F on the permanent record. The grade of I is not computed in the student's grade point average.

AU — AUDIT Courses may be taken for audit at the discretion of the course instructor. Registration and fee policies are the same as those for regular students; however, priority in registration will be given those registering in a course for credit.

P — PASSING Passing in a pass-fail course.

XF — Failure in a Pass-Fail course.

Grade Points

Semester grades are assigned grade points as follows:

A — 4 grade points per unit earned

B — 3 grade points per unit earned

C — 2 grade points per unit earned

D — 1 grade point per unit earned

F — 0 grade points per unit earned

WF — 0 grade points per unit earned

Thus, a three-unit course with a grade of A would earn (3x4) 12 grade points.

The total grade points accumulated by a student are divided by the total of units attempted (exclude W and I grades) and the result is known as the student's cumulative grade point average, or GPA. Each time a course is taken both the units attempted and the grade points are included in computing the cumulative grade point average.

Scholastic Honors

1. Any student who completes 12 or more units in one semester or phase and maintains a semester and cumulative GPA of 3.000 or better will be placed on Honors.
2. Any student who completes six through 11 units in one semester, or phase, maintains a semester and cumulative GPA of 3.000 or better, and has 18 or more completed units in residency will be placed on Honors.

Unit Load Limitations

The maximum class load for a beginning freshman is 17 units, 19 units for second semester freshmen. Students wishing to exceed these limitations may petition the Academic Council.

Entering students with lower than "C" average will be limited to 15 units. This will include those coming from high school and those transferring from another college.

Continuing students who have: (a) 1 - 10 minus points will be limited to 15 units; (b) 11 or more minus points will have academic requirements determined by Academic Council. These requirements will be stated in writing and the student must indicate his understanding of requirements and agree to comply.

Academic Probation

All students who have attempted nine or more units at Cochise College and maintain a semester and a cumulative grade point average of 1.999 or lower will be placed on Academic Probation by the Academic Council.

Removal from Academic Probation

A student will be returned to academic good standing when his cumulative grade point average is 2.000 or better.

Academic Suspension or Dismissal

1. A student who has attempted nine or more units may be academically suspended from the College for one semester if his cumulative grade point average falls below 1.6 at the end of any semester.
2. A student while on Academic Probation may be academically suspended if his cumulative grade point average falls below 1.6.
3. All available factors having a bearing upon the academic record of the student will be evaluated by the Academic Council before academic suspension.
4. A student required to leave the College a second time for academic reasons will be dismissed.
5. Exceptions may be made by the Academic Council when evidence of significant academic improvement is made by the student during his period of academic probation; such students must continue to show improvement to remain in this special probationary status.

Transfer Students

The following rules govern the admission of a student who has attended another college:

1. Courses for which the student has earned a grade of D or F will not be accepted for credit.
2. Students with a GPA below 2.000 may be admitted on academic probation.
3. Students academically dismissed from another college may not attend Cochise for one full semester after said dismissal.
4. In determining academic standing at Cochise College, the GPA of a transfer student is computed on the basis of units attempted at Cochise College only and will not include units and grade points earned at another college.

Credit by Examination

A student enrolled for credit may establish credit by examination for a maximum of 12 units during his coursework at Cochise College but may challenge only one course for credit by examination per regular semester. A student may challenge only those courses which carry transfer credit, in which a written examination is the primary evaluative device, and in which he has not had advanced work in the same area. Credit by examination units will be computed into the regular course load with corresponding fee and unit-load limitations. The student should obtain the application for credit by examination from Student Affairs, then secure permission from department involved. A student may not petition to challenge a course a second time. Some departments may have additional qualifications which must be met before a course may be challenged. Challengers in the Nursing Department will be required to pass a practical examination.

College Level Examination

Credit may be granted to students who have taken one or more tests of the College Level Examination Program developed by the College Entrance Examination Board. To receive credit on the General Examinations, a student must have a standard score of 500 or above. On the Subject Examinations, the student must have a standard score of 50 or better.

Students may earn up to 30 units of college credit by taking the CLEP. Any interested person may contact the Division of Student Affairs.

U.S.A.F.I. and Other Military Service Schools

Cochise College follows the credit recommendation of the American Council on Education for U.S.A.F.I. and Military Service Schools.

Credit for U.S.A.F.I. courses will be granted if the student received a satisfactory or above, or if the score is in the 41st percentile or above.

NOTE: Colleges differ on their policies related to credit allowed for credit by examination, CLEP, U.S.A.F.I. and Military Service Schools. Credit granted by Cochise College does not obligate any other college or university nor guarantee its acceptance at another educational institution.

Students must be enrolled in at least one Cochise College course before credit will be granted for CLEP, U.S.A.F.I. or Military Service Courses. Credit allowed on any of these will not count toward the 15 resident hours required for an A.A. Degree from Cochise College.

Individual Studies

Under "Course Offerings," and for most subjects, will be found a course description called Individual Studies. This course, No. 99 in all cases, is designed to accommodate particular needs of students capable of independent study. The number of units granted depends on the nature of the work undertaken. The transfer value depends also on the nature of the work and its acceptability by the institution to which the student transfers.

Grade Report

Each student receives a grade report at completion of the semester. Final semester grades are recorded on the student's permanent record.

The grade reports of unmarried students under 18 years of age are mailed to parents or guardians. Grade reports of other students are mailed to their home address.

On the fifth week of each semester, students who are currently making a D or and F in any course will receive a deficiency notice from the Registrar's Office.

Institutional Non-Degree Credit

Institutional Non-degree Credit is credit granted by Cochise College which is applicable toward a certificate, but not applicable toward a Cochise College degree. If a student should want any of these courses applied toward a degree from Cochise, he or she must petition the Academic Council.

Final Examinations

Final examinations are given in most courses and students are personally responsible for taking all assigned final examinations as they are listed in the examination schedule. Final examinations normally will not be given in advance of the scheduled time.

Change of Grade

A grade once reported to the Student Affairs Office may be changed only upon authorization of the faculty member issuing the grade.

Repetition of Courses

1. If a student earns a grade of D or F, he may repeat the course and receive a new grade; however, the listing of the original grade remains as part of the permanent record. The units of the original course are not counted for graduation or in computing the cumulative point average.
2. A student need not repeat a course which he has failed unless it is a prerequisite for another course or is a course required for graduation or transfer.
3. Repetition of high school courses is permitted only if required by the College.
4. A student may not repeat a course in which he has received a grade of C or better.

Change of Program

Students are expected to arrange their academic schedule carefully and maintain this schedule throughout the semester. Necessary program changes are to initiate with the instructor.

Courses may not be added to a program after the first week of classes. Part-time evening students may register the first evening the class meets without paying a late-registration fee.

A student may drop a course at any time up to Friday of the ninth week of classes without penalty and the grade assigned will be W, Withdrew. Courses dropped after Friday of the week following mid-semester examinations will receive a grade of W or WF (Withdrew Failing) at the discretion of the instructor.

Audit Courses may be taken for audit at the discretion of the course instructor. Students may change to audit with permission of instructors through Friday of the ninth week of the semester.

Withdrawal from College

A student who withdraws from the College before the end of the semester must consult with his counselor in order to obtain proper dismissal. A student will receive a WF in all courses if he does not officially withdraw.

Transcripts

A transcript is a copy of the student's permanent record which, upon the request of the student, is available to the student, to another college or university or to a prospective employer.

Transcripts are forwarded by the Registrar's office at the request of the student. Transcripts to educational institutions will be sent directly by mail. Transcripts given directly to the student are marked "issued to student". The first transcript is issued without charge, with additional transcripts \$1 each.

Transfer of Credit

Students transferring from approved institutions of higher education ordinarily will be given credit, hour for hour, for work done in those institutions insofar as it applies to the requirements of the curriculum pursued at Cochise College. A grade of D, earned at another institution, will not be accepted.

Students who have registered in other colleges and universities shall not disregard their records in such institutions in order to make application for admission solely on the basis of their high school records. Failure to report previous college attendance at the time of registration shall be sufficient cause for cancellation of the student's enrollment, or any credit earned, or both.

Students transferring from Cochise College to one of Arizona's state universities should observe the following:

1. Follow carefully the curriculum guide developed by Cochise College in cooperation with the universities for your major area.
2. In general, the universities will accept up to 64 units of community college courses.
3. Developmental Courses carrying X, Y or Z designation will not transfer.
4. Courses in which a student makes under a C are accepted for transfer only at the discretion of the universities and/or the particular college in the university.
5. The overall grade point average must be a 2 point (C) or better.
6. If particular problems concerning transfer are encountered, the student should contact the Dean of Student Affairs at Cochise College.

Attendance Policy

Attendance policies at Cochise College are based on the belief maximum benefits can accrue to the student only if his attendance is regular and his assignments are prepared promptly and adequately. A student is expected to be in attendance at all times in classes, laboratories and orientation assemblies unless there is a compelling reason for absence. Professors set an attendance policy for each class and it is the student's responsibility to know and comply.

Registration for Physical Education

The Board endorses the philosophy of required physical education. In instituting this policy, the following requirements are set forth:

1. A full-time student shall be enrolled in a physical education activity course each semester of attendance until he has acquired a minimum of two semester credits of physical education, except full-time students at Fort Huachuca-Sierra Vista Center. Only one credit per semester may be earned to fulfill this requirement.
2. A student who is physically unqualified for participation in physical education as certified by a licensed physician (such certification by a physician shall be renewed each

semester) shall be exempt from physical education activity. Physically handicapped students will enroll in a Personal Health course, or a special adaptive physical education course.

3. A student 24 years of age or older at the time of registration shall be exempt from physical education courses.
4. Honorably discharged servicemen with a minimum of two years of active duty, married men and women, and men and women who are heads of households are exempt from the requirement of two units of physical education.

Graduation Requirements

Cochise College grants the degree of Associate in Arts and the Associate in Science.

Requirements for Graduation with the Associate Degree are:

1. Completion, with a cumulative GPA of 2.0 (C) or better, of at least 60 passing units.
2. A minimum of 15 units, with a grade average of 2.0 (C) or better, must be taken at Cochise College.
3. Registration at Cochise College (not necessarily full-time) when graduation requirements are completed except that a student who has met all other requirements and has earned up to 56 units at Cochise may, within one year, transfer from another institution a maximum of four units to complete the degree requirements at Cochise College.
4. The General Education requirement at Cochise College is 26 hours distributed as follows:

AREA 1: A six-unit requirement from the following and related options. English placement will be determined on the basis of placement test scores and high school record:

ENGL Y, Reading Fundamentals
ENGL 1-2, Composition
ENGL 3, Advanced Composition
ENGL 4, Introduction to Literature
ENGL 6, Critical Evaluative Reading
ENGL 8-9, Written Communications and Reports
JOUR 1, Communications
JOUR 2, Reporting
JOUR 3, Advanced Reporting
SPAN 1a-b, Elementary Spanish
SPAN 3a, 3b, Intermediate Spanish
SPAN 75a, 75b, Intermediate Composition and Conversation
SPCH 2, Fundamentals of Speech
SPCH 10, Public Speaking

AREA 2: A six-unit requirement from the following options. Although several courses appear on both Area 1 and Area 2 lists, a specific course may be used only to fulfill requirements in one area:

ART 3, Basic Design
 ART 6, Basic Drawing
 ART 7, 8, Survey of World Art
 DRAMA 3, Introduction to the Theater
 ENGL 4, Intro to Literature
 ENGL 7, Creative Writing
 ENGL 20, 21, British Literature
 ENGL 24, 25, American Literature
 ENGL 26, 27, World Literature
 HUM 1, Humanities in Contemporary Life
 HUM 50, 51, Humanities
 MUS 1, 2, Introduction to Music
 MUS 30, Keyboard Harmony
 MUS 32a, 32b, Music Theory
 MUS 50, Introduction to Jazz
 PHIL 11, Introduction to Philosophy
 PHIL 13, Introduction to Moral Philosophy
 PHIL 20, Philosophies of the East
 PHIL 21, Philosophy of Religion
 SPAN 75a, 75b, Intermediate Composition and Conversation
 SPAN 104a, 104b, Introduction to Spanish Literature

AREA 3: A six-unit requirement from the following and related options:

ANTH 1, Origin and Antiquity of Man
 ANTH 2, Development of Culture
 ANTH 25, Society and Culture
 ANTH 26, Non-Literate Cultures of the World
 ANTH 35, Introduction to Archaeology
 ANTH 36, Archaeological Excavation
 ANTH 37, Analysis of Archaeological Materials
 ANTH 38, Archaeological Summer Session
 ANTH 40, Developing Small Museums
 ANTH 41, Setting Up Small Museums
 ANTH 85, Prehistoric Cultures of North America
 ANTH 86, Historic Indian Tribes of North America
 BUS 9, Survey of American Business
 BUS 23, Personnel Psychology
 ECON 1, 2, Principles of Economics
 GEOG 1, Physical Geography
 GEOG 2, Cultural Geography
 GEOG 5, Economic Geography
 HIST 1, 2, History of the U.S.
 HIST 4, 5, History of Western Civilization
 HIST 15, Survey of the American West
 POL-SCI 2, American National Government
 POL-SCI 50, Introduction to International Relations
 POL-SCI 57, National and Arizona Constitution
 PSYC 1, 2, Elementary Psychology
 PSYC 10, Introduction to Social Psychology

SOC 1, Introduction to Sociology
SOC 2, Social Problems
P.S. 54, Psychology for Law Enforcement
P.S. 56, Criminology

AREA 4: A six-unit requirement from the following and related options:

ANTH 36, Archaeological Excavation
ANTH 37, Analysis of Archaeological Materials
ANTH 40, Developing Small Museums
ANTH 41, Setting Up Small Museums
AVIA 12, Applied Aero Math
AVIA 14, Aero Physics
BIOL 1, 2, General Biology
BIOL 20, Microbiology
BIOL 34, Genetics
BOT 1, General Botany
BUS 1, Principles of Accounting
BUS 4, Business Math
BUS 19, Business Statistics
BUS 72, Introduction to Data Processing
BUS 73, Introduction to Computer Programming
CHEM 1, Introduction to Chemistry
CHEM 2a, 2b, General Chemistry
D.T. 11, Blueprint Interpretation and Basic Drafting
D.T. 12, Technical Graphics I
D.T. 20, Technical Graphics II
E.T. 1, Introduction to Electronics
E.T. 10, Math for Electronic Technicians
E.T. 20, Advanced Math for Electronics
GEOL 1, Introduction to Geology
GEOL 51, Physical Geology
G.T. 1, Technical Math I
G.T. 2, Technical Math II
MATH 1X, Fundamentals of Math
MATH 2X, Elementary Algebra
MATH 3X, Plane Geometry
MATH 11, Intermediate Algebra
MATH 20, College Algebra
PHYS 1, Introduction to Physics
PHYS 2a, 2b, General Physics
PHYS 3a, Introductory Physics w/Calculus
ZOOL 1a, 1b, General Zoology
ZOOL 20a, 20b, Human Anatomy and Physiology

PHYSICAL EDUCATION: A two-unit requirement

Courses which conform to the general pattern of the four areas may be accepted upon review by a counselor.

Students in occupational programs and students in pre-professional science programs whose General Education requirements are somewhat different should consult with their program advisors for appropriate requirements.

Students may be exempted from specific General Education requirements on the basis of advanced placement.

Students who intend to transfer should review general education requirements of universities they plan to attend with their counselors.

Students may complete the following graduation requirements in the Developmental Program:

Area 1	5 units
Area 3	3 units
Area 4	3 units

INSTITUTIONAL NON-DEGREE CREDIT COURSES

Courses such as PREP or any courses in certificate programs are referred to as "Institutional Non-Degree Credit".

Institutional Non-Degree Credit is credit granted by Cochise College which is applicable toward a certificate, but not applicable toward a Cochise College degree.

Programs and courses which carry "Institutional Non-Degree Credit" are:

Predischarge Education Program (PREP)

See special Fort Huachuca-Sierra Vista section, page 113.

CETA-Comprehensive Employment Act or successor programs

The following certificate or specialist programs will apply toward an Associate in Arts if a student subsequently desires to meet further General Education requirements:

- Secretarial Certificate
- Middle Management Specialist
- Drafting Technology Certificate
- Electronic Technology Certificate
- Police Science Certificate
- Professional Pilot Certificate

Serviceman's Opportunity College (SOC)

Cochise College, a Serviceman's Opportunity College, assumes the responsibility of aiding servicemen in pursuance of educational objectives. Assistance provided to servicemen includes:

1. Advising and counseling
2. Granting of credit for appropriate educational experiences in the armed forces
3. Transfer and reverse transfer of credits
4. Contract for degree option

INSTRUCTIONAL PROGRAMS

College-Parallel Programs

For the student who wishes to extend his education to include a bachelor's (four-year) degree, Cochise College offers the first two years of the four-year program. In addition he may remove any high school grade or subject deficiencies required for entrance to the four-year college or university of his choice.

Students who plan to transfer to Arizona universities, or to other colleges and universities, should consult the specific catalog with the aid of their counselors to determine lower division requirements of junior standing. Catalogs of major universities and colleges are available in the Learning Resources Center and the Student Affairs Office.

The student who plans to graduate from Cochise College and wishes to obtain junior standing in another college or university has four requirements to fulfill.

- (1) He must clear up any entrance deficiencies in grades or subject matter if the senior college to which he expects to transfer requires it;
- (2) He must fulfill the general requirements of the senior college which are prescribed for all students;
- (3) He must fulfill his own pre-major requirements, i.e., the lower division requirements for his upper division major;
- (4) He must earn a cumulative grade point average of 2.0 or better.

Under the provisions of the ROTC Vitalization Act of 1964, Community college men are now eligible immediately to enter the Advanced ROTC Program when they transfer to a four-year college or university. Information relative to this program may be secured from the Dean of Student Affairs.

AMERICAN INDIAN STUDIES

For full information contact the Department of Anthropology.

HONORS PROGRAM

The honors program is designed to present a challenging curriculum that stresses scholarship initiative and creativity in an effort to achieve a meaningful education. To develop a sense of the interrelatedness of disciplines and to relate oneself to this organic unity is at the heart of an educational process which the Program will endeavor to nurture. The general objectives of the program are:

1. To provide an intellectually challenging program for able students.
2. To originate creative and integrative educational opportunities of an interdisciplinary nature.
3. To encourage and support co-curricular activities and events which enrich and broaden academic experiences.
4. To provide opportunities for individual growth and development through independent study and dialogue.
5. To serve the entire College as an arena and agent for excellence, innovation, communication and integration.

