

# Catalog and Announcements

Academic Year 1967 - 1968

## COCHISE COLLEGE

A Public Junior College

Douglas, Arizona



Member of:

*American Association of Junior Colleges*

*National Committee on Accreditation*

*Council of North Central Junior Colleges*

*Candidate for membership status with  
North Central Association of Colleges  
and Secondary Schools*

**COCHISE COLLEGE CALENDAR — ACADEMIC YEAR 1967-68**

1967		AUGUST 1967				
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1968		JANUARY 1968				
		1	2	3	4	5
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27

1967		SEPTEMBER 1967				
		1	2			
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

1968		FEBRUARY 1968				
		1	2	3		
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

1967		OCTOBER 1967				
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1968		MARCH 1968				
		1	2	3	4	5
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
	31					

1967		NOVEMBER 1967				
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22			
27	28	29	30			

1968		APRIL 1968				
		1	2	3	4	5
		6	7	8	9	10
15	16	17	18	19	20	21
21	22	23	24	25	26	27
28	29	30				

1967		DECEMBER 1967				
		1	2			
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23

1968		MAY 1968				
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29		30	31

**VACATION PERIODS**

**EXAMINATION PERIODS**

# Cochise College Calendar

1 9 6 7 - 1 9 6 8

## **FALL SEMESTER**

Aug. 14 - Sept. 15	Fall Counseling and Registration
September 14 - 15	Orientation
September 18	Classes begin
September 22	Last day for adding classes
October 6	Last day to drop classes without penalty
October 29	Parent's Day
November 6 - 10	Mid-semester exams
November 23 - 26	Thanksgiving recess
Dec. 23 - Jan. 2	Christmas recess
January 22 - 25	Final examinations
January 27 - 31	Semester recess

## **SPRING SEMESTER**

Jan. 29 - Feb. 2	Spring Counseling and Registration
February 5	Classes begin
February 9	Last day for adding classes
February 23	Last day to drop classes without penalty
March 25 - 29	Mid-semester examinations
April 6 - 14	Spring recess
May 30	Memorial Day (no classes)
May 27 - 31	Final examinations
June 3	Commencement

## Table of Contents

COLLEGE CALENDAR .....	iv · v
GENERAL INFORMATION .....	1
History .....	3
Accreditation .....	3
Philosophy of Education .....	3
Aims and Objectives .....	4
Degree .....	4
Campus Facilities .....	5
Advisory Committees .....	5
Evening College and Extension Programs .....	5
Community Services .....	6
STUDENT PERSONNEL SERVICE .....	7
Admissions .....	9
Orientation .....	9
Counseling .....	9
Testing .....	9
Food Services .....	10
Housing .....	10
Scholarships and Financial Aids .....	10
Student Employment .....	11
Health Services .....	11
Student Activities .....	11
Registration and Records .....	12
Placement .....	12
ACADEMIC INFORMATION .....	13
Academic Council .....	15
Classification of Students .....	15

Grading System .....	15
Grade Points .....	16
Academic Probation .....	16
Removal from Academic Probation .....	16
Academic Dismissal .....	16
Readmission Following Academic Dismissal .....	17
Transfer Students .....	17
Grade Report .....	17
Final Examinations .....	18
Credit by Examination .....	18
Repetition of Courses .....	18
Change of Program .....	18
Withdrawal from College .....	19
Transcripts .....	19
Attendance Policy .....	19
 ACADEMIC PROCEDURES AND REGULATIONS .....	21
Admission Requirements .....	23
Residence Requirements .....	23
Admission Procedures .....	24
Graduation Requirements .....	25
Semester Fee Schedule .....	27
General Education Requirements .....	31
 CURRICULAR PROGRAM OFFERINGS .....	33
Career .....	35
Transfer .....	41
Guided Studies .....	41
 ANNOUNCEMENT OF COURSES .....	43
 ADMINISTRATION AND FACULTY .....	87
 INDEX .....	94

## History

Cochise College, a public junior 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. Unlike many community junior colleges, Cochise serves both commuter and resident students by offering residence hall facilities, thus 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 fourteen-building campus is located in the center of a 540-acre site.

The College district is governed by the seventeen-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 county-wide levy.

## Accreditation

Cochise College is accredited by the Arizona State Board of Directors for Junior Colleges. Students who complete appropriate lower division courses with a grade of 3 or better are accepted with full credit on transfer to the University of Arizona, Arizona State University, Northern Arizona University, all the University of California campuses and other universities and colleges in the nation.

The college holds memberships in the American Association of Junior Colleges, the Council of North Central Junior Colleges, and is a candidate for membership status with North Central Association of Colleges and Secondary Schools.

## Philosophy of Education

Cochise College as a comprehensive community junior college, is dedicated to the service of its community. The college shall make education beyond the high school level available to all students interested in, and capable of, benefiting from such a program of higher education.

The quality and effectiveness of instruction offered by the college is important to all those interested in higher education — students, teachers, administrators, alumni, and the general public. It is the responsibility of the administration of the college to facilitate instruction and lead 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, and the community is essential for the realization of personal and institutional goals.

## Aims and Objectives

The main aims and objectives of Cochise College are:

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 students to orient themselves to adult and college life by providing a program of counseling which enables the student to discover his aptitudes and interests, and assists him in the choice of a vocation.
3. To provide educational opportunity in several occupations for those 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 the lower division studies which may be used in transfer for the purpose of securing a bachelors degree (the candidate for a bachelors degree can transfer to the institution of his choice with full junior standing, after having successfully completed appropriate lower division studies and general education requirements.)
5. To provide for the educational needs of mature and receptive adults whose interest and requirement lie in both cultural activities and occupational fields.
6. To make available other community services for the enrichment of the lives 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 their individual needs and to promote honors study programs for students with superior academic cababilities.
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 Junior Colleges, Cochise College may confer the Associate in Arts degree on those students completing 60 units in prescribed courses with a 3.000 or better average. Either transfer or non-transfer courses may be used to meet the 60 unit requirement.

## Campus Facilities

The campus is designed for the traditional college programs and for education in technical-vocational and semi-professional fields. The low, one-story, tile-roofed buildings and carved doors are of distinctive southwest architectural design which harmonize with the surrounding valley and mountains.

**Learning Resources Center** — The Learning Resources Center is located in the geographic center of the academic instructional units. It is one of the most modern resource buildings in the Southwest. The Cochise College Learning Resources Center has been 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, a group study room, a lecture-exhibit room, and an audio-visual section.

**Student Union** — The Student Union contains a cafeteria, snack bar, private dining room, reception area, student lounge, game room, and student activity area.

## Advisory Committees

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

To date the curriculum recommendations of several different citizen advisory committees have been implemented (see list under "Two-Year Career 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.

## Evening College and Extension Programs

For those who wish to continue their education and training, but are unable to attend regular daytime classes, Cochise College offers Evening College and Extension classes each semester. Detailed announcements concerning extension classes are made at the beginning of each semester through special publications.

Evening College classes parallel day courses in prerequisites, course content, time devoted to preparation of assignments, and examinations.

Students attend evening classes to prepare for a vocation, to gain a better education, and to satisfy lower division 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 evening 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 evening students as for full-time students; namely, 60 units in the prescribed courses with a grade point average of 3.000 or better. Physical education and Psychology 1, however, are not required.

## 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.

The College is a community center — a gathering place for many community functions; it often serves as a catalyst for cultural development of the community. In accordance with the policies of the Governing Board, the College facilities are made available for use by authorized community groups when such use does not interfere with the College educational program.

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; and a program of non-credit courses.

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.

## Admissions

Prospective students and their parents are encouraged to visit the campus to discuss educational plans with the Director of Admissions. The Office of Admissions is open Monday through Friday and also on Saturday mornings during the months of March, April, and May. Applications for admission may be obtained from the college admissions office or from Arizona high school principals or counselors.

## Orientation

All entering full-time freshmen and transfer students are required to participate in the two day Orientation to College which is designed to familiarize the student with his new college environment. Students are introduced to the philosophy and objectives of the college as they relate to available curricula, staff and facilities. Other facets of orientation to the college are presented to the students during registration week.

## Counseling

Each entering student is assigned a counselor who will assist him in planning his educational program and with the general adjustments to college life. Of particular concern is career choice and the related sequence of courses which will prepare the student for graduation and transfer to the junior year at a baccalaureate degree institution or for immediate employment following graduation from a vocational or technical program at Cochise College.

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 may result in benefits to the student, such as a carefully coordinated curriculum, advantageous registration procedures, advice on problems of adjustments to college, and assistance in the solution of many other personal problems.