Student Eligibility

1. Both full- and part-time students will be eligible to enter the Program.
2. Applicants will be evaluated in terms of high school grades, standardized test scores and high school recommendations; however, major emphasis will be placed on the student's application and personal interview.
3. The Program application will consist of the student's answers to the following questions, submitted in six to ten typewritten pages:
 - a. Student's evaluation of the strengths and weaknesses of the formal education he has received to date.
 - b. Student's detailing of an experience that has been of exceptional profit to him.
 - c. Description of the student's reading habits and experiences with books with discussion of a single aspect of one book that has had particular significance for him.
 - d. If in school, student narrative of how he has spent the previous two summers; if not in school, how he has occupied his time since leaving school.
 - e. List of reasons for deciding to enroll in the Program and a discussion of his family's reactions to his educational plans.

Curriculum

1. Honors Program students will participate in a retreat-orientation with Program faculty during the week prior to the beginning of regular classes.
2. Students may enroll in one or both of the six-unit interdisciplinary blocks of instruction offered each semester in the 1975-76 academic year:
 - a. Psychology-World Literature — a two-semester course team-taught by psychology and English instructors will involve examination of selected masterworks of literature and of the characters of these works in terms of basic psychological principles. The learning process will include lecture, seminar discussion, independent study, and laboratory experiences.
 - b. Great Ideas in Science and Philosophy — a two-semester course team-taught by science and philosophy instructors will involve (1) in the fall semester an examination of the theories of motion, terrestrial and extraterrestrial, as they have developed from Aristotle to Einstein and a study of eastern and western philosophies as they relate to these theories, and (2) in the spring a study of the theories of the constitution of matter from the classical period to modern times. The learning process will include lecture, seminar discussion, independent study and laboratory experiences.
 - c. Student in either interdisciplinary block may elect English 1 or 2 in the fall and English 2 or 3 in the spring on an individual basis, compositions to be based in part on block content. Students may also elect Speech 2 on a similar individual basis, with oral presentations made in block sessions or before campus or community groups.
 - d. The student may also elect a forty-hour internship each semester for cooperative education credit in a vocational area of his choice to determine whether that vocational choice is personally valid.

- e. The student enrolled in the Honors Program would therefore be eligible to enroll for as few as six units in the Program and as many as nineteen each semester.

All courses in the program except the cooperative education internship component will be fully transferable to four-year colleges and universities.

Occupational Programs

Occupational programs at Cochise College are intended for the student who wishes to gain employable skills.

Occupational programs in Middle Management, Law Enforcement, Associate Degree Nursing (RN), Practical Nursing, Nursing Assistant, Office Careers, Medical Secretarial Studies, Construction Trades, Teacher Aides, Archaeology Aide and Museum Aide Programs for American Indians, Drafting Technology, Electronics, Airframe and Power Plant Technology and Professional Pilot Training are offered at Cochise. Each occupational program has been developed with the aid of business and industrial advisory committees to insure the student of quality instruction and to enhance his opportunities for successful employment. (Information relating to additional occupational curricula may be secured through the Office of Admissions.)

Upon completion of the required curriculum, the student will receive an Associate degree or a Certificate of Completion. The College Placement Bureau will assist graduates in finding permanent full-time positions in fields of specialization.

Several four-year technical programs are offered at Arizona State University and Northern Arizona University. A large number of occupational programs at Cochise College will transfer into many of these university programs. For further information on specific transfer options, consult a counselor, the Office of Career Placement or the respective division chairman.

In addition to the established occupational programs listed above, the College will offer a variety of short-term, non-credit extension courses upon request of business, industry or other interested groups. Several one-year certificate programs are also offered. Many of the programs geared to business and industry are co-sponsored by the Small Business Administration.

COOPERATIVE EDUCATION PROGRAM: Cochise College students enrolled in any of the College's programs may elect to participate in the Cooperative Education Program. This is a cooperative arrangement between the employer, the student and the College to provide part-time (or in some cases, full-time) job placement in training positions related to the student's career interest. The student's work is coordinated by college staff and the student will receive college credit for this job experience. This program is also adaptable for employed adults who are interested in gaining additional job skills for future advancement. Cooperative Education is not a course of study but is the laboratory component for the various programs offered at Cochise College.

ARCHAEOLOGY AIDE — MUSEUM AIDE PROGRAMS FOR AMERICAN INDIANS

Two programs are available to the student seeking a working knowledge in archaeology or museum work — the two-year program leading to an Associate of Arts Degree and a one-year program for the student desiring to receive a certificate.

A student planning to earn the AA Degree must meet the graduation requirements set forth in the Cochise College catalog. A total of 60 semester hours must be earned. Twenty-six of these hours must be in general education courses from the four areas listed in the catalog. The remaining hours, to make a total of 60, are accumulated through anthropology courses pertinent to the programs and other elective subjects.

A student interested in the Certificate Program must complete the following course of study.

Archaeology Aide

FALL SEMESTER	SPRING SEMESTER	SUMMER SESSION
Anth 35 Introduction to Archaeology	Anth 2 Development of Culture	*Anth 38 Summer Archaeological Field Session
*Anth 36 a-b Archaeological Excavation	*Anth 36 a-b Archaeological Excavation	
Anth 85 Prehistoric Cultures of North America	Anth 37 Analysis of Archaeological Materials	

Museum Aide

Anth 35 Introduction to Archaeology	Anth 37 Analysis of Archaeological Materials
Anth 36a Archaeological Excavation	Anth 41 Setting Up Small Museums
Anth 40 Developing Small Museums	Anth 86 Historic Indian Tribes of North America
Anth 85 Prehistoric Cultures of North America	Anth 99 Individual Studies (Problems in Museum Work)

*Anth 36a is required for both the Archaeology Aid and Museum Aide Programs. Anth 36b and 38 are required for the Archaeology Aide Program.

AVIATION TECHNOLOGY

Aviation Administration:

Graduates of this program will enter the aviation industry as mid-management trainees with airlines, in aircraft sales or in airport management. The programs include general education, business management and aviation courses of study. (Refer to Mid-Management Curriculum Guide)

Professional Pilot:

Academic and technical studies combined with flight training qualify the student for positions requiring professional pilots. All phases of flight training are available which will enable the student to complete the Airman Certification Requirements of the Federal Aviation Administration.

The Professional Pilot Program may be completed under one of the following options:

OPTION I

July Phase			Units
(24 weeks)	AT 80g-80f	Basic Flight	3-3
	AT 82g-82f	Intermediate Flight	3-3
	AT 86g-86f	Instrument Flight	3-3
		General Education	12
		TOTAL	30

January Phase

(20 weeks)	AT 84g-84f	Advanced Flight	3-3
	AT 88g-88f	Multi-Engine	option 1-2
	AT 89g-89f	Flight Instructor	option 3-2
	AT 92g-92f	Instrument Flight Instructor	option 1-2
		General Education	13
		TOTAL	30

OPTION II

July Phase			
(24 weeks)	AT 80g-80f	Basic Flight	3-3
	AT 82g-82f	Intermediate Flight	3-3
	AT 86g-86f	Instrument Flight	3-3
		General Education	6
		TOTAL	24

January Phase

(20 weeks)	AT 84g-84f	Advanced Flight	3-3
	AT 88g-88f	Multi-Engine	option 1-2
	AT 89g-89f	Flight Instructor	option 3-2
	AT 92g-92f	Instrument Flight Instructor	option 1-2
		General Education	6
		TOTAL	23

ONE SEMESTER-13 additional general education units to total 60 units required for an Associate in Arts Degree.

OPTION III

July Phase			
	AT 80g-80f	Basic Flight	3-3
	AT 82g-82f	Intermediate Flight	3-3
	AT 86g-86f	Instrument Flight	3-3
		General Education	3
			18

January Phase

	AT 84g	Advanced Flight	3
	AT 84f	Advanced Flight	3
	AT 86g-86f	Instrument Flight	3-3
		General Education	9
			18

One semester - 12 units of electives. The suggested electives include:

88g	Multi Engine	1
88f	Multi Engine	2
89g	Flight Instructor	3
89f	Flight Instructor	2
92g	Instrument Flight Instructor	1
92f	Instrument Flight Instructor	2

One semester - 13 units general education or more to total 60 units required for an Associate Degree.

Options I, II, and III lead to an Associate in Arts Degree. Students are urged to consult with the Aviation Department and Student Affairs before choosing Option I, II or III. A minimum of 24 credits from the Professional Pilot offerings are necessary for graduation. The Professional Pilot Program is a continuing operation and students may enter and start class when scheduled at any time during a single phase, at the discretion of the Aviation Department. The regular semester (16 weeks) must be taken during the regular Calendar Semester period.

AIRFRAME & POWERPLANT TECHNICIAN:

This curriculum, approved by the Federal Aviation Administration, consists of the theory and practical experience involved in disassembling, inspecting, overhauling and repairing aircraft powerplants and accessories including ignition, fuel systems, lubrication, propellers, powerplant overhaul and maintenance, jet engine and turbo-prop theory, instruments and aircraft systems in compliance with F.A.A. procedures. All courses offered in Aviation Maintenance will be completed during the 50-week program. Sequencing will be determined by department, as well as entrance dates at discretion of Division

		Cr.
AT 11	Aircraft Materials and Processes	4
AT 12	Applied Aero Math	3
AT 20	Basic Aircraft Powerplants	11
ENG 8	Written Communications and Reports	3
AT 21	Aircraft Propeller Systems	3
AT 14	Aerophysics	3
AT 30	Adv. Aircraft Powerplants	11
AT 42	Aircraft Elec. Systems	4
AT 15	Aeronautics Drafting	4
AT 40	Basic Airframe Structures	5
AT 50	Adv. Airframe Structures	6
AT 16	Theory of Flight and Instrumentation	4
AT 17	Shop Management Principles	3
AT 53	Hydraulic and Pneumatic Systems	5
AT 52	Aircraft Assembly, Rigging, and Inspection	7

BUSINESS ADMINISTRATION — TRANSFER

PROGRAM (College Parallel)

The transfer program (college parallel) is designed to serve individuals who desire to complete the first two years of a Business Administration baccalaureate degree program at Cochise College.

The following course outline is suggested for students planning to transfer to State of Arizona four-year institutions of higher learning upon completion of two years of study at Cochise College.

Freshman Year	Total Hours	Sophomore Year	Total Hours
English 1, 2	6	Accounting (Bus. 1a, 1b)	6
Natural Sciences	8	Business Statistics	
Math 20 (or higher)	3	(Bus. 19, 20)	6
Economics 1, 2	6	Business Law (Bus. 31)	3
Social Sciences	6	Math 35	3
Physical Education	2	Humanities	8
*Elective	0-3	*Electives	6
	<hr/> 31-34		<hr/> 32

*Recommended electives include, but are not limited to, Speech, Introduction to Data Processing, Math 50 (or 51), Survey of American Business, Typing and Business Communications. Consult the Transfer Curriculum Guide applicable to the four-year institution where you wish to continue your education following completion of two years at Cochise College for appropriate elective choices.

MIDDLE MANAGEMENT

The Mid-Management program is designed to serve individuals having diverse occupational objectives. The primary objective of the program is to prepare students for full-time employment upon graduation from Cochise College. Participation in the program does not preclude the student from entering a four-year institution of higher learning. Career plans are often altered and not infrequently in a direction requiring further education. The Mid-Management student who does decide to continue his schooling will find that the majority of the course work will be accepted for transfer credits.

The Mid-Management program consists of three areas of concentration: General Business, Hotel-Motel and Aviation Administration. The curriculum for each area consists of three parts: General Education, Area of Concentration and the Mid-Management core. The core and general education requirements are the same for each area.

			Hours With Intern- ship	Hours Without Intern- ship
Freshman Year	Total Hours	Sophomore Year		
Gen. Educ. Requirements	18	Gen. Educ. Requirements	9	9
Area of Concentration	3-6	Area of Concentration	0-3	12-15
Mid-Management Core:		Mid-Management Core:		
Princ. of Marketing	3	Personnel Management	3	3
Princ. of Management	3	Bus. 1a or Bus. 56	3	3
Salesmanship	3	Seminar-Trends & Prac- tices in Marketing & Management	3	3
		*Intern. in Coop. Educ.	12	0
	<hr/> 30-33		<hr/> 30-33	<hr/> 30-33

* Internship in Cooperative Education (on-the-job training) has three options:

1. Full-time basis during the student's fourth semester.
2. Part-time basis during the student's school year. This is dependent upon student being placed locally in order that he or she may attend classes at Cochise College.
3. Research Study — Students who are employed full-time may do a research study with the permission of the Coop. Coordinator. Credit will be limited to three credit hours per semester.

Mid-Management courses are designed to accommodate students who have different occupational goals by permitting appropriate course selection in an area of concentration. These options are as follows:

GENERAL BUSINESS

Area of Concentration:

Suggested courses from which to choose the Area of Concentration electives include, but are not limited to, Survey of American Business, Business Math, Economics, Business Law, Accounting, Statistics, Typing, Business Communications, Introduction to Data Processing.

HOTEL-MOTEL MANAGEMENT

Area of Concentration

BUS 58

Hotel-Motel Management

A series of correspondence courses from the Educational Institution of the American Hotel and Motel Association.

AVIATION ADMINISTRATION

Area of Concentration

AT 80g

Basic Flight (ground)

AT 17

Shop Management Principles

DT 11

Blueprint Interpretation and Basic Drafting

GEOG 5

Economic Geography

BUS 31

Business Law

			Hours With Intern- ship	Hours Without Intern- ship
Freshman Year	Total Hours	Sophomore Year		
Gen. Educ. Requirements	18	Gen. Educ. Requirements	9	9
Area of Concentration	3-6	Area of Concentration	0-3	12-15
Mid-Management Core:		Mid-Management Core:		
Princ. of Marketing	3	Personnel Management	3	3
Princ. of Management	3	Bus. 1a or Bus. 56	3	3
Salesmanship	3	Seminar-Trends & Prac- tices in Marketing & Management	3	3
		*Intern. in Coop. Educ.	12	0
	<hr/> 30-33		<hr/> 30-33	<hr/> 30-33

* Internship in Cooperative Education (on-the-job training) has three options:

1. Full-time basis during the student's fourth semester.
2. Part-time basis during the student's school year. This is dependent upon student being placed locally in order that he or she may attend classes at Cochise College.
3. Research Study — Students who are employed full-time may do a research study with the permission of the Coop. Coordinator. Credit will be limited to three credit hours per semester.

Mid-Management courses are designed to accommodate students who have different occupational goals by permitting appropriate course selection in an area of concentration. These options are as follows:

GENERAL BUSINESS

Area of Concentration:

Suggested courses from which to choose the Area of Concentration electives include, but are not limited to, Survey of American Business, Business Math, Economics, Business Law, Accounting, Statistics, Typing, Business Communications, Introduction to Data Processing.

HOTEL-MOTEL MANAGEMENT

Area of Concentration

BUS 58

Hotel-Motel Management

A series of correspondence courses from the Educational Institution of the American Hotel and Motel Association.

AVIATION ADMINISTRATION

Area of Concentration

AT 80g

Basic Flight (ground)

AT 17

Shop Management Principles

DT 11

Blueprint Interpretation and Basic Drafting

GEOG 5

Economic Geography

BUS 31

Business Law

MIDDLE MANAGEMENT SPECIALIST PROGRAM (One Year)

First Semester	Total Hours	Second Semester	Total Hours
Mid-Management Core:		Mid-Management Core:	
Princ. of Marketing	3	Salesmanship	3
Princ. of Management	3	Bus. 1a or Bus. 56	3
Personnel Management	3	Seminar-Trends & Practices	
Internship in Coop. Ed.	6	in Marketing & Management	3
*Seminar in Coop. Ed.	1	Internship in Coop. Ed.	6
		*Seminar in Coop. Ed.	1
	<hr/> 15-16		<hr/> 15-16

* A course from the core area may be substituted upon permission from the coordinator

CLERICAL-SECRETARIAL STUDIES

Two-year programs, leading to an Associate of Science degree, are available in the areas of General Secretary, Medical Secretary, Legal Secretary and Bilingual Secretary.

Certificate programs include: Clerk-Typist and Receptionist with the following areas of concentration: general, medical, legal and bilingual.

CLERK-TYPIST

(GENERAL, MEDICAL, LEGAL AND BILINGUAL)

CERTIFICATE PROGRAM FOR DIRECT EMPLOYMENT

Required Courses	Course Numbers	Units
Typewriting	BUS 6, 7, 8, 14 (Bil.)	6
Business Math	BUS 4	3
Bookkeeping & Financial Mgmt.	BUS 56	
or		
Principles of Accounting	BUS 1a	3
Grammar Usage & Punctuation	ENG 11	3
Business Communications	BUS 66	3
General Office Procedures	BUS 61	3
*Clerical Practice	BUS 62	3
Personnel Management	BUS 23	3
Calculating Machines	BUS 18	2
Records Management	BUS 17	3
Electives		3-6
Recommended Electives:		
Medical Terminology for the medical clerk-typist	BUS 81	(3)
Business Law for the legal clerk-typist	BUS 31	(3)
Six hours of Spanish for the bilingual clerk-typist		(6)
		<hr/> 35-38

* This course will be individualized for the General, Medical, Legal and Bilingual Clerk-Typist

RECEPTIONIST
(GENERAL, MEDICAL, LEGAL AND BILINGUAL)
CERTIFICATE PROGRAM FOR DIRECT EMPLOYMENT

Required Courses	Course Numbers	Units
Typewriting	BUS 6, 7, 8, 14 (Bil.)	6
Grammar Usage & Punctuation	ENG 11	3
Bookkeeping & Financial Mgmt.	BUS 56	
or		
Business Math	BUS 4	3
General Office Procedures	BUS 61	3
Records Management	BUS 17	3
Business Communications	BUS 66	3
Personnel Management	BUS 23	3
*Clerical Practice	BUS 62	3
Calculating Machines	BUS 18	2
Electives		6
Recommended Electives:		
Medical Terminology for the Medical Receptionist	BUS 81	(3)
Business Law for the Legal Receptionist	BUS 31	(3)
Six hours of Spanish for the Bilingual Receptionist		(6)
Key punch	BUS 70	(3)
Principles of Accounting for other business electives	BUS 1a	(3)
		(6)
		35

* This course will be individualized for the General, Medical, Legal and Bilingual Receptionist

EXECUTIVE SECRETARY
(GENERAL, LEGAL AND BILINGUAL)
ASSOCIATE OF SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Required Courses	Course Numbers	Units
Grammar Usage & Punctuation	ENG 11	3
Typewriting	BUS 6, 7, 8, 14 (Bil.)	9
Shorthand	BUS 10, 11, 12, 22	9
Business Math	BUS 4	3
Survey of American Business	BUS 9	3
Bookkeeping & Financial Mgmt.	BUS 56	
or		
Principles of Accounting	BUS 1a	3
Calculating Machines	BUS 18	2

Personnel Management	BUS 23		3
College Secretarial Procedures	BUS 64		3
Records Management	BUS 18		3
Business Law	BUS 31		3
*Secretarial Practice	BUS 68		3
Business Communications	BUS 66		3
Fine Art Electives			6
Other Electives			6-9
Recommended Electives:			
Six hours of Spanish for the Bilingual Secretary			(6)
Key punch	BUS 70	(3)	
Intro. to Data Processing	BUS 72	(3)	
Intro to Computer Programming	BUS 73	(3)	
or			
Principles of Accounting	BUS 1b	(3)	(9)
			<hr/>
			62-65

* This course will be individualized for the General, Legal and Bilingual Secretary

MEDICAL SECRETARY

ASSOCIATE OF SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Required Courses	Course Numbers	Units
Grammar Usage & Punctuation	ENG 11	3
Shorthand	BUS 10, 11, 12, 22	9
Typewriting	BUS 6, 7, 8	9
Human Anatomy & Physiology	ZO 20A-20B	8
Business Math	BUS 4	3
Bookkeeping & Financial Mgmt.	BUS 56	
or		
Principles of Accounting	BUS 1a	3
College Secretarial Procedures	BUS 64	3
Medical Terminology	BUS 81	3
Records Management	BUS 17	3
Business Communications	BUS 66	3
Personnel Management	BUS 23	3
Calculating Machines	BUS 18	2
*Secretarial Practice	BUS 68	3
Business Law	BUS 31	3
Fine Art Electives		6
		<hr/>
		64

In addition to the above, the Medical Secretary degree requires an internship to be done the summer following graduation.

(16)
TOTAL 80

* This course will be individualized for the Medical Secretary

DRAFTING TECHNOLOGY

The complexity of American industrial and building construction requires that ideas, sketches and verbal instructions be neatly and accurately recorded in the form of engineering drawings or documents.

Today most industries to fill their drafting job openings are employing only graduates who have received specialized training in Design and Drafting from Community Colleges or Technical Institutes.

The curriculum in Drafting Technology is designed to prepare the student with a variety of skills and related knowledge, necessary to perform as efficient draftsmen and design draftsmen, capable of transferring ideas from engineers and designers to the finished product.

The Drafting Technology Program at Cochise College is accredited by the American Institute for Design and Drafting.

Graduates may be employed by manufacturing industries, construction companies, mapping companies, mines, utilities or architectural planners.

Preparation for this career includes Technical Drafting skills and a knowledge of mechanical components and devices, technical mathematics, materials and processes of industry.

FRESHMAN YEAR

Two-year Associate Degree Program

First Semester

DT-12	Technical Graphics I	3 hrs.
DT-31	Drafting for Electronics	3 hrs.
ET-1	Electronics Foundations	3 hrs.
GT-1	Technical Mathematics I	3 hrs.
GT-5	Manufacturing Materials and Processes I	3 hrs.
		15 hrs.

Second Semester

DT-20	Technical Graphics II	3 hrs.
DT-24	Spatial Relationships	3 hrs.
GT-2	Technical Mathematics II	3 hrs.
GT-6	Manufacturing Materials and Processes II	3 hrs.
Eng-8	Written Communications and Reports	3 hrs.
		15 hrs.

SOPHOMORE YEAR

Third Semester

DT-36	Drafting for Manufacturing	4 hrs.
DT-49	Topographical Design and Drafting	4 hrs.
T.I-40	Principles of Industrial Management	3 hrs.
General Education Electives		6 hrs.
		17 hrs.

Fourth Semester

DT-46	Construction Drafting	4 hrs.
DT-50	Tool Design	4 hrs.
General Education Electives	6 hrs.	
		14 hrs.

DRAFTING TECHNOLOGY

One-Year Certificate Program

FRESHMAN YEAR

First Semester

DT-11	Blueprint Interpretation & Basic Drafting	3 hrs.
DT-12	Tech Graphics	3 hrs.
DT-31	Drafting for Electronics	3 hrs.
GT-5	Manufacturing Materials & Processes I	3 hrs.
Math 2X	Elementary Algebra	3 hrs.
		15 hrs.

Second Semester

DT-20	Tech Graphics II	3 hrs.
DT-24	Spatial Relationships	3 hrs.
GT-6	Manufacturing Material & Processes II	3 hrs.
Math 3X	Plane Geometry	3 hrs.
Eng. 8	Written Communications and Reports	3 hrs.
		15 hrs.

ELECTRONICS TECHNOLOGY

Electronics has made a significant contribution to the scientific age in which we live. The electronics technician plays a very important role in this exciting and rapidly growing industry.

The electronics program at Cochise College is designed for young men and women interested in becoming technicians and a part of the scientific team which will meet the demands and challenges of this interesting industry. The program provides the student with a thorough foundation in electronics, supported by a knowledge of mathematics, English and basic sciences. In modern laboratories the student practices experimental techniques and develops technical competence with the use of test equipment and trainers that are designed to reinforce and apply the student's knowledge of theory. The objective of the total program is to produce a competent electronics technician who may work individually, or be capable of working and communicating directly with engineers and production personnel in his specialized work. He will be capable of satisfactorily performing work for his employer and of growing into positions of increasing responsibility. The electronics field provides excellent employment opportunities for students who are interested in working as a team with engineers in research and development, and installation and servicing of electrical and electronic devices.

Major employers are computer manufacturers, aerospace industries, nuclear installations, communication equipment manufacturers, automated industrial manufacturing companies and government organizations which are involved in many areas of the electronics field. There will also be increasing demands in the fields of oceanography, medical electronics, satellite communication, and education electronics.

FRESHMAN YEAR

General Education Requirements	9 hrs
ET 10 Mathematics for Electronic Technicians	3 hrs
ET 20 Advanced Mathematics for Electronics	3 hrs
Other Technical Subjects:	
ET 1 Electronics Foundations	(3)
DT 31 Drafting for Electronics Technicians	3 hrs
Electronics Technology Core	16 hrs
ET 2a Introduction to DC Circuits	(3)
ET 2b Introduction to AC Circuits	(4)
ET 22 Semiconductors and Transistors	(4)
ET 25 Electronic Circuits and Systems	(5)

SOPHOMORE YEAR

General Education Requirements	11 hrs
Science Requirements (Minimum of 3 hrs of General Education total)	
Electronics Technology Core	25 hrs
ET 31 Pulse Circuits	(5)
ET 33 Digital Circuits and Systems	(4)
ET 43 Modern Electronic Devices	(4)
ET 45 Communications Electronics I	(4)
ET 47 Communications Electronics II	(4)
ET 46 Avionics I	(4)



Adults attend conferences on campus.

HEALTH TECHNOLOGIES: NURSING

Nurse Assistant

Practical Nurse

Associate Degree Nurse

Cochise College offers an open-ended curriculum in nursing that allows the student to travel at his own pace, get on and off the curriculum ladder as needed. It is imperative the student maintain a grade of C in all nursing courses, Anatomy, Physiology and Math 10 to progress satisfactorily.

The nursing curriculum is a basic core in which the student can elect to take all or part. It is so devised that at the end of the first semester taking minimum requirements, the student is eligible to receive a certificate of proficiency as Nurse Assistant. At the end of a year, the student will have the necessary requirements to apply for State Board exams to become a Licensed Practical Nurse. At the end of two years, taking maximum requirements, the student is eligible to apply for State Board exams to become a Registered Nurse.

The Health Technology Program prepares young men and women to become Nurse Assistants, Practical Nurses or Registered Nurses. Students are prepared to render quality nursing care at various levels and in those functions commonly associated with bedside nursing. Technical nursing skills are taught in the classroom and related clinical areas such as hospitals, clinics, public health agencies, doctors' offices and nursery schools. In addition, courses in general education are provided for all students in the program.

Nurse Assistants: Qualified nurse assistants are in constant need to function as members of the hospital or community health team. Primary functions of nurse's assistants are to care for subacutely ill patients and to assist other members of the health team. A one-semester program.

Practical Nurses: Completion of requirements in this program will qualify men and women to apply for state licensure as Licensed Practical Nurses. LPN's function at the hospital and in community health services at a skilled level under the direction of a Registered Nurse or physician. Practical Nurses are in high demand to give basic nursing care and to assist other members of the health team. A two-semester program.

Associate Degree Nurses: Employment opportunity for these technical nurses is at a premium high. RN's function in the hospital or community at a cognitive level under the direction of a licensed physician. The primary function of this nurse is to give scientific and comprehensive health care and to assist other members of the health team. Completion of requirements for this program qualifies graduates to apply for state licensure exams for Registered Nurse status. A four-semester program.

ALLIED HEALTH

Through consortium effort with Cochise College, Arizona Western College, and Pima College the following programs are offered wherein the student may take core course work during their first year at Cochise College and do their laboratory practicum in various Tucson hospital facilities through arrangements with Pima College. The following programs fall into this category:

Operating Room Technology, Ophthalmic Dispensing Technology,
Radiologic Technology, Respiratory Therapy.

OPERATING ROOM TECHNICIAN

First Semester Cochise College

HT-50	Introduction to Health Care	3 units
Eng-1	Composition	3 units
PSYC-1	Elementary Psychology	3 units
ZO-20A	Human Anatomy & Physiology	4 units
BIOL-20	Microbiology	4 units

Second Semester (Fall) Pima Community College

ORT-51	Basic Surgical Therapy	2 units
ORT-52	Basic Surgical Techniques	5 units
ORT-53	Surgical Biology	3 units
ORT-54	Surgical Procedures	3 units
ORT-55	Surgical Anatomy	4 units

Third Semester (Spring)

ORT-60	Advanced Surgical Techniques	4 units
ORT-61	Clinical Procedures I	5 units
ORT-62	Clinical Procedures II	5 units
HCA-99	Independent Studies in Health Sciences (ORT)	3 units

ASSOCIATE DEGREE NURSE

First Semester

General Education Requirements	6 units
ZO 20A Anatomy & Physiology	(4)
MA 10 Measurement of Drugs & Solutions	(2)
HT 56 Nursing I	10 units
<hr/>	
16 units	

After satisfactorily completing Nursing I, each student will receive a certificate as Nurse Assistant.

Second Semester

General Education Requirements	7 units
ZO 20B Anatomy & Physiology	(4)
EN 10 Written Communications	(3)
HT 57 Nursing II	11 units
<hr/>	
18 units	

Student may apply for licensure as a Practical Nurse.

Third Semester

General Education Requirements	9 units
PY 1 Elementary Psychology	(3)
Communications	(3)
CH 10 Basic Science	(4)
HT 58 Nursing III	8 units
<hr/>	
18 units	

Fourth Semester

General Education Requirements	9 units
Fine Arts or Humanities	(3)
Anthro 25 or Sociology I	(3)
Elective	(3)
HT 59 Nursing IV	8 units
<hr/>	
17 units	

SUGGESTED ELECTIVES

Spanish

Microbiology

NOTE The following course work is integrated throughout the Nursing program.

Community and Mental Health Nursing, Care of Children with Physical and Mental Illness, Nutrition and Diet Therapy, Pharmacology

POLICE SCIENCE

This program is responsive to current changes in the profession; therefore, it is recommended the applicant consult with the Dept. Head of Police Science at the earliest opportunity.

The magnitude and complexity of today's law enforcement and rehabilitation activities dictate the need for educated law enforcement personnel. The program at Cochise College is designed to prepare the student for the challenging and demanding opportunities which exist in public service and private industry. Failure to meet proper requirements may exclude persons from acceptance into the program.

Private industry offers positions in protective services, insurance investigation and personnel checking for employment and security. City, county and state law enforcement agencies offer positions in patrol, identification, public relations, research, statistical analysis and juvenile programs. Women are finding careers in law enforcement challenging too, especially in youth and investigative work. The value of a college education cannot be overemphasized for the alert young man or woman who plans to make a career in law enforcement.

FRESHMAN YEAR

	General Education	16 hrs
PS 20	Introduction to Police Science	3 hrs
PS 21 ✓	Introduction to the Criminal Justice System	3 hrs
PS 22 ✓	Police Patrol Functions I	3 hrs

PS 24	Police Patrol Functions II	3 hrs
PS 27	Rules of Evidence	3 hrs
PS 30	Juvenile Procedures	3 hrs
		<hr/>
		31 hrs

SOPHOMORE YEAR

PS 35	Physical Evidence — Photography	3 hrs
PS 32	Criminal Law I	3 hrs
PS 34	Criminal Law II	3 hrs
PS 36	Physical Evidence — Recognition, Collection, Preservation	3 hrs
PS 38	Criminal Investigation	3 hrs
PS 46	Police Community Relations	3 hrs
PS 48	Institutional Corrections	3 hrs
PS 49	Constitutional Law	3 hrs
PS 52	Accidents, Citations, Disorders	3 hrs
	Elective (or) General Education Course	3 hrs
		<hr/>
		30 hrs

Teacher Aide Program

The Teacher Aide Program is a one-year certificate program to train students as elementary school teacher aides. During the two-semester program, students will attend classes three days a week and work as interns in an elementary school classroom two days a week. Courses in the program include Art 5, Business 6, English 2Y, 11 and 12, Physical Education 189, Psychology 13, Math 1x, Science 1 and Cooperative Education 10 and 20. Bilingual aids will also take Spanish 3a and 3b. (See individual catalog descriptions.) Aides who complete the program may go on to complete the second year curriculum in preparation for transfer to the university in Elementary Education, Special Education or Home Economics.

Interested students should contact the College before the beginning of the fall or spring semesters.



Teacher aides in classes at college.

COURSE OFFERINGS

Numbering of Courses

Courses designated 1 through 99 carry college level credit. The number to the left of the title of the course is the identification number of the course, viz. 1 General Biology.

Courses carrying a letter designates X, viz. IX Fundamental Mathematics and Y, viz. Y Reading Fundamentals may be used to complete graduation requirements toward the Associate Degree but may not be counted as transfer courses.

Credit Value

The number to the right after the course title indicates the number of units of credits given for the semester. The number of lecture and laboratory hours per week is given in some cases at the conclusion of each course description. When laboratory work is not indicated, the course is considered to be a lecture; the word "lecture" does not imply that class discussion or participation is not an essential part of the course work.

Prerequisites

The prerequisites as shown in the description for each course must be met before enrollment in the course is permitted. Prerequisites stated are intended to insure that the student will have sufficient preparation to assure a reasonable chance of success.

Schedule of Classes

The College reserves the right to make additions or deletions to the list of course offerings during the year and to cancel those sections in which enrollment is not great enough to justify continuance. The Semester Schedule, published each Fall and Spring, is the official list of courses offered.

Agriculture

- | | | |
|----------|--|----------------|
| 1 | PRINCIPLES OF VETERINARY SCIENCE
Prerequisite: None.
An introduction to the veterinary sciences for potential pre-veterinary students as well as those students of animal science or husbandry interested in the care and health of all domestic animals and livestock. | 3 UNITS |
| | | |
| 5 | RANGE MANAGEMENT I
Prerequisite: None.
A study of the history of rangeland use, the influences of use on plant physiology and ecology, and the interrelationships and coordination of rangeland uses for farm and ranch managers interested in plants, soils, and livestock. | 3 UNITS |

Anthropology

- | | | |
|----------|--|----------------|
| 1 | THE ORIGIN AND ANTIQUITY OF MAN
Prerequisite: None.
A survey of human biological origins based upon paleontological and archaeological records including recent developments in physical anthropology. | 3 UNITS |
|----------|--|----------------|

2	THE DEVELOPMENT OF CULTURE	3 UNITS
	Prerequisite: None. An introduction to elements of cultural anthropology. The study of man's cultural progress from Lower Paleolithic to historic periods.	
25	SOCIETY AND CULTURE	3 UNITS
	Prerequisite: None. Theoretical and practical insight into cultural forces which affect man's way of life including study of material culture, technology, social, political, economical systems, religion and language.	
26	NON-LITERATE SOCIETIES OF THE WORLD	3 UNITS
	Prerequisite: None. The study of selected non-literate peoples and their way of life with major attention to such groups as tribes, chiefdoms, pastoral and peasant societies.	
35	INTRODUCTION TO ARCHAEOLOGY	3 UNITS
	Prerequisite: None. A basic study of archaeological theory and technique. Field trips and laboratory work are important aspects of the course.	
36a-36b	ARCHAEOLOGICAL EXCAVATION	4-4 UNITS
	Prerequisite: None. Practical experience through scientific excavation of an archaeological site. Sessions held in the field and laboratory. May be repeated for credit.	
37	THE ANALYSIS OF ARCHAEOLOGICAL MATERIALS	3 UNITS
	Prerequisite: Permission of Instructor. Experience in scientifically analyzing materials recovered in archaeological excavation. Lectures, laboratory sessions and field trips.	
38	ARCHAEOLOGICAL SUMMER SESSION	6 UNITS
	Prerequisite: None. Scientific excavation of a prehistoric Indian ruin, with emphasis on archaeological method, technique and interpretation for the novice. Offered only during the summer. May be repeated for credit.	
40	DEVELOPING SMALL MUSEUMS	4 UNITS
	Prerequisite: None. An introduction to the creation of displays and the management and conservation of collections. The laboratory portion of the course will consist of an extensive survey of graphic arts skills pertaining to the creation of displays.	
41	SETTING UP SMALL MUSEUMS	4 UNITS
	Prerequisite: None. Lectures will provide practical insight into all of the legal, financial, technical and management aspects of setting up small museums. Photographic skills for publications and displays will be taught in the lab.	
85	PREHISTORIC CULTURES OF NORTH AMERICA	3 UNITS
	Prerequisite: None. A survey of prehistoric cultures of Canada, the United States and Northern Mexico. Field trips	

86 HISTORIC INDIAN TRIBES OF NORTH AMERICA 3 UNITS

Prerequisite: None.

A survey of Native American Tribes from the Arctic to the Mexican Sierra Madre. Field trips.

99 INDIVIDUAL STUDIES 1-4 UNITS

Prerequisite: Approval of the Division Chairman and Professor.

The student with demonstrated academic ability will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Art

1 INTRODUCTION TO ART 3 UNITS

Prerequisite: None.

Introduction of art elements and principles. A study of the developments of ideas, materials and techniques. Lecture 2 hours, lab 4 hours.

3 BASIC DESIGN 3 UNITS

Prerequisite: None.

A study of the basic elements of visual perception and organization. Lecture 2 hours, studio 4 hours.

5 ART IN THE ELEMENTARY SCHOOL 3 UNITS

Prerequisite: None.

To introduce the teacher aide to the varied materials and methods used in an elementary art class. A study of a child's artistic development through lectures, slides, films and appropriate art experiences in lab involvements. Will not fulfill the art education requirement for elementary school teacher certificate.

6 BASIC DRAWING 3 UNITS

Prerequisite: None.

An introduction to representational drawing and expressive pictorial design. Lecture 2 hours, studio 4 hours.

7 SURVEY OF WORLD ART 3 UNITS

Prerequisite: None.

A study of the development of the art and architecture of western civilization from pre-historic times through the Gothic era. Lecture 3 hours.

8 SURVEY OF WORLD ART 3 UNITS

Prerequisite: None.

A continuation of Art 7 through the modern era. Lecture 3 hours.