## Testing

As a supplement to the ACT entrance tests, the student and counselor may decide that additional individual testing is needed. Although educational and vocational testing do not constitute the final answer, they are often helpful in narrowing prospective educational choices or supplying concrete leads for a more intelligent exploration of possible vocations. 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.

## Food Services

The college maintains its own campus dining hall and snack bar where appetizing meals and snacks are served seven days a week, when classes are in session.

## Housing

The College maintains campus housing for 344 resident students. Each residence hall is under the supervision of a qualified resident director who is assisted by trained student proctors. All resident students have the opportunity of participating in student government activities as provided by each residence hall council.

## Scholarships and Financial Aids

**Scholarships:** Awards and scholarships are available to Cochise College students while they are attending as full-time students. Applicants are considered for all scholarships for which they are eligible and awards are usually based on scholastic ability, financial need, and leadership qualities. Additional information concerning awards and scholarships may be secured from the Student Personnel Office.

**Loans for entering freshmen:** Entering freshmen are expected to pay for the full costs of the first semester. However, entering freshmen who have graduated in the top quarter of their high school class and demonstrate financial need may be eligible for short-term loans.

**Loans for second semester freshmen:** Second semester freshmen who have attained a grade point average of 3.000 or better and demonstrate financial need are eligible for short-term loans from the College Loan Fund.

**Loans for sophomores:** Sophomores who attain a cumulative grade point average of 3.000 or better and demonstrate financial need may participate in the United Student Aid Fund (USA). Cochise College has a USAF loan capacity of \$25,000 which has been arranged through the financial support of the Cochise County Medical Society. USAF loans, available to sophomores only, are arranged through the college and the student's local bank and are payable when the student completes his education, which may include graduate school.

**Fee Waivers:** A limited number of fee waivers are available for out-of-state students. Information is available from the Director of Admissions.

## Student Employment

Whenever possible, the college employs students to carry on the work of maintaining campus operations. Typical student employment includes work in the learning resources center, dining hall, building and grounds crews, switchboard operator, secretarial work, and proctorships in the residence halls. Information on employment opportunities in local communities and summer work may be obtained in the Student Personnel Office.

## Health Services

The college maintains a well-equipped campus health center directed by a full-time registered nurse who is under the supervision of a regularly licensed physician. 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.

## Student Activities

The college encourages student participation in extra-curricular activities, campus organizations, and intramural and intercollegiate athletics to promote leadership and cooperative planning experience and social and skill development.

**Student Government:** The Student Senate provides a representative governing body for the Associated Students, of which every full-time student is a member. The Student Senate assists in the encouragement of responsible student leadership and participation, the coordination of campus organizations, the establishment of policies and regulations affecting student affairs, and the planning, coordination and supervision of student activities.

**Organizations:** Student organizations include: Band, Baptist Student Union, Campus Guides, Cheerleaders, Chess Club, Choir, Delta Epsilon (Distributive Education), Deseret, Drama Productions, **El Recuerdo** (Yearbook), Freshman Class, Future Spanish Teachers, Newman Association, **Heliograph** (Newspaper), Pom Pom, Residence Hall Councils, Rifle and Pistol Club, Rodeo Association, Sophomore Class, Student National Education Association, United Protestant Group, Women's Athletic Association, and Young Women's Christian Association. Others will be organized by interested students.

**Cultural Programs:** A College Hour each week provides for the presentation of visiting lecturers, recital groups, and student talent. A student film series supplements these programs. The college also provides for the admission of students to Douglas Community Concert Association presentations.

**Intramurals:** The college has an active intramural program with participation in touch football, basketball, volleyball, table tennis, badminton, tennis, and golf.

**Intercollegiate Athletics:** The college is a member of the Arizona Junior College Athletic Conference and participates on an inter-collegiate basis in basketball, baseball, tennis, and golf.

## Registration and Records

The Student Personnel Office is responsible for the registration, grade reports, transcripts, and academic and personnel record of each student.

## Placement

The placement officer of the college will assist graduates in making contacts and arranging interviews with prospective employers in their field of specialization or in making application for admission to a four-year college or university if they have completed a transfer program.

## Academic Council

The enforcement, interpretation, and waiving of academic regulations are the responsibility of the Academic Council. Membership includes the Dean of Instruction and appointed faculty members. 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 in 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:

1 - SUPERIOR

2 - GOOD

3 - AVERAGE

4 - POOR

5 - FAILURE

W5 - WITHDREW FAILING Indicates withdrawal from the class after the third week with below a 3 in the course. A grade of "W5" is computed in the student's grade point average as a 5, or failure.

W0 - WITHDREW Indicates that the student withdrew from the course before the end of the third week or that he was earning a grade of "3" or better if the withdrawal was after the third week. A grade of "W0" is not computed in the student's grade point average.

N0 - 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 "N0" to a "5" on the permanent record. The grade of "N0" is not computed in the student's grade point average.

#### AUDIT .

Courses may not be taken for audit.

## Grade Points

Semester grades are assigned grade points as follows:

- 1 - 1 grade point per unit earned
- 2 - 2 grade points per unit earned
- 3 - 3 grade points per unit earned
- 4 - 4 grade points per unit earned
- 5 - 5 grade points per unit earned
- W5 - 5 grade points per unit earned

Thus, a three-unit course with a grade of "4" would earn (3x4) 12 grade points.

The total grade points accumulated by a student are divided by the total of units attempted (exclude "W0" and N0" 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.

## Academic Probation

All students who have attempted nine or more units at Cochise College and have not attained a cumulative grade point average of 3.000 or better are 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 3.000 or better.

## Academic Suspension or Dismissal

1. A student who has attempted nine or more units may be academically suspended for one semester from the college, if his cumulative grade points at the end of any semester are more than ten below the number required for a 3.000 average without a period of probation.
2. A student while on Academic Probation may be academically suspended if his cumulative grade points are more than ten below the number required for a 3.000 average.
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.

## Readmission Following Academic Suspension or Dismissal

A student who has been academically suspended for the first time may return after a period of one regular semester has elapsed, excluding summer sessions. A student who has been academically dismissed may petition the Academic Council for readmission.

A student readmitted following academic suspension or dismissal will be placed on CONTINUED PROBATION.

## 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 4 or 5 (D or F) will not be accepted for credit.
2. Students with a GPA below 3.000 may be admitted upon a petition to the Academic Council and, if admitted, will be placed on academic probation.
3. Students academically dismissed from another college may not attend Cochise College 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.

## Grade Report

Each student receives a progress report at mid-semester and a grade report at the completion of the semester. Only final semester grades are recorded on the student's permanent record.

The grade reports of unmarried students under 21 years of age are mailed to parents or guardians. Grade reports of other students

are mailed to their home address. A second copy of the grade report is also available to each student in the Student Personnel Office.

A copy of the semester grade report of freshmen students under 21 years of age is mailed to the high school from which the student graduated.

## Final Examinations

Final examinations are given in all 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; exceptions may be granted by the Academic Council but only on the basis of a written petition and for compelling reasons.

## Credit by Examination

Recommendation in special circumstances by the Academic Council may be made for certain students to receive credit in a course by examination.

## Repetition of Courses

1. If a student earns a grade of 4 or 5, 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 but are included in computing the cumulative grade 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 3 or better.

## Change of Program

Students are expected to carefully arrange their academic schedule and maintain this schedule throughout the semester. Necessary program changes are to initiate with the student's counselor. The student must attend all classes in which he originally enrolled until the change has been authorized by his counselor, the professors involved, and the Student Personnel Office.

Courses may not be added to a program after the first week of classes. When a course is added a \$5 fee will be assessed for each course added unless it is determined that the change is due to administrative reasons.

A course may be dropped at any time during the first three weeks without penalty and the grade assigned will be "W0", withdrew. Courses dropped after the first three weeks will also receive a grade of "WO" if the student has a 3 or better average at the time of the drop, but if the average at the time of the drop is 4 or 5, the final grade will be "W5" (Withdrew Failing).

## 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 a proper dismissal. A student will receive a "W5" 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 another college or university, or to a prospective employer.

Transcripts are forwarded by the Registrar's office only on the written request of the student. Transcripts to educational institutions will be sent directly by mail. Transcripts given directly to students are classified as "unofficial." The first transcript is issued without charge with additional transcripts being issued at \$1 each.

## Attendance Policy

Attendance policies at Cochise College are based on the belief that 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.