30 TWO DIMENSIONAL DESIGN 3 UNITS

Prerequisite: Art 3.

An introduction of the theory and practice of two dimensional composition and design. Lecture 2 hours, studio 4 hours.

31 THREE DIMENSIONAL DESIGN 3 UNITS

Prerequisite: Art 3.

An introduction to methods of sculpture, pottery and jewelry. Lecture 2 hours, studio 4 hours.

45	BEGINNING FIGURE DRAWING	3 UNITS
	Prerequisite: Art 6 or permission of professor.	
	A study of organic form, relationships, motion and rhythm with secondary emphasis on the human figure in its environment. Lecture 2 hours, studio 4 hours.	
65	BEGINNING COMMERCIAL DESIGN	3 UNITS
	Prerequisite: Art 3.	
	The principles of commercial design and techniques of advertising layout, concentrating on practical applications. Lecture 2 hours, studio 4 hours.	
70	CERAMICS	3 UNITS
	Prerequisite: Art 3, Art 31, or permission of professor.	
	An introduction to clay and glaze techniques through hand-built, wheel-thrown and sculptural techniques. Student involvement from raw material through fired product. Lecture 2 hours, 4 hours studio.	
80	BEGINNING PAINTING	3 UNITS
	Prerequisite: Art 3, Art 6 or permission of professor.	
	An introduction to the principles and techniques of oil, water color, easel and fresco painting. Lecture 2 hours, studio 4 hours.	
85	BEGINNING PHOTOGRAPHY	3 UNITS
	Prerequisite: Art 3 or permission of instructor.	
	An introduction to the use and function of the camera and black and white darkroom technique. Lecture 2 hours, studio and lab 4 hours.	
90	SCULPTURE	3 UNITS
	Prerequisite: Art 3, Art 31, or permission of professor.	
	An introduction to sculptural medias and techniques through wood, plaster, metal, plastic, clay, paper and stone. Student involvement from raw material to finished product. Lecture 2 hours, studio 4 hours.	

Aviation Technology

5	AIRFRAME AND POWER PLANT UPGRADE	
	A review of the total A & P program curriculum designed for the military aircraft mechanic who has 30 or more months experience. Upon completion of the 90 hours of lecture-discussion for 6 units of credit (3 units airframe, 3 units power plant) the student will be qualified to take FAA written, oral and practical examinations.	
11	AIRCRAFT MATERIALS AND PROCESSES	4 UNITS
	Exploration of the common as well as the newer and more sophisticated materials of the aviation industry to provide general foundation for practices and techniques which will be refined during the laboratory work involved in the Airframe and Powerplant Maintenance Program.	
12	APPLIED AERO MATH	3 UNITS
	A rapid review of high school algebra, plane geometry and arithmetic manipulations directly applicable to the Aviation Mechanic Technician's everyday problems.	

14	AERO PHYSICS	3 UNITS
A basic physics course with emphasis on electrical concepts, mechanical leverages and pressure problems, discussion and problems realistically oriented toward the common problems of the Aviation Mechanic Technician		
15	AERONAUTICS DRAFTING	4 UNITS
A course in basic drafting skills with emphasis on blueprint interpretation and sketching with considerable practice in tracing electrical circuits on schematic drawings.		
16	THEORY OF FLIGHT AND INSTRUMENTATION	4 UNITS
A study of the theory of flight as it relates to the maintenance technician with particular emphasis on the associated instrumentation in an aircraft		
17	SHOP MANAGEMENT PRINCIPLES	3 UNITS
A study of fundamental concepts of management with emphasis on handling the common problems that arise with workers, including extensive examination of union grievances and solutions		
20	BASIC AIRCRAFT POWERPLANTS	11 UNITS
An introductory course in powerplants of various kinds specialized for aircraft use, a foundation for A1-30		
21	AIRCRAFT PROPELLER SYSTEMS	3 UNITS
A study of the complex nature of sophisticated propeller systems used on modern aircraft, including propellers used with turbine power		
30	ADVANCED AIRCRAFT POWERPLANTS	11 UNITS
A continuation of A1-20 with emphasis on the more complex and modern powerplants, including in-depth study of radial engines and turbine engines (jets). Stress on trouble-shooting and actual repairs		
40	BASIC AIRFRAME STRUCTURES	5 UNITS
An introductory course in actual structures and repair procedures applicable to same		
42	AIRCRAFT ELECTRICAL SYSTEMS	4 UNITS
A study of the entire electrical system, as well as the component parts, with trouble-shooting and repair as objectives		
50	ADVANCED AIRFRAME STRUCTURES	6 UNITS
A continuation of A1-40 with emphasis on more sophisticated repairs to larger aircraft primarily in the laboratory.		
52	AIRCRAFT ASSEMBLY, RIGGING AND INSPECTION	7 UNITS
A course in which the student has the opportunity to perform final work and inspection on an aircraft prior to its return to service after receiving required maintenance, with stress on FAA regulations.		
53	HYDRAULIC AND PNEUMATIC SYSTEMS	5 UNITS
A study of aircraft hydraulic and pneumatic systems in depth with laboratory experience oriented toward trouble-shooting and repair.		

NOTE: All courses offered in Aviation Maintenance will be completed during the 50-week program. Sequencing will be determined by department.

80g-80f	BASIC FLIGHT The student will solo the aircraft, learn to navigate cross-country both by pilotage and radio, gain proficiency in all maneuvers required for a private license, learn to read and understand weather reports and learn the Federal Aviation Regulations pertaining to the private license.	3-3 UNITS
82g-82f	INTERMEDIATE FLIGHT The student will become familiar with the commercial maneuvers and with radio navigation. The student will complete the cross-country hours required for a commercial license.	3-3 UNITS
84g-84f	ADVANCED FLIGHT The student will become proficient in all the commercial maneuvers and in controlling the aircraft solely by reference to instruments. He will be introduced to instrument procedures.	3-3 UNITS
86g-86f	INSTRUMENT TRAINING The student will become proficient in ILS, VOR, DME, ADF and radar approaches and cross-country navigation by reference to instruments, and in air traffic control procedures and emergency procedures.	3-3 UNITS
88g-88f	MULTI-ENGINE The student will become proficient in piloting multi-engine aircraft, learning all the emergency procedures pertaining to a multi-engine airplane and the problems and advantages of operating a multi-engine aircraft.	1-2 UNITS
89g-89f	FLIGHT INSTRUCTOR Development of teaching skills necessary to become a Certified Flight Instructor, including a working knowledge of pertinent F.A.R.'s gained by study in depth and repeated use.	3-2 UNITS
90a-90b	AIRLINE TRANSPORT RATING PROGRAM Designed to meet minimum requirement for an Airline Transport Rating as set forth in Federal Aviation Regulations.	9-6 UNITS
92g-92f	INSTRUMENT FLIGHT INSTRUCTOR Prerequisites: Successful completion of AT80, 82, 84, 86 and 89 or permission of the Chief Flight Instructor. Development of teaching skills and knowledge required of a Certified Instrument Flight Instructor. Ground School 1 unit, Flight 2 units.	1-2 UNITS

99	INDIVIDUAL STUDIES	1-4 UNITS
	Prerequisite: Approval of Division Chairman and Professor.	
	The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.	
Biology		
X	DEVELOPMENTAL SCIENCE	3 UNITS
	Prerequisite: None.	
	A survey science course for the non-science oriented student. The main theme of aspects of human diseases includes areas of biology, chemistry, mathematics and physics with laboratory experiences using science equipment.	
1	GENERAL BIOLOGY	4 UNITS
	Prerequisite: None.	
	Principles and concepts of biology with reference to organization and function of cells, flowering plants and man. Not open to majors in the Biological Sciences or the pre-professional curricula. Lecture 3 hours, Laboratory 3 hours.	
2	GENERAL BIOLOGY	4 UNITS
	Prerequisite: None.	
	Major principles of biology as illustrated by the animal and plant kingdoms, inheritance, speciation and ecology. Not open to majors in the Biological Sciences or the pre-professional curricula. Lecture 3 hours, Laboratory 3 hours.	
20	MICROBIOLOGY	4 UNITS
	Prerequisite: Completion of a semester of a college biological science.	
	A survey of microbe life and fundamental biological peculiarities. The characteristics of bacteria as prototypes of all microorganisms; characteristics and importance of microorganisms other than bacteria; control of microorganisms; microorganisms and disease; and other aspects of applied microbiology. Lecture 3 hours, Laboratory 3 hours.	
34	GENERAL GENETICS	3 UNITS
	Prerequisite: Completion of a semester of a college biological science.	
	Fundamental concepts and methods of analysis of plant and animal inheritance. Includes basic Mendelism, elementary probability, chromosome behavior, population and biochemical genetics. Laboratory 3 hours.	
99	INDIVIDUAL STUDIES	1-4 UNITS
	Prerequisite: Approval of the Division Chairman and Professor.	
	The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.	

Botany

1	GENERAL BOTANY	4 UNITS
	Prerequisite: Completion of a semester of high school or college chemistry or college biological science. Basic course in botany for students of biological science or agriculture.	
	An introduction to the principles of botany as illustrated by flowering plants	

- 23 PERSONNEL MANAGEMENT 3 UNITS**
Prerequisite: None.
 This course is a study of policies and techniques pertaining to personnel management and human relations as applied to employee selection, placement, training, motivation, promotion and supervision. Employer and employee social responsibilities are also introduced and studied.
- 25 OCCUPATIONAL SAFETY AND HEALTH ACT 3 UNITS**
OF 1971 (OSHA '71)
Prerequisite: None.
 The student will be able to demonstrate his understanding of the comprehensive, single source safety and health standards as contained within the Act. He will be able to select the standards for individual situations and apply them.
- 31 BUSINESS LAW 3 UNITS**
Prerequisite: None.
 The basic legal principles involved in laws of contracts, negotiable instruments, property and business organization are presented to assist in meeting the daily problems of management, ownership or employment in business.
- 40 REAL ESTATE 3 UNITS**
Prerequisite: None.
 This is an instructional program specifically designed to meet the State Real Estate Board's educational requirements for the licensing of salesmen and the certification requirements of the National Association of Real Estate Boards.
- 51 INSURANCE 3 UNITS**
Prerequisite: None.
 Principles and practices of insurance, including coverage available, buying methods, procedures for settling claims, analysis of contracts and forms of insurance purchased by the average individual are presented.
- 52 PRINCIPLES OF MANAGEMENT 3 UNITS**
Prerequisite: None.
 This course presents managerial principles with emphasis on planning, organizing, motivating and controlling for effective business decisions.
- 53 SALESMANSHIP 3 UNITS**
Prerequisite: None.
 Career opportunities in sales work, practical and psychological factors in selling, development of a desirable sales personality and correct techniques in conducting sales campaigns are presented. Members of the class will engage in practical sales demonstrations.
- 55 PRINCIPLES OF MARKETING 3 UNITS**
Prerequisite: None.
 This course presents marketing principles involved in the distribution of goods and services from the producer to the ultimate consumer, including functions of wholesaling, retailing, direct selling, risk-taking, storage, etc.

- 14 BILINGUAL TYPEWRITING 3 UNITS**
Prerequisite: Spanish proficiency at the second-year level, finished or currently enrolled in Business 7, or permission of the instructor. It is also recommended that the student have completed or enrolled in Spanish 75a.
 This course is for students interested in qualifying as a bilingual (English and Spanish) typist. Through individualized instruction the student will demonstrate ability to type mailable copy in both English and Spanish.
- 16 NOTEHAND 3 UNITS**
Prerequisite: None.
 The student will study a simple and easy-to-use adaption of Gregg Shorthand expressly designed for notemaking. The fundamentals of good notemaking, both theory and practice, will be stressed for personal use.
- 17 RECORDS MANAGEMENT 3 UNITS**
Prerequisites: Business 6 or equivalent; minimum grade of C in English.
 The principles and procedures of filing and actual practice in the basic systems of filing will be taught. The course deals with the management of established filing systems, transferring and disposing of records.
- 18 CALCULATING MACHINES 2 UNITS**
Prerequisites: Business math or permission of the instructor.
 The student will develop fundamental skills in operating rotary calculators, 10-key and printing calculators and electronic computation equipment.
- 19 BUSINESS STATISTICS 3 UNITS**
Prerequisites: Business 4, college or high school algebra, or permission of the instructor.
 This course stresses introductory topics of business statistics such as data presentation, probability, probability distributions, sampling distributions, elementary decision-making, estimation of population means and testing of hypotheses.
- 20 BUSINESS STATISTICS 3 UNITS**
Prerequisite: Business 19.
 This course is a continuation of Business 19 and will stress such topics as testing and estimation, statistical inference, variance analysis, regression and correlation and time series and index number application.
- 21 TAXATION PRINCIPLES AND PROCEDURES 3 UNITS**
Prerequisite: Business 1a or permission of the instructor.
 Tax laws, accounting procedures and preparation of required United States and Arizona Income Tax returns as they apply to individuals and businesses is presented. This course is intended for those who do not anticipate specialization beyond the junior college level, but is a college-level course and may, in some cases, be accepted for transfer.
- 22 ADVANCED TRANSCRIPTION 3 UNITS**
Prerequisites: Business 11 and 12 or presently enrolled in Business 12, two years of shorthand in high school with a minimum of 100 words a minute, or permission of the instructor.
 This fourth semester course in shorthand and transcription stresses high quality techniques and skills. A shorthand speed of 110 words a minute is required for successful completion of the course. Shorthand and typing are integrated with English skills in order to prepare the student for office standards.

tabulations, forms and manuscripts through individualized units of work. Students who have had typing in high school should enroll in Business 5 or 6.

7 INTERMEDIATE TYPING 3 UNITS

Prerequisite: Business 6, high school typing, the ability to type 35 wpm, or permission of the instructor.

The student will improve basic typewriting skills, techniques, and accuracy through problem typing, as well as demonstrating an increase in words per minute in timed writings. Production work will include individualized units of work dealing with all types and styles of letters and business forms.

8 ADVANCED TYPING 3 UNITS

Prerequisite: Business 7, ability to type 55 wpm, or permission of the instructor.

The student will gain additional typewriting skills in special, more demanding problems in business letters, manuscripts, tabulation and various business forms through the use of individualized units of work. In addition, the student will be introduced to actual business situations and demands faced by office typists. The student should successfully demonstrate an improvement in speed as well.

9 SURVEY OF AMERICAN BUSINESS 3 UNITS

Prerequisite: None.

The course presents the fundamental characteristics and functions of modern business, with emphasis on possible career opportunities.

10 ELEMENTARY SHORTHAND 3 UNITS

Prerequisite: Business 6 or equivalent, minimum grade of C in English, or permission of the instructor.

The student will undertake an intensive study of Gregg Shorthand theory. Students are expected to attain a minimum speed of 60 wpm on new material. Students with a year of high school shorthand should enroll in Business 11 or 13.

11 INTERMEDIATE SHORTHAND 3 UNITS

Prerequisite: One year of shorthand in high school, Business 10 with a grade of C or better, or permission of the instructor.

The student will improve shorthand skills and should develop dictation speed to a minimum of 80 words a minute on new material.

12 ADVANCED SHORTHAND 3 UNITS

Prerequisite: Two years of shorthand in high school, Business 11 with a grade of C or better, or permission of the instructor.

This course emphasizes speed dictation, vocabulary development and mailability of transcripts. Students are expected to attain a minimum speed of 100 words a minute on new material.

13 SHORTHAND REVIEW 1 UNIT

Prerequisite: Previous shorthand experience, minimum grade of C in English, or permission of the instructor.

Through the reinforcement of previous ability to write shorthand and through the review of principles and theory of Gregg Shorthand, students are expected to attain a minimum speed of 60 words a minute on new material.

with emphasis on anatomy and physiology. Lecture 3 hours. Laboratory 3 hours.

- 99 INDIVIDUAL STUDIES 1-4 UNITS**
Prerequisite: Approval of Division Chairman and Professor.
The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit

Business

- 1a PRINCIPLES OF ACCOUNTING 3 UNITS**
Prerequisite: None.
This is an introductory course in gathering, recording and using the financial data of a business. The accounting cycle, debits and credits, classification of accounts, recording of transaction and preparation of financial statements for single proprietorships, partnerships and corporations are stressed.
- 1b PRINCIPLES OF ACCOUNTING 3 UNITS**
Prerequisite: Business 1a.
Business 1b is a continuation of Business 1a with increased emphasis placed upon partnership and corporation accounting. Capital structure and interpretation and usage of accounting data for managerial decision-making purposes are stressed.
- 2a INTERMEDIATE ACCOUNTING 3 UNITS**
Prerequisite: Business 1b.
This is a comprehensive course in gathering, recording and using the financial data of a business. The accounting treatment of assets, including related principles of profit determination, is stressed.
- 2b INTERMEDIATE ACCOUNTING 3 UNITS**
Prerequisite: Business 2a.
Business 2b is a continuation of Business 2a. The accounting treatment of liabilities and capital accounts and the analysis of financial statements are stressed.
- 4 BUSINESS MATH (Programmed) 3 UNITS**
Prerequisite: None.
The fundamentals of business mathematics and ability to communicate with the "number language" of today's business world is stressed. The programmed approach permits students to advance at their own rate, to realize higher achievement levels and to gain a complete and thorough mastery of the subject matter.
- 5 TYPING REVIEW 1 UNIT**
Prerequisite: None.
Through individualized instruction, case problems and production work, the student will review skills and mechanical functions of the typewriter, letter format, tabulation, form and manuscripts. This course begins at midterm
- 6 ELEMENTARY TYPEWRITING 3 UNITS**
Prerequisite: None.
The student will develop basic typewriting skills and techniques. In addition to learning the keyboard, the student will be introduced to letter styles.

- 56 BOOKKEEPING AND FINANCIAL MANAGEMENT 3 UNITS**
Prerequisite: None.
 The basic accounting cycle; business transactions, journalizing, posting and financial statements, will be studied. Additional areas of study will be cash control and banking, payroll preparation, credit and receivables control, inventory control, sources of funds, budgeting and ratio analysis.
- 58 HOTEL-MOTEL MANAGEMENT 2-15 UNITS**
Prerequisite: Permission of instructor.
 This is a series of correspondence courses from the Educational Institute of the American Hotel and Motel Association.
- 60 LABOR RELATIONS 3 UNITS**
Prerequisite: Business 23 or Business 52 or permission of instructor.
 A presentation of the history of the labor movement in the United States; union structure, the collective bargaining process, and a review of labor legislation and a summation of current and future problems and trends in the labor field.
- 61 GENERAL OFFICE PROCEDURES 3 UNITS**
Prerequisite: Business 6, or high school typing, or permission of the instructor.
 The student will learn and experience general office procedures including duties of office workers, staff members and management. Personnel qualifications, systems of filing, preparation of reports, handling mail, using the telephone, and operations of duplicating and calculating machines most commonly found in business offices will be stressed. Case problems, projects and actual machine operations will be observed and evaluated to determine student development.
- 62 CLERICAL PRACTICE (GENERAL, MEDICAL, 3 UNITS
 LEGAL & BILINGUAL)**
Prerequisite: Business 61 or permission of the instructor.
 This course will include actual practice in handling office mail, job applications and interviews, filing and telephone techniques for each individual occupational option. Transcription equipment machines, executive typewriters and actual practice in using duplicating equipment will be stressed. Students will work with practice sets in specialized areas. This course will be individualized for medical, legal, bilingual and general business students.
- 64 SECRETARIAL OFFICE PROCEDURES 3 UNITS**
Prerequisites: Business 8, 12 and 17.
 This course deals with office organization and layout, workflow, procedures, standards, personnel policies and supervision procedures through progressive job situations.
- 66 BUSINESS COMMUNICATIONS 3 UNITS**
Prerequisites: English 1, Business 6.
 Development of skills and techniques used in communicating facts and ideas in business is the objective of this class.