# Admission Requirements

1. All high school graduates are eligible for admission.
2. Non-high school graduates 19 years of age or older who demonstrate to the satisfaction of College authorities that they are able to profit by the instruction may also be admitted. Students who are not high school graduates or have not obtained a G.E.D. Certificate of High School Equivalency are admitted on probationary status. Probationary status is removed after the student has earned 15 hours of credit with a grade point average of 3.000 or better.
3. Transfer students from other colleges are admitted provided they have met Cochise College's scholarship standards. Students disqualified from another college will not be admitted for at least one semester, and then only by petition to and approval of the Academic Council. This petition, along with the other admission credentials, must be submitted in accordance with the dates on the College Calendar.
4. Superior seniors in high school may be admitted for one course upon the recommendation of the high school principal.
5. Special admission procedures are followed for courses in Practical Nursing and Law Enforcement. Interested students should make an appointment with the Director of Admissions to discuss the special requirements for these courses.

## 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 under the conditions above.

### **Residence In High School Districts**

#### **Not Maintaining A Junior 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 Junior College**

Students residing in counties in Arizona that maintain a junior college may enroll in Cochise College but must pay the tuition established by the State Board of Directors for Junior Colleges.

### **Out-of-State Students**

Out-of-state students may enroll in Cochise College but must pay the tuition established by the State Board of Directors for Junior Colleges for non-residents and an application fee of \$5.

### **Foreign Students**

Foreign students are welcome at Cochise College. To be admitted, foreign students should provide evidence of the equivalent of high school graduation, demonstrate adequate proficiency in English to profit from regular college classes, and show evidence of sufficient funds to pay all expenses for one academic year.

### **Veterans**

Cochise College has been approved for veterans training under all federal and Arizona laws. The Director of Admissions acts as the veterans' coordinator. Veterans should confer with Director of Admissions at the time of registration concerning educational benefits. Petition for evaluation of military experience may be filed with the Office of the Dean of Students following completion of a minimum of 12 units in attendance at Cochise College.

## **Admission Procedures for Full Time Students**

### **Application**

An application blank may be obtained by writing or calling the College Admissions Office. Applicants should submit applications and transcripts well in advance of the beginning date of the semester for which they wish to be admitted. Those who fail to supply accurate and complete information will not be considered for admission nor allowed to remain in attendance if discrepancies are discovered after enrollment.

Students applying for admission to Cochise College are required to provide the following:

1. Completed Application for Admission.
2. Official transcript of high school credits signed and forwarded by the principal to the Admissions Office of Cochise College.
3. Scores from the American College Tests (ACT) submitted to the College before being accepted.
4. Official transcript and statement of honorable dismissal sent directly to Cochise College from each collegiate institution attended after high school graduation.
5. A medical examination (not required of part-time students).
6. A residency affidavit is required for out-of-county students.

## Admission Procedures for Evening Students

Admission **requirements** are similar for both day and evening students. However, students wishing to enroll for evening classes **only** follow different admission **procedures** and should secure a **Schedule of Classes** for detailed instructions. Day students wishing to enroll in evening classes must do so at the time of enrollment for day classes.

## Readmission

Any student who previously attended Cochise College and who is returning to the College after an absence of one semester or more must arrange for an appointment with an Admissions counselor. If a student has attended any other educational institution since previous attendance at this College, transcripts must be supplied for all academic work for which the student enrolled in the period since last attending Cochise College. A student who has been disqualified from the College must submit an application in accordance with the dates on the Cochise College Calendar in order that it may be reviewed by the Academic Council.

## Registration

Counseling and registration take place during the month prior to the opening of classes of each semester. (See the Calendar at the front of the catalog.) Students register only after receiving program approval from a counselor. Registration after the first week of instruction will not be permitted. See the **Schedule of Classes** for detailed information.

## Unit Load Limitations

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

## Graduation Requirements

Cochise College will grant the degree of Associate in Arts to all graduates of the two-year curriculum.

### **Requirements for graduation with the Associate Degree are:\***

1. Completion, with a cumulative GPA of 3.000 or better, of at least sixty passing units.
2. A minimum of fifteen units, with a grade average of 3.000 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 4 units to complete the degree requirements at Cochise College.

4. Fulfillment of the following basic requirements:

At Cochise College the General Education courses are organized within the areas of English, Humanities, Natural Science, Social Science, and Physical Education. The number of required credit hours in General Education courses may vary slightly according to the specific program a student selects.

The General Education requirement for the Associate in Arts Degree is thirty-eight hours, to be distributed as follows:

A. Psychology 1*	1 Unit
Communications English 3**	6 Units
Speech 3	
Social Science	6 Units
Natural Science	3 Units
Humanities or Fine Arts	3 Units
Physical Education	4 Units

B. An additional fifteen hours of General Education may be selected from courses offered in the above areas. Electives are provided to assist transfer students in meeting the requirements of the particular university to which they plan to transfer. The student should consult a program advisor representing the department which offers these courses. Additional General Education courses may be taken as electives.

A full-time student must be enrolled in a mathematics course until he has completed Math 1X or has demonstrated competence at this level.

Students in technical, vocational or semi-professional programs, as well as students in pre-professional science programs whose General Education requirements are somewhat different, should consult with their program advisors for appropriate requirements.

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

---

\* For all full-time first semester students.

\*\* A full-time student must be enrolled in an English course or until he has completed at least English x or demonstrated competence at this level.

# Semester Fee Schedule

## Tuition\*

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

	<b>Per Semester</b>
Residents of Cochise County .....	No Charge
Military personnel and their dependents living in Cochise County .....	No Charge
Residents of counties other than Graham, Maricopa, Yuma (home county pays Cochise College \$300.00 per semester) .....	No Charge
Residents of Graham, Maricopa, and Yuma Counties (these counties have their own two-year college) .....	\$300
Residents of other states & foreign countries ....	\$325
 B. Part-time Day and Evening Students (1-11 units):	
County residents including military personnel and their dependents .....	No Charge
Residents of other states & foreign countries:	
1 - 6 units .....	No Charge
7 - 11 units .....	\$20 per unit
 C. Summer Session (after 7-11 units):	
Residents .....	\$10 per unit
Non-residents .....	\$20 per unit

\* See "REFUNDS" concerning Refund Schedule.

## Other Fees and Charges

### Student Services Fee

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

\$50

#### B. Part-time Day & Evening Students (1-11 units):

1 - 6 units .....

\$15

7 - 11 units .....

\$30

#### Out-of-State Student Application Fee .....

\$5

A fee of \$5 must accompany the  
Application for Admission.

#### Room and Board .....

\$365

All full-time resident students who are  
single and under 21 years of age are re-  
quired 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. College housing is not available for part-time students.

**Room Deposit .....** **\$40**

The room deposit of \$40, which does not apply toward room and board fees, should accompany the Application for Admission of those who plan to live in college housing.

#### **Forfeiture of Room Deposit**

This deposit is a guarantee against cancellation of the housing application, termination of residency prior to full-semester payment, property damages, and other possible charges that may accrue during residency. Although normally refundable, the entire \$40 is subject to forfeiture under conditions of the housing contract.

#### **Late Registration**

Students registering after the close of the announced registration dates will be charged a late registration fee of \$5.

#### **Graduation**

Every candidate for an Associate degree is required to pay a graduation fee of \$10; portions of this fee are used to cover the diploma and academic costume charges.

#### **Payment of Fees for All Students**

All semester fees will be paid in full at the time of registration. However, arrangements may be made to pay the room and board fee on a half-semester basis; one-half of semester charge due on the day of registration for classes, the second-half on the Monday of the eighth week of classes.

#### **Refunds**

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 period will begin with the first day of classes.

	<b>Per Cent Refunded</b>
Two weeks or less .....	75
Between two and four weeks .....	50
Over four weeks .....	none

Student services fees are non-refundable after the first week of classes.

Withdrawal during the first week entitles the student to 50% refund.

## **Withdrawal Refunds**

**Room Refund:** Students who officially withdraw from the college before the completion of a semester will forfeit the unused portion of the half-semester room payment.

**Board Refund:** Students who officially withdraw from the college before the completion of a semester will receive a pro rata or day for day refund of the unused portion of the board payment.

**Room Deposit Refund:** The \$40.00 room deposit is a guarantee against cancellation of the housing application, termination of residency prior to the end of a semester, and damage or loss of college property while in residence. Although the room deposit is fully refundable, it is forfeited under the following conditions:

- (A) Failure to give notification of room cancellation by the date specified:
  - (1) Fall Semester, all students — thirty days before classes begin.
  - (2) Spring Semester
    - (a) New students — thirty days before classes begin.
    - (b) Continuing students — Saturday of Registration Week.
- (B) Failure to complete a full semester of residence.
- (C) Loss or damage to college property (only in the amount of loss or damage).
- (D) Academic or disciplinary dismissal from the college prior to the end of a semester.
- (E) Failure to follow formal and prescribed check-out procedures when departing from assigned residence hall.