- 68 SECRETARIAL PRACTICE (GENERAL, MEDICAL, LEGAL & BILINGUAL) 3 UNITS**
Prerequisites: General: Business 64 or permission of the instructor; Medical: Business 64 and ZO20a; Legal: Business 31 and Business 64; Bilingual: Business 14 and Business 64.
 This course will include actual practice in using equipment for the transcription of written, verbal or recorded ideas into typewritten form. Students will obtain proficiency on transcription equipment machines, executive typewriters and duplicating equipment. This course also emphasizes office-style dictation, business letters, technical articles, filing, telephone techniques, mailing and personal grooming for each individualized occupational option. Students will work with practice sets in specialized areas -- general, medical, legal and bilingual.
- 70 KEYPUNCH 2 UNITS**
Prerequisites: Business 6 or equivalent, or permission of the instructor.
 This course deals with developing proficiency on the keypunch machine to job-entry level.
- 72 INTRODUCTION TO DATA PROCESSING 3 UNITS**
Prerequisite: None.
 An overview of the data processing field, general practices and aims of business, data processing systems and terminology are presented. Topics covered include data collection, report preparation, functions of data processing units, flow charts, system design concepts and basic computer programming. Students receive actual practice in writing computer programs.
- 73 PROGRAMMING - COBOL LEVEL I 3 UNITS**
Prerequisite: Business 72 or permission of the instructor.
 A detailed study of the COBOL programming language is presented and the student becomes familiar with the organization of a COBOL program. Topics covered include computer organization, data structure, program procedures, input-output and operator considerations. A minimum of two operational programs is required from each student.
- 74 PROGRAMMING - COBOL LEVEL II 3 UNITS**
Prerequisite: Business 73 or permission of the instructor.
 This course is an advanced study of the COBOL language. Topics covered include such advanced techniques in the design of a computer program as control and validation methods using magnetic devices, table organization and random and sequential file processing. Students will be required to construct and successfully write several programs using advanced techniques.
- 81 MEDICAL TERMINOLOGY 3 UNITS**
Prerequisite: Zoology 20a or permission of the instructor.
 Terms frequently encountered in medical records are learned through the study of prefixes, suffixes and the principles for combining the two to make a compound; followed by a comprehensive study of a list of diagnostic, operative, symptomatological and drug terms and abbreviations.

- 82 MANAGEMENT INFORMATION SYSTEMS 3 UNITS**
Prerequisite: Business 72, comparable work experience, or permission of the instructor.
 This course is a study of the management sciences involved in meeting the informational needs of business, industry, governmental and educational agencies. A study of the skill and knowledge of man versus machine to develop and design data processing systems to accomplish these needs is made. A problem-oriented approach will be utilized to assist the student in this course.
- 93 SEMINAR-TRENDS AND PRACTICES IN MARKETING AND MANAGEMENT 3 UNITS**
Prerequisites: Business 53, 55 and 1a or 56; or permission of the instructor.
 This course is designed to dovetail theory and practice. Problems encountered by students in their employment will be discussed and current readings in marketing and management will be assigned.
- 95 INTERNSHIP AS MEDICAL SECRETARY 16 UNITS**
Prerequisite: Business 68 and 81.
 This course is designed to dovetail theory and practice with experience in a medical record department or similar facility.
- 99 INDIVIDUAL STUDIES 1-4 UNITS**
Prerequisite: Approval of the Department Head and the instructor.
 Solving a problem or completing a project under the direction of a faculty member is required. This course may be repeated for credit.

Chemistry

- 1 INTRODUCTION TO CHEMISTRY 4 UNITS**
Prerequisite: None.
 Elements of general chemistry. Adapted to the needs of those students who have not had high school chemistry. Lecture 3 hours, Laboratory 3 hours.
- 2a GENERAL CHEMISTRY 4 UNITS**
Prerequisite: One year of high school chemistry, Chemistry 1 or Math 11.
 Introduction to the general principles of chemistry with emphasis on quantitative relationships. Chemical bonding and properties of matter are related wherever possible to present concepts of atomic structure. Redox principles and chemical equilibria are introduced. Lecture 3 hours, Laboratory 3 hours.
- 2b GENERAL CHEMISTRY 4 UNITS**
Prerequisite: Chemistry 2a.
 Continuation of Chemistry 2a with emphasis on kinetics and equilibria along with a study of the elements through group relationships on periodic tables. Aspects of organic and biochemistry are included. Lecture 3 hours, Laboratory 3 hours.
- 10 BASIC SCIENCE: HEALTH AND MEDICAL CONCEPTS 4 UNITS**
Prerequisite: None.
 A one-semester laboratory course dealing with a number of basic science concepts but emphasizing chemical principles important to the understanding of

human biological functions and related medical aspects. Adapted to the needs of students in Nursing and Health-related fields. Lecture 3 hours, Laboratory 3 hours.

30 ANALYTICAL CHEMISTRY 4 UNITS

Prerequisites: Chemistry 2b.

Principles of quantitative chemical analysis including theory and practice of separation processes and analytical determinations involving gravimetric, volumetric, colorimetric and electroanalytical procedures. Lecture 2 hours, Laboratory 6 hours.

40a-40b ORGANIC CHEMISTRY 4-4 UNITS

Prerequisite: Chemistry 2b.

General principles of organic chemistry; laboratory preparation of organic compounds. Lecture 3 hours, Laboratory 3 hours.

99 INDIVIDUAL STUDIES 1-4 UNITS

Prerequisites: Approval of Division Chairman and professor.

The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit

Cooperative Education

10 INTERNSHIP IN COOPERATIVE EDUCATION 1-12 UNITS

Prerequisite: Prior approval of Cooperative Education Coordinator.

Student should enroll concurrently in Coop Ed 20 unless excused by coordinator. Internship credit is provided in career areas, such as Manufacturing, Construction, Marketing, Business and Office, Teacher-Aide, Fine Arts and Humanities, Public Service, Social work and Police Science.

20 SEMINAR IN COOPERATIVE EDUCATION 1-4 UNITS

Prerequisite: Permission of Coop. Ed. Coordinator. Student should enroll concurrently in Coop. Ed. 10 unless excused by coordinator.

Basic processes and concepts of the world of work: Job application, job responsibilities, human relations, career areas, and supervisory development will be discussed and explored.

Developmental Program 1-12 UNITS

The Developmental Program attempts to provide the basic background necessary for success in college. Reading, notetaking and test-taking skills are emphasized. Students are advised about possible careers and graduation requirements. Field trips serve as a liaison between classroom experiences and the real world. Courses in the program include History 1S, Science X, Reading Y, Math 2X, Speech 2, Psychology 1, Humanities 1, Composition 1. (See individual catalog descriptions.)

Interested students should contact the college before the beginning of the fall or spring semesters

Drafting Technology

- 11 BLUEPRINT INTERPRETATION & BASIC DRAFTING 4 UNITS**
Prerequisite: None.
A beginning course in the basic elements involved with blueprint interpretation and drafting. The course is designed to make the individual very proficient in the reading and interpretation of blueprints and also have a broad general knowledge of drafting and sketching practices as related to mechanical and architectural requirements. Two lectures, 6 hours laboratory.
- 12 TECHNICAL GRAPHICS I 3 UNITS**
Prerequisite: None.
Emphasis on orthographic and axonometric projection, geometric forms, graphs, basic dimensioning and elements of descriptive geometry. Two lectures, 4 hours laboratory.
- 20 TECHNICAL GRAPHICS II 3 UNITS**
Prerequisite: DT 12.
Study of auxiliary and oblique surfaces, intersections, detailing standards, fasteners, materials and dimensioning. Elements of descriptive geometry are stressed. Two lectures, 6 hours laboratory.
- 24 SPATIAL RELATIONSHIPS 3 UNITS**
Prerequisite: DT 12.
Solutions of points, lines and planes, single curved, double-curved and warped surfaces. Emphasis upon mechanical, civil and mining engineering applications. Two lectures, 4 hours laboratory.
- 31 DRAFTING FOR ELECTRONICS 3 UNITS**
Prerequisite: DT 12 or concurrent with.
Concentration on the developmental skill in mechanical drafting as it applies to electricity and electronics. Demonstration of the ability to delineate electronic component symbols, block diagrams, wiring diagrams, schematics and miniaturized circuitry. Two lectures, 4 hours laboratory.
- 36 DRAFTING FOR MANUFACTURING 4 UNITS**
Prerequisite: DT 12 and GT 1.
A study of fabrication procedures, machine elements, and the influence of manufacturing on design. Development of skills in precision dimensioning and the delineation of complex detail and assembly drawings. Two lectures, 6 hours laboratory.
- 46 CONSTRUCTION DRAFTING 4 UNITS**
Prerequisite: DT 12 and GT 1.
Principles and applications of architectural and structural details as they apply to the residential and structural building industry. Two lectures, 6 hours laboratory.
- 49 TOPOGRAPHICAL DESIGN AND DRAFTING 4 UNITS**
Prerequisites: DT 12 and GT 2.
Topographical mapping, highway design and subdivision design are correlated with basic surveying from a design standpoint. Land parcels, profiling, contouring, sectioning, area calculations, horizontal curve analysis and vertical

curve analysis are emphasized with actual in-the-field use of surveying equipment. Two lectures, 6 hours laboratory.

50 TOOL DESIGN 4 UNITS

Prerequisite: DT 24 and GT 2.

An introduction to the philosophy of tooling as it is used in the economical manufacturing of industrial products. A study is made of standardized tooling components and materials through the use of manufacturer's catalogs. An introduction to the fields of elementary jigs and fixture design, gage design and an introduction to basic punch and die design. Presents the fundamentals in these specialized design areas. Elements of descriptive geometry, technical math, and material and processes of industry are used in solving design problems. Two lecture - 6 hours laboratory.

99 INDIVIDUAL STUDIES 1-4 UNITS

Prerequisite: Approval of Division Chairman and Professor.

The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Drama

3 INTRODUCTION TO THEATER 3 UNITS

Prerequisite: None.

A study of the history and tradition of western theater with analysis and discussion of representative drama from classical to contemporary theater. Lecture 3 hours.

10 THEATER WORKSHOP 1 UNIT

Prerequisite: Permission of professor (audition).

Actual participation in a college dramatic production either in an acting or a production role. No student will be awarded more than FOUR such credits.

Economics

1 PRINCIPLES OF ECONOMICS 3 UNITS

Prerequisite: None.

This course is a macro-economic presentation of the fundamental characteristics of American capitalism and includes the areas of economic analysis, economic theories, and practical application of theory to current economic problems.

2 PRINCIPLES OF ECONOMICS 3 UNITS

Prerequisite: Economics 1.

This course is a micro-economic presentation of price theory for product market models, agricultural economics, monopolistic competition, distribution of income, labor economics and problems of poverty and insecurity. The public sector and taxation, the international economy and gold, and the current balance of payment problems are also presented.

11 ECONOMICS IN AMERICAN AGRICULTURE 3 UNITS
Prerequisite: None.
 The student will gain an understanding of economic principles governing the production of agriculture including the principles of supply and demand, pricing, investing, measuring and consuming in the economy. Theories and practical applications to current economic problems will be emphasized.

99 INDIVIDUAL STUDIES 1-4 UNITS
Prerequisite: Approval of the department head and the instructor.
 Solving a problem or completing a project under the direction of a faculty member is required. This course may be repeated for credit.

Education

11 INTRODUCTION TO EDUCATION 3 UNITS
Prerequisite: Sophomore standing or permission of Professor.
 The significance of our educational institutions in the development of our society; an introduction to the cultural and social influences on educational theory and practice. Lecture 3 hours.

Electronics Technology

1 ELECTRONICS FOUNDATIONS 3 UNITS
Prerequisite: Concurrent enrollment in Tech Math or equivalent.
 A general overview of basic electronic principles. This course will cover the general principles of DC and AC circuits. Impedence, resonance and power will be discussed without going into deep mathematical derivations. Various amplifiers, transistors, diodes and bridge circuits will also be introduced to give the student a general concept of the field of electronics.

2a INTRODUCTION TO DC CIRCUITS 3 UNITS
Prerequisite: ET 10 or equivalent (ET 10 may be taken concurrently).
 The analysis of direct current resistive circuits, emphasizing Ohm's law, Kirchhoff's laws, Thevenin's, Norton's and superposition theorems.

2b INTRODUCTION TO AC CIRCUITS 4 UNITS
Prerequisite: ET 2a (ET 2a may be taken concurrently).
 An introduction to alternating current passive circuits, and the application of trigonometry and vectors to circuit solutions.

10 MATHEMATICS FOR ELECTRONICS TECHNICIANS 3 UNITS
Prerequisite: One year of high school algebra or permission of Professor.
 A review of arithmetic and the study of algebraic principles necessary to analyze electronics circuitry and provide a firm background for advanced studies. Fractions, decimals, fundamental concepts of algebra, scientific notation, the slide rule, graphing, the trigonometric functions, linear equations and the solution of DC electric currents presented.

20 ADVANCED MATHEMATICS FOR ELECTRONICS 3 UNITS
Prerequisite: ET 10 or equivalent.
 Study of basic trigonometric relations applied to electronics with emphasis on network problems and analysis of alternating current circuits.

22	SEMICONDUCTORS AND TRANSISTORS Prerequisite: ET 1, ET 10. A comprehensive study of semiconductor devices, stressing the ideal transistor approach. Study of semiconductor physics, the P-N junction diode, transistor configurations, bias arrangements, temperature effects and frequency response. Laboratory work, closely associated with lectures, is designed to illustrate the principles of semiconductors.	4 UNITS
25	ELECTRONIC CIRCUITS AND SYSTEMS Prerequisite: ET 10, concurrent enrollment in ET 20 or equivalent. Study of rectifier circuits and filters, audio, video and R.F. amplifiers. Use of theoretical concepts for practical application in these and oscillator, modulation and demodulation circuits.	5 UNITS
31	PULSE CIRCUITS Prerequisite: ET 22. A study of waveforms, networks, passive pulse circuitry, transistor switching, non-linear waveshaping, gating and multi-vibrators. The laboratory work illustrates the principles covered in the lectures.	5 UNITS
33	DIGITAL CIRCUITS AND SYSTEMS Prerequisite: ET 31. A study of logic and digital circuits common to computers and other areas of digital electronics. Emphasis on binary and octal numbers, codes, Boolean Algebra, logic circuits, counters, digital clocks, computing circuits and storage devices. Application of digital circuits and systems studied in the laboratory.	4 UNITS
40a	RADIO COMMUNICATIONS Prerequisite: None. Study and analysis of international and U.S. laws and FCC rules and regulations required to obtain a 3rd class FCC license. Typical questions will be studied and analyzed to insure clear understanding of the laws and their background. The student will be introduced to the basic technical knowledge required to further his career and obtain a 2nd class FCC license.	3 UNITS
40b	RADIO COMMUNICATIONS Prerequisite: Background in basic electronics or ET 40a. Study and analysis of requirements to obtain a second class FCC radio telephone license. Theory and typical questions will be studied to prepare students for the second class FCC radio-telephone examination.	3 UNITS
43	MODERN ELECTRONIC DEVICES Prerequisite: ET 22. A study of the characteristics of operational amplifiers, applications and analysis of practical op amp circuits, photoconductive and photovoltaic devices, unijunction transistors, silicon-controlled rectifiers and selected material covering other electronic devices.	4 UNITS
45	COMMUNICATION ELECTRONICS I Prerequisite: ET 20 and ET 22 (ET 20 may be taken concurrently). Resonant circuits, coupled circuits, voltage and power amplifiers and oscillators will be studied and analyzed in this course. Stress on practical application and problem-solving.	4 UNITS

46	AVIONICS I 4 UNITS Prerequisites: ET 22, ET 25, and concurrent enrollment in ET 45. Analysis and troubleshooting of aircraft receivers and transmitters. The student will have the opportunity to apply basic theoretical concepts to practical circuits and complex electronic systems. Emphasis is placed on schematic diagram reading and the use of industrial test equipment in systems analysis, troubleshooting and restoration of communication avionics equipment.
47	COMMUNICATION ELECTRONICS II 4 UNITS Prerequisite: ET 45. A continuation of Communication Electronics I, including AM receivers, frequency modulation, transmission lines, antennas and propagation. In the laboratory, emphasis on the use of electronic test equipment in the analysis and adjustment of receivers.
60	ACTIVE CIRCUITS 4 UNITS Prerequisite: Permission of Instructor. Analysis and design of linear active circuits with emphasis on solid-state devices and circuits. Starting with a background of linear circuits, solid state components will be described in terms of characteristic curves. The h-parameter and hybrid pi model will be developed and used extensively. Small signal and large signal uncompensated amplifiers will be studied.
62	WAVE GENERATION AND SHAPING 3 UNITS Prerequisite: Permission of Instructor. Passive and active devices and circuit configuration used for generation and processing of pulse, digital and switching waveforms will be studied. Techniques and analysis of wave shaping circuits, logic gates, timing and sweep circuits, memory elements and oscillators will be emphasized. This course will familiarize the student with circuitry and signals used extensively in computers, control systems, digital instrumentation, pulse communications, radar, telemetry, television, and in many areas of experimental research.
English	
X	ENGLISH FUNDAMENTALS 3 UNITS An intensive review of grammar, spelling, vocabulary and other fundamentals, with emphasis on writing paragraphs and short themes. Cannot be transferred to a four-year institution. Lecture 3 hours.
1X,2X, 3X,4X	CONVERSATIONAL ENGLISH 3-3-3-UNITS Prerequisite: A desire to speak English clearly. Some proficiency in reading English is helpful. The class provides text and explanation; the language laboratory offers individual practice, recording and tutoring. Class recitation is individual and in concert according to its level of conversational proficiency. The language laboratory provides tape recordings of the text material, records of selected portions of the text and tapecards which allow immediate recording, listening and correcting of pronunciation. English 1X and 2X are NOT creditable toward AA degree or transferable. English 3X and 4X ARE creditable toward AA degree but are not transferable.