All refunds and deposits due students for any reason will be forfeited unless called for on or before June 15 of the academic year in which they are due.

## **Housing Regulations**

### **General**

All students under the age of twenty-one are required to live in college residence halls or in the home of parents, guardians, or relatives, if they are commuting students.

Students living in college residence halls are required to carry an academic load of twelve or more units.

A student must submit a room deposit of \$40.00 with the Application for Admission and be admitted to the college before a room assignment may be made. Room assignments are confirmed by mail

and the room is reserved through the Saturday of Registration Week. Rooms not claimed by this date will be reassigned.

Adjustments in room rates are not made in periods of over-crowding and the college will 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.
- (d) rent over vacation periods.

### **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 half-semester basis as follows:

- (a) one-half of the semester room and board payment on the day of registration for classes.
- (b) second half of semester room and board payment due on the Monday of the eighth week of classes.

The board payment provides a seven-day meal ticket for the semester with 20 meals each week when classes are in session. The Sunday evening meal is not included.

### **Scholastic Honors**

High Honors are awarded to graduating students who receive a grade point average of 1.5 or above in all work taken at Cochise College, and Honors are awarded to those whose grade point average is between 1.51 and 2.0.

### **Notice of Intent to Graduate**

A notice of Intent to Graduate must be filed by each student who wishes to receive the Associate in Arts degree from Cochise College. The Notice should be filed at the beginning of the semester in which the student plans to complete requirements for graduation. Requirements may be completed during any semester, but the degree will not be conferred until the graduation ceremony is held at the close of the Spring semester. (See also Graduation Fee Requirement on page 28 )

## 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 maximum of four semester credits of physical education. 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 who is 24 years of age or older at the time of registration shall be exempt from physical education courses.
4. Servicemen will not be exempt from physical education courses, unless they are 24 or older, or are physically unqualified as certified by a licensed physician.

## Change of Grade

A grade once reported to the Student Personnel Office may be changed only upon authorization of the faculty member issuing the grade and the approval of the Dean of Instruction.

## Transfer of Credit

Students 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 4, 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, of any credit earned, or both.

# Career Programs

## Transfer Programs

## Guided Studies Programs

Students may enroll in Cochise College in one of several courses of study. It is the purpose of the College to present as broad a curriculum as possible in order to meet both community and regional needs, and also to give the general, specialized, and technical training, so necessary in our increasingly complex society.

Students who enroll with one purpose will frequently change their objectives. It is the philosophy of this institution that all fields are worthy occupational areas for the individual, and all instructors and counseling personnel assume responsibility to assist the student in finding the educational program best suited to his interests and abilities. Transfer from one program to another will always be made if it seems desirable.

**Selection of a Major:** The selection of a major is an indication of the goal toward which the student concentrates his efforts, whether it be mastery of a field of knowledge or development of marketable competencies. If a student is undecided about his major, he may find assistance in making a decision by studying further this section of the catalog.

## Career Programs

Career programs at Cochise College are intended for the student who wishes to extend his education by completing two years of college. The programs offered in career studies are designed to prepare men and women for employment upon completion of two years of education.

Career programs in middle management, law enforcement, practical nursing, office careers, medical secretarial studies, medical record technology, drafting technology, and civil technology are offered at Cochise. Each career program has been developed with the aid of business and industrial advisory committees to insure students of quality instruction and to enhance their opportunities for successful employment. (Information relating to additional occupational curricula may be secured through the Office of Admissions.)

Upon completion of the required two years of studies, students will receive an Associate in Arts or Associate in Science degree. The College Placement Bureau will assist graduates in finding permanent full-time positions in fields of specialization.

In addition to the established two-year career programs listed above, the college will offer a variety of occupational short-term, non-credit extension courses upon request of business, industry or other interested groups.

# Curriculum Guides

The curricula outlined in the following pages include general education courses intended to broaden the student's understanding of himself and his world. It is assumed that through such courses the student will develop a sense of personal and social responsibility and understandings appropriate to his vocation and community affairs.

## Civil Technology

The education of Civil Technicians at Cochise College is planned to most efficiently produce a graduate who will be effective and will be in demand in civil engineering and building construction. The technicians trained in this program may assist the civil engineer in planning, directing, inspecting, and supervising construction projects of various kinds. Graduates may be employed as surveyors, construction supervisors, estimators, engineering aides, materials salesmen, or soil mechanics lab technicians.