Y	READING FUNDAMENTALS Prerequisites: None. Development of optimum reading efficiency through units in college level vocabulary, comprehension and rate. Techniques include viewing timed tachomatic films with comprehension checks, reviewing word-attack skills, reference skills, paragraph organizational patterns and skimming-skanning techniques. Vocabulary checks and comprehension checks given weekly in addition to pre and post Nelson-Denny tests.	2-3 UNITS
2Y	INDIVIDUALIZED READING A programmed second semester of reading for students falling below the 51 percentile on the Nelson-Denny reading test, particularly bilingual or foreign students. Emphasis will be placed on growth of college vocabulary, reading rate above 300 wpm and advanced comprehension skills needed for college textbooks. Emphasis will be placed on individualized self-study in the IRC, in addition to reading lab work.	2 UNITS
Z	BASIC COMMUNICATIONS An introduction to verbal and non-verbal systems of communication: elementary speech, TV, radio, film, art, photography. Not transferrable to a 4-year institution.	3 UNITS
1	COMPOSITION Prerequisite: Placement by Communications Division. The student may also be required to take Reading Y, based on placement scores. The student writes approximately 5,000 words of expository prose, including the techniques of narration and description. Student is introduced to the methodology of writing documented papers.	3 UNITS
2	COMPOSITION Prerequisites: English 1 with a grade of C or better. The student may also be required to take English 6. A continuation of English 1. The student will write 5,000 words, emphasizing argumentative and persuasive techniques, and will demonstrate knowledge of research techniques. Some emphasis will be placed on critical and evaluative reading.	3 UNITS
3	ADVANCED COMPOSITION Prerequisite: English 2. Critical and evaluative writing and analysis of various literary genre: drama, poetry, short story and the novel. Credit for English 4 will not be granted if the student has taken English 3.	3 UNITS
4	INTRODUCTION TO LITERATURE Prerequisite: English 2 or permission of the instructor. A study of literary genre: drama, poetry, fiction, criticism. Emphasis on writing about literature. Credit for English 4 will not be granted if the student has taken English 3.	3 UNITS
5	ENGLISH FOR BILINGUAL AND FOREIGN STUDENTS Prerequisite: Permission of instructor. An intensive study of grammar, vocabulary and principles of expository writing for students whose native language is not English.	3 UNITS

- 6 CRITICAL EVALUATIVE READING 2 UNITS**
Prerequisites: 40th percentile on the placement test.
 Exercises in reading as an analytical, interpretive and evaluative process requiring the reader to make rational judgments about both the content and style of writing based upon valid and appropriate criteria. The emphasis of the course is upon non-fiction, magazines and newspapers wherein accurate word perception and skillful interpretation of language are important. Student recognition of satire, irony, propaganda devices and author's purpose is stressed as well as the formulation of accurate inferences, generalizations, assumptions and conclusions.
- 7 CREATIVE WRITING 3 UNITS**
Prerequisites: English 1 and permission of professor.
 A three hour lecture and workshop in creative writing with emphasis on composition of poetry, short story, essay and description.
- 8 WRITTEN COMMUNICATIONS AND REPORTS 3 UNITS**
Prerequisites: Counselor placement; Airframe and Powerplant students only.
 Development of the skills of effective written communication, with emphasis on the organization of factual materials. Special attention to the vocabulary used in the A & P program.
- 9 WRITTEN COMMUNICATIONS AND REPORTS 3 UNITS**
(Police Science Students Only)
Prerequisites: 5 units of English 1 and Reading Y or English 1 and 2. One year of practice in the organization and mechanics of written communications and one year of courses in Police Science.
 Concentrated practice in the form of police reports, including vocabulary study and exact observation of cases.
- 10 WRITTEN COMMUNICATIONS 3 UNITS**
(Nursing Students only)
Prerequisite: None.
 Development of optimum reading efficiency in the areas required by Associate Degree Nursing students. Intensive study of roots and vocabulary used in the health technologies. The development of study skills will be adapted to particular courses in the ADN program.
- 11 GRAMMAR, USAGE AND PUNCTUATION 3 UNITS**
 A general review of modern English punctuation, grammatical structure, diction and modern American English usage. Lecture 3 hours.
- 12 CHILDREN'S LITERATURE 3 UNITS**
Prerequisite: None.
 A survey of the most important works in Children's Literature.
- 16 STUDY OF WORLD LANGUAGES 3 UNITS**
Prerequisite: None.
 Designed to acquaint the student with material from which he will induce the phonological and grammatical processes that are common to a variety of languages. Students will be able to perform phonetic and grammatical analyses from a language corpus. Student will also learn information about the major language families of the world.

informed, balanced understanding of the current trends of environment degradation.

10 WILDERNESS LIVING 3 UNITS

Prerequisite: PE 33 or permission of instructor.

A study of man's relation to the wilderness through direct experience and through selected works of Thoreau, Muir, Leopold, and others. Students will learn how to use backpacking equipment and how to live in harmony with a wilderness environment. A minimum of four backpacks will be required. Students must furnish their own equipment. (Same as PE 43).

Fire Science Technology

1 INTRODUCTION TO FIRE SCIENCE 3 UNITS

Prerequisite: None.

A course designed to study the historical and scientific background of the Fire Protection Field. Its development in American History will be studied along with its expanding future role. Governmental, industrial, and private fire protection organizations will be examined. Modern methods in fire prevention and protection will be explored with students being introduced to the employment and promotional opportunities presently available in the Fire Protection Field.

6 FUNDAMENTALS OF FIRE PREVENTION 3 UNITS

Prerequisite: None.

A course designed to survey the basic principles of Fire Prevention with special emphasis being placed on the interpretation and enforcement of fire regulations. Hazards dealing with ordinary and special occupancies will be studied and supplemented with special problems and field trips.

10 FIRE OPERATIONS I 3 UNITS

Prerequisite: None.

A course developed to introduce to the student those operations and individual skills involved in the extinguishment of fire. Different areas of fire operations will be studied along with an actual hands-on approach to the use of different types of fire equipment.

11 FIRE OPERATIONS II 3 UNITS

Prerequisite: Fire Operations I.

A continuation of FIRE OPERATIONS I with additional emphasis placed on community fire defense systems, use of ropes, hoses, ladders and breathing apparatus in fire service. Problems in fire extinguishment, ventilation, salvage and overhaul will be reviewed utilizing classroom and field exercises.

French

1a, 1b ELEMENTARY FRENCH 4-4 UNITS

Prerequisite: 1a is a prerequisite for 1b.

A course for beginning students with stress on conversation, comprehension of the spoken language, pronunciation, grammar, reading skills and composition.

General Technology

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| 1 | TECHNICAL MATHEMATICS I
Prerequisite: One year of high school algebra and one year of Plane Geometry or permission of Professor.
A review of arithmetic and the study of algebraic principles, from an applied point of view necessary for the student to function in a technical employment situation and provide a firm background for advanced studies. Fractions, decimals, fundamental concepts of algebra, scientific notation, the slide rule, graphing and linear equations will be presented. | 3 UNITS |
| 2 | TECHNICAL MATHEMATICS II
Prerequisite: GT 1.
A comprehensive study of trigonometry as applied to electronics and drafting industrial situations with an introduction into calculus. | 3 UNITS |
| 5 | MANUFACTURING MATERIALS AND PROCESSES I
Prerequisite: None.
An understanding of present-day manufacturing processes is of extreme importance to students in Design Drafting Technology. This course is designed to provide a background of knowledge covering the various manufacturing methods employed in the hot and cold working of metals and non-metals, with the emphasis placed on their relationship to drafting and design. | 3 UNITS |
| 6 | MANUFACTURING MATERIALS AND PROCESSES II
Prerequisite: GT 5.
This course is designed to provide a background of knowledge covering the various types of machining processes and automated manufacturing techniques used in industry. The emphasis will be placed on the interrelationship of these processes with design and drafting. | 3 UNITS |

Geography

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| 1 | PHYSICAL GEOGRAPHY
Prerequisite: None.
An introduction to the various features of the earth's physical environment in which man lives, consisting of a study that includes the origin and development of landforms, the composition of the earth's crust, weather, climate, vegetation, soils and the mineral resources used by man. | 3 UNITS |
| 2 | CULTURAL GEOGRAPHY
Prerequisite: None.
A study of the culture regions of the world surveying the important world geographical characteristics, culture and problems of the world's major regions. | 3 UNITS |
| 4 | POLITICAL GEOGRAPHY
Prerequisite: None.
Political Geography will consist of a study of political phenomena (nation, country, state, empire, colony, enclave, exclave . . .) from place to place in conjunction with the variations created by physical features (mountains, rivers, oceans, shore line configurations, passes, valleys, swamps . . .) of the earth's | 3 UNITS |

landscape. Included in these phenomena will be the political forces and ideas that generate these forces.

- 5 ECONOMIC GEOGRAPHY 3 UNITS**
Prerequisite: None.
A study of the world's economies: subsistence economic activities, commercial gathering of animals and plants, commercial bioculture, mining, manufacturing, transportation and trade, and tertiary economic activities. This course centers around these basic economies and their relationship to the natural resources of the area involved and the relationship of the physical features — climate, soil, vegetation, and topography — to carrying out these activities.
- 11 GEOGRAPHY OF MEXICO AND CENTRAL AMERICA 3 UNITS**
Prerequisite: None.
An introductory study of the culture, environment and economic activities of Mexico, the Central American Republics and the Caribbean Islands.
- 12 GEOGRAPHY OF SOUTH AMERICA 3 UNITS**
Prerequisite: None.
An introduction to the culture and economic activities of the peoples and nations of South America; with emphasis on the physical patterns, urban growth, industry, agriculture and mineral resources.
- 99 INDIVIDUAL STUDIES 1-4 UNITS**
Prerequisite: Approval of the Division Chairman and Professor.
The student with demonstrated academic ability will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Geology

- 1 INTRODUCTION TO GEOLOGY 4 UNITS**
Prerequisite: None.
Current theories on earth processes, the applications of these processes to understanding man's physical environment and the problems that remain to be solved. Lecture 3 hours, Laboratory 3 hours.
- 51 PHYSICAL GEOLOGY 4 UNITS**
Prerequisite: None.
Principles of physical geology for students who plan to major in geology, hydrology, engineering and agriculture. Lecture 3 hours, Laboratory 3 hours.
- 99 INDIVIDUAL STUDIES 1-4 UNITS**
Prerequisites: Approval of Division Chairman and Professor.
The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

German

- 1a-1b ELEMENTARY GERMAN 3 UNITS**
Prerequisite: 1a is a prerequisite for 1b.
A study of grammar, reading skills, comprehension of the spoken language.

pronunciation, composition, and conversation for those students with no previous training in German or with limited experience in the language.

Group Dynamics

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| 1 | GROUP DYNAMICS
Prerequisite: None.
Development of self-understanding through group interaction and testing under the direction of a member of the counseling staff. | 1 UNIT |
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Health

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| 42 | PERSONAL HEALTH
Prerequisite: None.
A survey of body functions in health and disease; common diseases and their early symptoms, consideration of personal, physical and mental health; effect of exercise and fatigue, selection of proper foods, marriage and parenthood. | 3 UNITS |
| 70 | FIRST AID AND SAFETY
Prerequisite: None.
The standard and advanced Red Cross course in first aid with emphasis on practical application of theory in bandaging, litter bearing, artificial respiration and other types of emergency care in case of sudden accident or illness. | 2 UNITS |
| 71 | SCHOOL AND COMMUNITY HEALTH
Prerequisite: Sophomore standing or permission of professor.
A study of the basic plan of the school health program: health services, health instruction and healthful school environment. Analysis of the role of the teacher in relation to the school health program and the community health program. Taught spring semester only. | 3 UNITS |

Health Technologies

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| 50 | INTRODUCTION TO HEALTH CARE
Prerequisite: None.
This introductory course provides the student opportunities to acquire knowledge of health science fundamentals and explore health care delivery concepts and applications common to all health workers. The course introduces health as an individual, community and world service and relates these concepts to health careers and delivery. Required by allied health programs through SARAHELP. | 3 UNITS |
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Associate Degree Nurse

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| 56 | NURSING I
Prerequisite: Admission to the ADN program.
An introduction to comprehensive patient-centered nursing utilizing a conceptual framework of basic human needs, major health problems and the nursing process. The knowledge and skills necessary for carrying out nursing care measures and therapeutic techniques are presented through lecture demonstration and supervised clinical practice. Legal and ethical aspects of nursing practice will be studied. Lecture 6 hours, Laboratory 12 clock hours | 10 UNITS |
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- 57 NURSING II 11 UNITS**
Prerequisite: HT 56, ZO 20A.
This course is built upon the foundations presented in Nursing I. Emphasis is placed on identifying the needs of the physically and mentally ill adult or child and planning for patient care. The student is assigned total patient care of a few selected patients under the direction of the clinical instructor. Pharmacology and diet therapy will be integrated throughout the course. Lecture 7 hours, Laboratory 12 hours.

Completion of the Practical Program

- 58 NURSING III 8 UNITS**
Prerequisite: HT 56, HT 57, ZO 20A, ZO 20B, MA 10.
A study of physical and emotional changes in mothers during normal maternity cycle, normal growth and development of child from birth to adolescence. Medical management principles and techniques of nursing care will be presented pertaining to the normal maternity cycle, care of the newborn and care of the child during common illnesses in relation to growth and developmental factors. Conferences will integrate understandings to further the family-centered perspective; supervised clinical practice in caring for mothers, newborn and children; participation in clinics, nursery-school and other child-care agencies. Lecture 4 hours, Laboratory 12 hours.

- 59 NURSING IV 8 UNITS**
Prerequisite: HT 56, HT 57, HT 58.
Advanced nursing skills will be presented along with patient evaluation, problem solving and planning for patient care. Supervised clinical practice in the doctors' offices, hospitals, homes and outpatient clinics. Community health and psychiatric concepts are integrated. Basic supervisory skills and techniques will be taught. Legal and ethical considerations, history of nursing, nursing organizations and current trends are explored. Lecture, discussion, demonstration and audio-tutorial aids will be used. Lecture 4 hours, Laboratory 12 hours.

- 74 EMERGENCY MEDICAL TRAINING 6 UNITS**
Prerequisite: None.
This is a required core course for consortium programs in the following: operating room technology, ophthalmic dispensing technology, radiologic technology, respiratory therapy. The Basic Emergency Medical Technician course covers all techniques of emergency medical care currently considered as responsibilities of the Emergency Medical Technician. Skills are developed in recognizing symptoms of illness and injury and proper procedures of emergency care. Includes study of anatomy, physiology, triage, assessment, and stabilization of patients in shock. The Basic EMT course is offered through the community college system.

History

- 1 HISTORY OF THE UNITED STATES TO 1865 3 UNITS**
Prerequisite: None.
A study of the development of American characteristics and nationality from the founding of the New World to the preservation of the Union in 1865.

emphasizing the factors and forces which produced the Revolution, Constitution, westward expansion, sectionalism and the Civil War.

2 HISTORY OF THE UNITED STATES SINCE 1865 3 UNITS
Prerequisite: None.

A study of the social, economic and political forces that moved the United States through the periods of Reconstruction and industrialization, and into the position of a world power, focusing on both domestic and foreign affairs in the country's last century of development.

4 SURVEY OF WESTERN CIVILIZATION FROM ANCIENT TIMES TO THE REFORMATION 3 UNITS
Prerequisite: None.

Discussion of the major historical trends from primitive man and the emergence of ancient civilization through the Protestant Reformation including such topics as the Aegean, Grecian, Roman, Medieval and Renaissance civilizations with special emphasis upon the social, economic, political and intellectual developments which characterize each historical era. Stress on the relationships of these developments to subsequent history.

5 MAJOR WORLD DEVELOPMENTS SINCE 1850 3 UNITS
Prerequisite: None.

A study of the major developments taking place in the world arena since the Industrial Revolution of the mid-19th century including events within Europe, Asia, Russia, China and the Middle East which have helped shape and are shaping our present-day world.

6 INTRODUCTION TO THE HISTORY OF THE SOVIET UNION 3 UNITS
Prerequisite: None.

A survey of Russian history since 1917, emphasizing revolutionary movements leading to the Bolshevik triumph, the early Soviet governments, the Stalin Era, Russia in WW II and the USSR in the contemporary world.

15 SURVEY OF THE AMERICAN WEST 3 UNITS
Prerequisite: None.

A survey of the methods of penetration and the patterns of westward expansion and settlement of the Great American West including the nature of exploitation, the contribution of minority groups and the significance of the frontier in American history, with emphasis on the Southwest.

16 AFRO-AMERICAN HISTORY 3 UNITS
Prerequisite: None.

A survey of Afro-American history since the first century with emphasis on the rise and fall of slavery and the Afro-American contributions to the United States.

18f SEMINAR AND FIELD STUDIES IN THE HISTORY OF THE SOUTHWEST 6 UNITS
Prerequisite: None.

A composite study of the American Southwest from the Spanish period until 1920 with field excursions to provide historical and geographic background so

the student will more fully understand and appreciate the heritage of the area. Offered in the summer only.

- 99 INDIVIDUAL STUDIES 1-4 UNITS**
Prerequisite: Approval of Division Chairman and professor.
The student with demonstrated academic ability will solve a problem under the direction of a faculty member with the approval of the Division Chairman.

Honors Program

See page 35 for details.

Humanities

- 1 HUMANITIES IN CONTEMPORARY LIFE 3 or 4 UNITS**
Prerequisite: Reading Y or equivalent.
A study of contemporary thought, literature and art as they occur in mass media: journalism, television and motion pictures. Four units of credit will be granted for those students electing to submit critiques of required lectures, plays, motion pictures, concerts and art exhibits
- 15 MEXICAN-AMERICAN CULTURE OF THE SOUTHWEST 3 UNITS**
Prerequisite: None.
A survey of MexicanAmerican culture in the Southwest emphasizing the significant elements, events, customs and historical figures that have contributed to the formation of the culture. Taught in English and Spanish.
- 50 HUMANITIES 4 UNITS**
Prerequisites: English 2 and sophomore standing.
A study of the development of art, literature and music in the western world from classical times to the late Middle Ages with particular emphasis on the development of concepts of freedom and justice. Lecture 3 hours, studio 2 hours.
- 51 HUMANITIES 4 UNITS**
Prerequisites: English 2 and sophomore standing.
A continuation of Humanities 50 to the contemporary period. May be taken independently of Humanities 50. Lecture 3 hours, studio 2 hours

Journalism

- 1 COMMUNICATIONS 3 UNITS**
Prerequisites: Eligibility for English 1, completion of English 1 with a C or better or permission of Professor.
An introduction to mass communications media with emphasis on defining and applying the basic concepts of gathering, writing and evaluating news for newspapers, magazines, radio, television, business publications and house publications, and studying the principles and problems of mass communications. Taught spring semester only

- 2 BASIC REPORTING 3 UNITS**
Prerequisites: Completion of Journalism 1 with a C or better or permission of professor.
 Practical experience in producing accurate, fair and condensed news coverage through actual reporting for *The Heliograph*. Intended for sophomore students.
- 3 INTERMEDIATE REPORTING 3 UNITS**
Prerequisites: Completion of Journalism 2 with a C or better or permission of professor.
 Improvement and development of skills through specialized reporting, rewriting, headline writing, feature writing, copyreading, proofreading and independent study with emphasis on the student's prospects and aptitude toward journalism as a career. Intended primarily for sophomore students.
- 10 PUBLICATIONS WORKSHOP 1 UNIT**
Prerequisite: Permission of professor.
 Participation in some phase of reporting, writing, photography, art, layout through work on College publications. Students in scheduled journalism classes may not enroll. No student shall be awarded more than FOUR such journalism units at Cochise College.

Mathematics

- 1X FUNDAMENTAL MATHEMATICS 3 UNITS**
Prerequisite: Indicated mathematics deficiency.
 Emphasizes basic arithmetic concepts and drill in skills and techniques of computation. Designed for students with low scores on mathematics placement tests. Includes number systems, number bases, fundamental operations with whole numbers, fractions and decimals, measurement, percentage, approximate numbers, areas, volume. Credit towards Associate degree only. Lecture 3 hours.
- 2X ELEMENTARY ALGEBRA 3 UNITS**
Prerequisite: Acceptable score in placement examination or grade of C or better in Math 1X.
 Covers the content of a complete first-year high school algebra course for students who have not earned credit in elementary algebra. Includes fundamental operations on integers, powers and exponents, special products and factoring of polynomials, algebraic fractions, functions, graphs, equations, quadratic formula. Credit toward Associate degree only. Lecture 3 hours.
- 3X PLANE GEOMETRY 3 UNITS**
Prerequisite: One year high school algebra or Math 2X.
 Covers the content of a complete high school plane geometry course for students who have not earned credit in plane geometry. Includes elementary logic, congruence, parallelograms, circles, inequalities, similar polygons, loci, constructions, area. Credit toward Associate degree only. Lecture 3 hours.
- 10 MEASUREMENT OF DRUGS AND SOLUTIONS 2 UNITS**
Prerequisite: Enrollment in Health Technology Program.
 Covers the mathematics and the systems of measurement used in ordering.

preparing and administering drugs and medicines. The student may only obtain credit for this course by successfully passing the final examination.

- 11 INTERMEDIATE ALGEBRA 3 UNITS**
Prerequisite: One year of high school algebra and one year of high school geometry or Math 3X.
Includes real number system, polynomials, fractions, first and second degree equations, radicals, functions and graphs, simultaneous systems. This course may not be transferable for credit at the universities. One should check the catalog of the university he intends to attend. Lecture 3 hours.
- 12 BASIC CONCEPTS OF NUMBER 3 UNITS**
Prerequisite: Two years of high school mathematics, not including general mathematics, or one year of college mathematics, not including Math 1X.
The nature of number and systems of enumeration, the logical structure of arithmetic, informal and formal geometry. Emphasis is on developing a basis for understanding the common processes of arithmetic and the metric and non-metric relations in geometry. Lecture 3 hours.
- 20 COLLEGE ALGEBRA 3 UNITS**
Prerequisites: High school plane geometry or Math 3X together with one and one-half years of algebra in high school or Math 11 with a grade of C or better.
Includes sets, logic of algebra, inequalities, absolute values, functions and graphs, linear and quadratic functions, determinants, polynomial functions, inverse functions, permutations and combinations, binomial theorem, mathematical induction, exponential and logarithmic functions, and complex numbers. Lecture 3 hours.
- 24 PLANE TRIGONOMETRY 3 UNITS**
Prerequisite: Math 20 or approval of the professor.
Includes trigonometric functions, identities, related angles, radian measure, graphs, functions of two angles, equations, logarithms, right and oblique triangles, inverse functions, complex numbers. Lecture 3 hours.
- 26 SLIDE RULE 1 UNIT**
Prerequisite: Permission of the professor.
Multiplication and division, ratio and proportion, combined operations, square root, cube root, logarithms, trigonometric functions, theory and practice of placing decimal point in all operations. Lecture 1 hour.
- 35 FINITE MATHEMATICS 3 UNITS**
Prerequisite: College Algebra (Math 20) or permission of instructor.
A nonrigorous yet mathematically sound introduction to finite mathematics, the branch of mathematics **not** involving infinite sets, limits and continuity. Topics include logic, vectors and matrices, probability, statistics, linear programming, and game theory. Examples are taken from business and the social sciences.
- 36 CALCULUS FOR BUSINESS 3 UNITS**
Prerequisite: College Algebra (Math 20) or equivalent.
Elementary topics in analytic geometry, differential and integral calculus with business applications.

- 44 COLLEGE ALGEBRA AND TRIGONOMETRY 5 UNITS**
Prerequisite: High school plane geometry or Math 3X, together with two years of high school algebra or Math 11.
 Includes sets, logic or algebra, inequalities, absolute values, functions and graphs, circular functions, linear and quadratic functions, determinants, polynomial functions, inverse functions, permutations and combinations, binomial theorem, mathematical induction, exponential and logarithmic functions, applications of circular functions, complex numbers. Lecture 5 hours.
- 51 ANALYTICAL GEOMETRY WITH CALCULUS 5 UNITS**
Prerequisite: Four years of high school mathematics with permission of the professor or Math 20 and Math 24 or Math 44.
 Absolute value and inequality; relations, functions, and graphs; limits and continuity; definition and application of the derivative, antiderivative, and definite integral; differentiation of algebraic functions; trigonometry; conic sections. Lecture 5 hours.
- 52 ANALYTICAL GEOMETRY WITH CALCULUS 5 UNITS**
Prerequisite: Math 51 with a grade of C or better.
 Differentiation of trigonometric and exponential functions and their inverses; parametric equations, arc length, polar coordinates; formulas, methods, and applications of integration; solid analytical geometry; vectors in a plane. Lecture 5 hours.
- 53 ANALYTICAL GEOMETRY WITH CALCULUS 3 UNITS**
Prerequisite: Math 52 with grade of C or better.
 Vectors in three dimensions, elements of infinite series, partial differentiation and multiple integration. Lecture 3 hours.
- 54 DIFFERENTIAL EQUATIONS 3 UNITS**
Prerequisite: Math 53 with grade of C or better.
 Special types of first order differential equations by methods of variables separable, homogeneous functions, exact differentials, integrating factors, Bernoulli and Clairaut and inspection; simple higher order equations, general higher order linear differential equations having constant or variable coefficients with emphasis on obtaining a particular solution by methods of undetermined coefficients, variation of parameter and differential operations; solutions of simultaneous differential equations; LaPlace Transformation and use of series and applications of differential equations to physical problems. Lecture 3 hours.
- 99 INDIVIDUAL STUDIES 1-4 UNITS**
Prerequisite: Approval of Division Chairman and Professor.
 The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Music

- 1 INTRODUCTION TO MUSIC 3 UNITS**
Prerequisite: None.
 An introduction to musical form with emphasis on listening to recorded music of the 18th Century through the 20th Century. Lecture 2 hours, studio 1 hour.

2	INTRODUCTION TO MUSIC Prerequisite: None. A continuation of Music 1 with emphasis on style characteristics of music from the Renaissance to the present. Lecture 2 hours; studio 1 hour.	3 UNITS
10(B)	BAND Prerequisite: Audition. Study and performance of outstanding musical literature transcribed from orchestral repertory or composed for band. May be repeated for credit. Daily rehearsal.	1 UNIT
10(C)	CHOIR Prerequisite: Audition. Study and performance of outstanding literature from various periods of musical composition. May be repeated for credit. Daily rehearsal.	1 UNIT
13 (I) a-b	INSTRUMENT - INDIVIDUAL INSTRUCTION Prerequisite: Permission of the professor. Student prepares recital literature for jury examination. Weekly lesson.	1-1 UNITS
20(I)	ENSEMBLE Prerequisites: Audition and two years playing experience. Study and performance of music appropriate to duets, trios, quartets or larger ensembles of mixed or like instruments. May be repeated for credit. Rehearsal 3 hours per week.	1 UNIT
20(V)	ENSEMBLE Prerequisites: Audition and two years singing experience. Study and performance of vocal literature appropriate to duets, trios or larger vocal ensembles. Rehearsal 3 hours per week.	1 UNIT
30	KEYBOARD HARMONY Prerequisite: To be taken concurrently with Music 32. Special work on ear training, keyboard harmonization and application of musical theory to the keyboard. Studio 2 hours.	1 UNIT
32a-32b	MUSIC THEORY Prerequisite: 32a is a prerequisite for 32b. A systematic study of the rules of music with emphasis on ear training and sight singing. Lecture 3 hours.	3-3 UNITS
50	INTRODUCTION TO JAZZ Prerequisite: None. A study of the history and development of jazz music in the United States from 1900 to the present.	3 UNITS

Philosophy

11	INTRODUCTION TO PHILOSOPHY Prerequisites: English 2 and sophomore standing. An introduction to philosophical methods and a study of the major concepts of western philosophy with emphasis on an examination of the nature of reality, meaning and right conduct. Lecture 3 hours.	3 UNITS
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13

INTRODUCTION TO MORAL PHILOSOPHY**3 UNITS****Prerequisite: None.**

An introduction to the major ethical and moral problems with emphasis on contemporary questions of morality and ethics

20

PHILOSOPHIES OF THE EAST**3 UNITS****Prerequisite: English 2 and sophomore standing.**

An introduction to the thought of Hinduism, Buddhism, Taoism and Confucianism with emphasis on their roles in the modern world. Lecture 3 hours

21

PHILOSOPHY OF RELIGION**3 UNITS****Prerequisite: English 2 and sophomore standing.**

Introduction to the nature of religion, nature and existence of God and major religious tenets of western thought

Physical Education

10

BEGINNING COED GYMNASTICS**1 UNIT****Prerequisite: None.**

Beginning and intermediate skills on all the basic pieces of gymnastics apparatus

11

INTERMEDIATE COED GYMNASTICS**1 UNIT****Prerequisite: PE 10 or permission of professor.**

Further development of previously acquired gymnastic skills on all pieces of gymnastics apparatus

12

WEIGHT TRAINING WRESTLING (Men Only)**1 UNIT****Prerequisite: None.**

The basic skills and knowledge necessary in weight training and wrestling with opportunity for competitive intraclass wrestling. Taught fall semester only

13

MODERN DANCE (Women Only)**1 UNIT****Prerequisite: None.**

Individual and group physical exercises and opportunity for expression through modern dance interpretations. Taught spring semester only

14

COED BADMINTON VOLLEYBALL**1 UNIT****Prerequisite: None.**

Badminton and volleyball with emphasis on the mastery of fundamentals

15

BEGINNING COED BOWLING**1 UNIT****Prerequisite: None.**

Development of beginning skills of bowling with emphasis on mastery of fundamentals

16

INTERMEDIATE COED BOWLING**1 UNIT****Prerequisite: PE 15 or permission of professor.**

Further development of previously acquired bowling skills

17	BEGINNING COED TENNIS Prerequisite: None. Introduction to the beginning skills of tennis with emphasis on mastery of fundamentals.	1 UNIT
18	INTERMEDIATE COED TENNIS Prerequisite: PE 17 or permission of professor. Further development of previously acquired tennis skills including the basic strategy of competitive tennis.	1 UNIT
19	BEGINNING COED GOLF Prerequisite: None. Development of beginning skills of golf with emphasis on mastery of fundamentals.	1 UNIT
20	INTERMEDIATE COED GOLF Prerequisite: PE 19 or permission of professor. Further development of previously-acquired golf skills, including chipping, putting, pitching and driving. Introduction of "special shots" and different forms of competition.	1 UNIT
21	COED SQUARE AND SOCIAL DANCE Prerequisite: None. Introduction to the various ballroom steps in social dancing with the opportunity to master traditional American square dances. Taught fall semester only.	1 UNIT
22	COED ARCHERY Prerequisite: None. Target archery and clout shooting with opportunity for improvement of existing skills.	1 UNIT
23	BEGINNING HANDBALL/WEIGHT TRAINING Prerequisite: None. Development of basic skills of handball through instruction, participation and intra-class competition and execution of basic weight training exercises.	1 UNIT
24	BEGINNING SWIMMING Prerequisite: None. For the non-swimmer, guidance through primary phases of learning to swim with the final objective of the course ability to swim 30 yards.	1 UNIT
25	INTERMEDIATE COED SWIMMING Prerequisite: PE 24 or permission of professor. Opportunity to improve on skills in the four fundamental strokes — crawl, breast, back and side — with final objective of the course the ability to swim continuously for five minutes on front, side and back.	1 UNIT
26	ADVANCED COED SWIMMING AND WATER SPORTS Prerequisite: PE 25 or permission of professor. Development of variations of the four fundamental strokes and other miscellaneous water skills. Introduction to water polo, synchronized swimming and other aquatic activities. Taught fall semester only.	1 UNIT

- 27 COED LIFE SAVING 1 UNIT**
Prerequisite: PE 26 or permission of professor.
 Development to meet the requirements of the Standard Red Cross course leading to certification in Senior Life Saving. Taught spring semester only.
- 28 COED ADAPTED PHYSICAL EDUCATION 1 UNIT**
Prerequisite: Written statement from a licensed physician requiring a limited activities program.
 A personalized program of physical education consistent with the recommendation of private physician.
- 29 TRAMPOLINING/BODY CONDITIONING (Men Only) 1 UNIT**
Prerequisite: None.
 Development of the basic and intermediate skills of trampolining and practice in several activities for body dynamics using a variety of pieces of equipment.
- 30 TRAMPOLINING/BODY DYNAMICS (Women Only) 1 UNIT**
Prerequisite: None.
 Development of the basic and intermediate skills of trampolining and practice in several activities for body dynamics, using a variety of pieces of equipment.
- 31 VARSITY SPORTS 1 UNIT**
Prerequisite: Permission of professor.
 Membership in class based on participation as members of a varsity collegiate team.
- 32 SONG AND CHEERLEADING (Fall Only) 1 UNIT**
Prerequisite: Permission of professor.
 Membership in class based on participation on the songleading or cheerleading squads, with emphasis on individual and group physical exercise stunts, and dances with demonstration of these skills at rallies and games. Taught fall semester only.
- 33 HIKING 1 UNIT**
Prerequisite: None.
 The student will participate in the wilderness trail and off-trail hiking and will learn the care of equipment, the use of maps, the care and protection of wilderness trails, the use of emergency first aid and the importance of physical conditioning.
- 34 COED BILLIARDS 1 UNIT**
Prerequisite: None.
 The student will be introduced to the skill of billiards with attention to rules, etiquette and proper playing techniques.
- 35 COED SCUBA DIVING 1 UNIT**
Prerequisite: Student should be able to swim.
 The student will be introduced to all aspects of scuba diving fundamentals and techniques with actual experience in the ocean. NAUI certification may be achieved upon successful completion of the course.

- 36 BEGINNING COED YOGA 1 UNIT**
Prerequisite: None.
 The student will be introduced to the beginning and intermediate postures of yoga, with a brief introduction to the advanced postures. Lecture and participation two hours per week.
- 37 BEGINNING COED JUDO 1 UNIT**
Prerequisite: None.
 The student will be introduced to the beginning and intermediate skills of judo, with a brief introduction to the advanced skills. Lecture and participation two hours per week.
- 38 TEAM ROPING 1 UNIT**
Prerequisite: Some basic riding experience. No former knowledge of roping is necessary.
 Provides opportunity for student to practice for pleasure as well as for later competition in rodeo activities. An opportunity to learn the sport correctly.
- 39 WESTERN HORSEMANSHIP 1 UNIT**
Prerequisite: None.
 Enables students who own or intend to buy a pleasure horse to handle and care for the animal in the Western tradition. Student learns to handle Western saddle, select appropriate equipment, to evaluate pleasure horse before purchase, to care for general well-being of animal.
- 43 WILDERNESS CAMPING 3 UNITS**
Prerequisite: PE 33 or permission of instructor.
 A study of practical backpacking and wilderness camping techniques with emphasis on man's place in the wilderness. The student will study selected works of wilderness philosophers and develop a wilderness ethic. Two hours of lecture a week and a minimum of four backpacks. Students must furnish their own backpacking equipment. Students may receive one unit of an activity credit to meet Physical Education requirement. (Same as ES 10)
- 47 INTERMEDIATE COED JUDO 1 UNIT**
Prerequisite: PE 37 or permission of instructor.
 The student will be introduced to the intermediate skills of Judo, with a brief introduction to the advanced skills. Lecture and participation two hours a week.
- 55 ORIENTATION TO PHYSICAL EDUCATION 3 UNITS**
Prerequisite: None.
 An introduction to the nature and scope of physical education, its historical development, basic philosophy and objectives, changing concepts, scientific foundations and professional opportunities. Taught spring semester only.
- 171 ORIENTATION TO RECREATION 2 UNITS**
Prerequisite: None.
 Analysis of the nature and scope of the field of recreation, its historical development, philosophy and objectives, changing concepts, scientific foundations and professional opportunities, recreation in American life, roles of various levels of government in recreation, relationships between physical education, health, camping and outdoor recreation. Taught fall semester only.

189 ELEMENTARY SCHOOL PHYSICAL EDUCATION 3 UNITS

Prerequisite: None.

A study of the scope and values of physical education and movement education in the elementary school including the teaching designs for primary and intermediate grades pertaining to physical education as well as knowledge necessary to evaluate physical education programs. Course designed for prospective elementary education teachers, physical education majors and minors. Taught fall semester only.

190 SPORTS OFFICIATING 3 UNITS

Prerequisite: None.

A lecture and laboratory course which will develop the art and skill of officiating several sports including basketball, football, baseball and volleyball. Completion of the course will qualify a person for trainee and/or probationary status with the Arizona Interscholastic Association. Taught fall semester only.

Physics

1 INTRODUCTION TO PHYSICS 4 UNITS

Prerequisite: None.

A survey course in the basic concepts of physics. Limited emphasis on mathematical applications. Lecture 3 hours, Laboratory 3 hours.

2a-2b GENERAL PHYSICS 4-4 UNITS

Prerequisite: Math 11 or equivalent high school background. 2a is a prerequisite for 2b.

Lectures, demonstration and problems in mechanics, properties of matter, heat, sound, light, electricity and magnetism, atomic and nuclear physics. Designed for the more-interested liberal student. Lecture 3 hours, Laboratory 3 hours.

3a-3b INTRODUCTORY PHYSICS WITH CALCULUS 4-4 UNITS

Prerequisite: Math 51.

Lectures, demonstrations and problem-solving at the calculus level in classical physics – mechanics, heat and thermodynamics, sound, light, electricity and magnetism, atomic and nuclear physics. Designed for engineers, scientists and mathematicians. Lecture 3 hours, Laboratory 3 or

99 INDIVIDUAL STUDIES 1-4 UNITS

Prerequisite: Approval of Division Chairman and Professor.

The student will solve a problem or work on a project under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Police Science

20 INTRODUCTION TO POLICE SCIENCE 3 UNITS

Prerequisite: None.

The history of police science in the United States and Europe including study of the different law enforcement agencies and their standards, qualifications, and functions, application of police report writing procedures and analysis of

current law enforcement books and periodicals, and application of basic criminal procedures of the judicial system to problems similar to those encountered in police work.

- 21 INTRODUCTION TO THE CRIMINAL JUSTICE SYSTEM 3 UNITS**
Prerequisite: None.
This course is designed to present the elements and processes of the criminal justice system. The material presents the elements of law, crime and punishment, the adversary system, court systems (state and federal), and the processes from criminal incident to arrest, trial, and correctional processes. Also included are the juvenile court process and juvenile corrections, the duties of personnel involved in the criminal justice system: police, prosecutors, defense attorneys, judges, juries, parole and probation officers, corrections personnel.
- 22 POLICE PATROL FUNCTIONS I 3 UNITS**
Prerequisite: None.
An introductory course designed to present the various duties and responsibilities of the police patrol division covering the basic theories of patrol, care of uniforms and personal equipment, including the care and use of protective weapons, self defense, use of patrol cars and police radio, and elements of patrol systems arrest, and the handling of prisoners.
- 24 SUPERVISION FOR POLICE 3 UNITS**
Prerequisites: P.S. 22 or permission of instructor.
This course is designed to present the role, prime functions, responsibilities, administrative and management duties of the police supervisor within the police organization. The following areas will be studied: principles of scientific personnel deployment and distribution, processes of oral and written communications, techniques of conference leading, command presence, leadership, problems of employee morale, training and discipline.
- 26 POLICE ORGANIZATION AND ADMINISTRATION 3 UNITS**
Prerequisites: PS 20, PS 22 and PS 24.
Study of the basic administrative and organizational concepts being advanced in police science including the organization of police service, the administrative services, the operational police services and the auxiliary services and police plant facilities.
- 27 RULES OF EVIDENCE 3 UNITS**
Prerequisite: None.
Examination of the Rules of Evidence, as applied in the courtroom to the evidence as compiled by the police officer in the investigation of criminal offenses. Trial procedure in criminal cases is examined and reviewed. The kinds of evidence, privileged communications, hearsay rule, exclusionary rule, confessions and admissions are examined in light of the police officer's duties and responsibilities as he prepares his case for prosecution.
- 30 JUVENILE PROCEDURES 3 UNITS**
Prerequisite: None.
Study of the social problem of juvenile delinquency, some of its causes, and what is being done to correct such causes. Juvenile delinquency and dependen-

cy and the police, juvenile crime, procedure of arrest, juvenile court, correctional methods and facilities and the various aspects and effectiveness of rehabilitative procedures.

32 CRIMINAL LAW I 3 UNITS

Prerequisite: P.S. 20 or permission of instructor.

This course offers a general overview of criminal procedure for investigation to conviction of criminal offenders including arrest, search and seizure. The main text will deal with the substantive criminal law and various elements of particular crimes as set forth generally in common law and specifically as applied to Arizona Revised Statutes, Criminal Code Title 13.

34 CRIMINAL LAW II 3 UNITS

Prerequisite: None.

Study of the three main working areas of law enforcement for the police officers: arrest, search, and seizure. Discussion of constitutional law cases involving these areas in detail.

35 PHYSICAL EVIDENCE: PHOTOGRAPHY I 3 UNITS

Prerequisite: None.

This course is designed to familiarize the student with the basic procedures of taking photographs of physical evidence, crime scenes and traffic accidents. The student will be given the opportunity of learning darkroom procedures involving development of film, making prints and enlarging prints. Color slide development for police in-service training films will allow the student to develop techniques for presentation to groups for instructional purposes.

36 PHYSICAL EVIDENCE: RECOGNITION, COLLECTION, PRESERVATION 3 UNITS

Prerequisite: None.

Examination of the various forms of physical evidence that may be located at the crime scene. Emphasis on importance of physical evidence in the successful prosecution of the guilty including proper collection, packaging, and transportation of such evidence as latent fingerprints, plaster casts, blood, semen, hair, tissue, soil, grasses. Study of specific types of crime, e.g. homicide, robbery, burglary, sex crimes and hit-and-run to familiarize the student with the criminal "method of operation".

38 CRIMINAL INVESTIGATION 3 UNITS

Prerequisite: PS 20.

A study of the investigative methods and procedures used in major and minor crimes. Emphasis on sources of information, preliminary and follow-up investigation and identification of individuals.

46 POLICE COMMUNITY RELATIONS 3 UNITS

Prerequisite: PS 20 and PS 22.

Through seminar study, preparation of researched data, which is logical, substantiated and well-documented with plans for the improvement of law enforcement relationships within the communities served. In-service students will be required to offer solutions to problems similar to those encountered in their own communities.

INSTITUTIONAL CORRECTIONS**Prerequisite: None.**

An introductory course in correctional science designed to present the elements, processes and history of imprisonment as a means of social control. Recent methods of training, educating and rehabilitating inmates; administration of the correctional institution, details of correctional personnel and parole are included in the course of study.

49

CONSTITUTIONAL LAW**3 UNITS****Prerequisite: PS 21, 32, 34, or permission of instructor.**

A comprehensive study of the U.S. Constitution and the Bill of Rights. Emphasis will be placed heavily on the first 10 and the 14th amendments. In-depth study will be made of numerous U.S. Supreme Court cases particularly in the area of freedom of speech and assembly, arrest, search and seizure, due process of law, right to silence, an attorney, a fair and speedy trial.

52

ACCIDENTS, CITATIONS, DISORDERS**3 UNITS****Prerequisite: None.**

Study of traffic law and various types of accident situations including: methods of handling, reporting and collecting evidence. Emphasis will be placed on prevention of accidents. Citations: their form, function and place in traffic enforcement, various kinds of civil disorders and police methods of control, dispersing or arresting participants, equipment used and legal aspects of disorder.

56

CRIMINOLOGY**3 UNITS****Prerequisite: Sociology 1 or permission of professor.**

Methods of collecting information regarding crime, organization and systemization of such information and drawing of conclusions from such data and the examination of facts of crime and delinquency. Factoral data examined includes: variations of crime and delinquency statistical collection methods, variables of race, age, sex, stratification, poverty and changing social values. Some time will be spent on the related subject corrections, probation and parole.

54

PSYCHOLOGY IN LAW ENFORCEMENT**3 UNITS****Prerequisite: PS 20 or permission of professor.**

Study of the basic fundamental terms and psychological theories including comparison and evaluation of some psychological theories advanced and how they could apply to police science. Discussion of the police officer encountering the mentally disturbed.

Political Science

2

AMERICAN NATIONAL GOVERNMENT**3 UNITS****Prerequisite: None.**

A study of the modern political systems of the United States including such topics as Constitution, voting, political parties, campaigns and elections, pressure groups, Congress, the Presidency, the federal bureaucracy and the federal judiciary to increase the student's understanding of the political arena in which he lives. Not open to students with credit in Political Science 57. The course fulfills the Federal Constitution requirement for an Arizona Teaching Certificate.

50 INTRODUCTION TO INTERNATIONAL RELATIONS 3 UNITS
Prerequisite: Consent of instructor.
 An introduction to the international system of relations between nation-states of the world, with primary emphasis on capability, ends and means of policy, and the struggle for world order. Not open to first semester freshmen.

57 NATIONAL AND ARIZONA CONSTITUTION 3 UNITS
Prerequisite: Sophomore standing.
 A study of the governments of the United States and Arizona through the interpretation of the Constitution of each political entity. This course is approved for teacher certification. Teachers needing only Arizona Constitution may take the Arizona portion of the course for 1 unit of credit. Students majoring in Political Science should take Political Science 2. Not open to Freshmen.

99 INDIVIDUAL STUDIES 1-4 UNITS
Prerequisite: Approval of Division Chairman and Professor.
 The student with demonstrated academic ability will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Psychology

1 ELEMENTARY PSYCHOLOGY 3 UNITS
Prerequisite: None.
 A survey of the fundamental methods and principles of psychology with major emphasis on growth and development, learning and conditioning principles, psychological measurements — testing, motivation and emotion.

2 ELEMENTARY PSYCHOLOGY 3 UNITS
Prerequisite: Psychology I.
 A more intensive study of the realm of psychology with emphasis on the psychobiological basis of behavior, intelligence, sensation, perception, higher mental processes, personality and adjustment, abnormal psychology and social psychology.

10 INTRODUCTION TO SOCIAL PSYCHOLOGY 3 UNITS
Prerequisite: None.
 An introduction to basic theories and concepts necessary to the study of social psychology with emphasis on culture and group situations as they are related to the individual.

13 CHILD PSYCHOLOGY 3 UNITS
Prerequisite: None.
 A study of human maturation through an analysis of the inter-relationships of biological and psychological development from infancy to adulthood.

99 INDIVIDUAL STUDIES 1-4 UNITS
Prerequisite: Approval of Division Chairman and Professor.
 The student with demonstrated academic ability will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Science

- 1 INTRODUCTION TO ELEMENTARY SCHOOL SCIENCE TEACHING 3 UNITS**
Prerequisite: None.
A course designed to introduce the student to some of the methods and techniques of science and to relate them to elementary science instruction. A variety of equipment, teaching materials and associated activities will be utilized to present current trends in elementary school science teaching. Lecture 2 hours, laboratory 2 hours.

Social Science

- X SOCIAL SCIENCE 3 UNITS**
Prerequisite: None.
An introduction to the several disciplines in the social sciences — anthropology, geography, history, political science, psychology, sociology — with an emphasis on how to read and interpret materials within each discipline.
- 1 INTRODUCTION TO SOCIAL SCIENCES 3 UNITS**
Prerequisite: None.
An introduction to the several disciplines in the social sciences — anthropology, psychology, sociology, economics, political science and international relations — using a systems approach. Freshmen are encouraged to enroll in this class to discover what discipline interests them for continuation. Accepted as an elective for AA degree.
- 6 THE CHICANO IN CONTEMPORARY SOCIETY 3 UNITS**
A survey of the Chicano culture, traditions, attitudes and ideals from the historical and sociological viewpoints with emphasis upon contemporary problems and conditions. Special attention will be given to social, cultural, economic, political and educational developments of the Chicano in the Southwest.
- 7 INTRODUCTION TO SOCIAL WELFARE 3 UNITS**
Prerequisite: None.
An introduction to our social welfare and social insurance systems. Designed to acquaint the student with various programs available to the general public through legislation and/or private means. (This course is offered at Glendale, Mesa and Pima Community Colleges, accepted for transfer credit at Universities. Usually titled Intro. to Social Welfare).

Sociology

- 1 INTRODUCTION TO SOCIOLOGY 3 UNITS**
Prerequisite: None.
An overview of the controversial aspects of sociology through major concepts of writers and presentation of verifiable social facts about group phenomena with student experience in selected social research.

2 SOCIAL PROBLEMS 3 UNITS
Prerequisite: Sociology 1.
 A study of contemporary major social problems through selected writings of various authors to provide "the means for understanding the source, nature, and possible resolution of them."

99 INDIVIDUAL STUDIES 1-4 UNITS
Prerequisite: Approval of Division Chairman and Professor.
 The student with demonstrated academic ability will solve a problem under the direction of a faculty member with the approval of the Division Chairman.

Spanish

1X,2X CONVERSATIONAL SPANISH 3-3-3-3 UNITS
3X,4X
Prerequisites: 1X for 2X, 2X for 3X, 3X for 4X or the satisfactory performance upon a written and oral exam in lieu of any one of courses in this series.

The student goals are the same as for Spanish 1a and 1b, however, classes will meet fewer hours per week, and will as a result cover less material in a semester. 1X and 2X will be considered the equivalent of 1a, 3X and 4X the equivalent of 1b. Credit will be transferable upon the completion of 4X.

1a, 1b ELEMENTARY SPANISH 4-4 UNITS
Prerequisite: 1a is a prerequisite of 1b.

For students with less than two years of high school Spanish, those who took Spanish but have been away from it for two or more years, and students with no experience. Comprehension of the spoken language, proper pronunciation, grammar, reading skills, composition and conversation will be stressed. Lecture 4 hours, lab 2 hours arranged.

3a, 3b INTERMEDIATE SPANISH 4-4 UNITS
Prerequisites: Spanish 1b or two years of high school Spanish taken not earlier than one year prior to registration at Cochise and completed with average grade or better, or competency as demonstrated to the satisfaction of the professor.
 Review of grammar, reading, writing and speaking; introduction to simple literature (short stories, novels, plays of selected Spanish authors). Lecture (Spanish) 4 hours, lab 2 hours. Course is conducted primarily in Spanish with only those explanations in English necessary for comprehension.

75a, 75b INTERMEDIATE COMPOSITION AND CONVERSATION 3-3 UNITS
Prerequisite: Spanish 3b or completion of course similar to Spanish 3b (Mexican schooling above 6th grade, four years of high school Spanish).
 Topic-centered composition and discussion. Application of grammar and increased vocabulary from a variety of readings, class discussions and individual presentations. Course conducted in Spanish.

104a INTRODUCTION TO SPANISH LITERATURE 3-3 UNITS
104b
Prerequisite: Spanish 3b and permission of professor or completion of course similar to Spanish 3b (Mexican schooling above 6th grade or four years of high school Spanish) and permission of professor.

An introduction to the works of representative Spanish authors from the beginnings of literary works in Spain to the present. A general knowledge of

the history and development of the arts in Spain will be acquired. Emphasis is placed on reading, understanding and analyzing Spanish literary works, through the literary ideas which originated in Spain that later spread to the rest of the Hispanic World. Course is conducted completely in Spanish.

99 INDIVIDUAL STUDIES 1-4 UNITS

Prerequisites: Approval of Division Chairman and Professor.

Problem solution under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.

Speech

2 FUNDAMENTALS OF SPEECH 3 UNITS

Prerequisite: None.

Study of fundamental techniques of public speaking, experience in construction and delivery of speeches of various types, and evaluation of speeches of other members of the class and the speeches of famous speakers.

10 PUBLIC SPEAKING 3 UNITS

Prerequisite: Speech 2 or permission of instructor.

Brief review of the fundamentals of public speaking, with delivery of various types of speeches and evaluation of speeches of others. Practice in and out of class toward improvement of quality and use of voice with participation in discussions and demonstrations of parliamentary procedure and public discussion.

Teacher Aide Program

The Teacher Aide Program is a one-year certificate program to train students as elementary school teacher aides. During the two-semester program, students will attend classes three days a week and work as interns in an elementary school classroom two days a week. Courses in the program include Art 5, Business 6, English 2Y, 11 and 12, Physical Education 189, Psychology 13, Math 1X, Science 1 and Cooperative Education 10 and 20. Bilingual aides will also take Spanish 3a and 3b (see individual catalog descriptions). Aides who complete the program may go on to complete the second year curriculum in preparation for transfer to the university in Elementary Education, Special Education or Home Economics. Interested students should contact the College before the beginning of the fall or spring semesters.

Trade and Industrial

5 WELDING 3 UNITS

Prerequisite: None.

The basic processes of oxy-acetylene and arc welding including safety, selection of electrodes, welding joints, types of beads and development of basic skills. Emphasis is on welding mild steel in flat and horizontal positions, fusion welding of light-gauge steel, and brazing.

7 WELDING 3 UNITS

Prerequisite: TI 5.

Stress on the electric arc welding processes covering joints and beads on light-gauge steel and heavy structural steel in vertical and overhead positions.

Tungsten inert gas welding (Heliarc) on aluminum and stainless steel is practiced. Bronze, cast iron, brazing, hard-surfacing, cutting, and pipe welding are emphasized in the fusion and oxy-acetylene portion of this course.

8 SEWING MACHINE MAINTENANCE 3 UNITS

Prerequisite: None.

A complete maintenance, servicing, adjustment and set-up of industrial sewing machines currently in common usage. This course is designed to provide the factual information and manipulative skill necessary to set up any commonly-used industrial sewing machine that has been used, abused or otherwise requires maintenance or set-up for a particular fabric. Particular emphasis will be placed upon trouble-shooting and preventative maintenance.

9 GENERAL MECHANICS - AUTOMOTIVE 3 UNITS

Classroom theory and supporting laboratory experience for routine automotive maintenance to develop entry-level skills for auto tuneup, electrical systems, fuel systems, cooling systems, lubrication systems and oils, transmissions and clutches, brake systems and accessories, such as air conditioning.

40 PRINCIPLES OF INDUSTRIAL MANAGEMENT 3 UNITS

Prerequisite: None.

This course is designed to give the student insight into the fundamental principles of management and the problems he is likely to encounter if employed in a supervisory capacity. Solutions to real-life, actual labor and management problems are studied in lecture discussion-type classes. The course requires the student to investigate a problem situation and write a report with alternate solutions. Special emphasis is given to labor relations and dealing with union organizations. The psychology of dealing with people is considered a necessary facet of this course.

41 ELEMENTS OF PRODUCTION MANAGEMENT 3 UNITS

Prerequisite: TI 40.

Elements of Production Management will provide a complete study of decision-making based on cost data associated with production systems and processes. There will also be in-depth study relating to plant layout problems relevant to motion and time study. Particular emphasis will be placed upon production planning and control, including inventory and production standards.

50 WATER AND WASTE WATER PLANT OPERATION 3 UNITS

Prerequisite: None.

This course is designed to provide the student with the knowledge, skills and techniques required to pass a State of Arizona Certification Examination or Class I or Class II Water or Waste Water Plant Operator.

Zoology

1a-1b GENERAL ZOOLOGY 4-4 UNITS

Prerequisite: High school Chemistry or Chemistry 2a or Chemistry 1 or concurrent enrollment in Chemistry 2a or Chemistry 1. 1a is a prerequisite to 1b except by special permission of the Professor.

An introduction to animal biology, structure and classification and a survey of animal phyla with an emphasis on vertebrate groups. Principles of genetics, ecology and embryology. Dissections of specimens representative of major phyla including dissection of typical vertebrates. Lecture 2 hours. Laboratory 6 hours.

20A-20B

HUMAN ANATOMY AND PHYSIOLOGY

4-4 UNITS

Prerequisites: Zoology 20A with a passing grade is prerequisite for 20B, or permission of the instructor.

An integrated study of the physical, structural and functional features of the cells, tissues, organs, and systems of the human body. Lecture 3 hours. Laboratory 3 hours. Discussion period 1 hour (optional).

99

INDIVIDUAL STUDIES

1-4 UNITS

Prerequisite: Approval of Division Chairman and Professor.

The student will solve a problem under the direction of a faculty member with the approval of the Division Chairman. May be repeated for credit.



Student officers enroute to senate retreat.