### *Suggested Sequence*

<b>First Semester</b>		<b>Cr</b>	<b>Second Semester</b>		<b>Cr</b>
CT 1	Orient. to Civil Technology	2	CT 7	Plane Surveying	4
DT 22	Technical Drafting	3	CT 52	Materials of Construction	3
Math 24	Trigonometry	3	Math 20	College Algebra	3
Engl 1	English Composition	3	Spch 3	Fundamentals of Speech	3
Psych 1	Psychology	1	PE 2	Physical Education	1
PE 1	Physical Education	1			—
Geol 51	Physical Geology	3			14
		—			
		16			
<b>Third Semester</b>		<b>Cr</b>	<b>Fourth Semester</b>		<b>Cr</b>
CT 62	Route Surveying	3	CT 51	General Land Surveying	3
Phys 12	Foundations of Science	3	CT 55	Soil Mechanics	3
Engl 8	Written Communications & Reports	3	PE 4	Physical Education	1
PE 3	Physical Education	1		Social Science Elective	3
CT 50	Elements of Construction	3		Elective	3
CT 65	Intro. to Hydraulics & Hydrology	2		Fine Arts Elective	3
		—			
		15			16

At least 60 units required for graduation.

## Drafting Technology

The curriculum in Drafting Technology develops draftsmen who prepare engineering documents or drawings for the transfer of ideas from the designer to the producer of products. Draftsmen are responsible for the completeness and accuracy of drawings, simple calculations, and records. Preparation for this career requires a knowledge of mechanics, mathematics, and building materials.

**Suggested Sequence**

<b>First Semester</b>		<b>Cr</b>	<b>Second Semester</b>		<b>Cr</b>
DT 10	Mechanical Drawing	3	DT 22	Technical Drafting	3
Bus 18	Calculating Machines	2	DT 23	Applied Descriptive Geometry	3
Math 11	Intermediate Algebra	3	Math 24	Plane Trigonometry	3
Engl 1	English Composition	3	Math 26	Slide Rule	1
Psych 1	Psychology	1	Engl 8	Written Communications & Reports	3
PE 1	Physical Education	1	PE 2	Physical Education	1
	Social Science Elective	3		Fine Arts Elective	2
		—			—
		16			16
					16
<b>Third Semester</b>		<b>Cr</b>	<b>Fourth Semester</b>		<b>Cr</b>
DT 31	Drafting and Design for Electricity-Electronics	3	CT 7	Plane Surveying	4
DT 34	Machine Drawing	3	DT 45	Technical Design	3
Phys 12	Foundations of Science	3	DT 47	Structural Drafting	3
PE 3	Physical Education	1	DT 46	Architectural Drafting and Design	3
	Social Science Elective	3	PE 4	Physical Education Elective	1
	Elective	3			2
		—			—
		16			16
					16

At least 60 units required for graduation.

## Law Enforcement

The magnitude and complexity of today's law enforcement and rehabilitation activities dictate the need for appropriately-educated law enforcement personnel. The program at Cochise College is designed to prepare graduates for the challenging and demanding opportunities which exist in public service and private industry.

The selection of law enforcement officers presents a diversified picture of minimum standards established by individual agencies. Failure to meet proper requirements may exclude persons from acceptance into the program. This program is open to both men and women.

**Suggested Sequence**

<b>First Semester</b>		<b>Cr</b>	<b>Second Semester</b>		<b>Cr</b>
LE 60	Intro. to Law Enforcement	3	LE 62	Police Organ. & Adm.	3
LE 61	Criminology	3	LE 62a	Cadet Training	1
Hlth 70	First Aid & Safety	2	Spec 3	Fundamentals of Speech	3
Engl 1	English Composition	3	Psych 2a	Elementary Psychology	3
*Bus 6	Elementary Typing or		Art 6	Basic Drawing	3
Bus 7	Intermediate Typing	3		Elective	3
PE 1	Physical Education	1	PE 2	Physical Education	1
Psych 1	Psychology	1			—
		—			17
		16			
<b>Third Semester</b>		<b>Cr</b>	<b>Fourth Semester</b>		<b>Cr</b>
LE 64	Police Patrol Functions	3	LE 70b	Criminal Investigation	3
LE 64a	Cadet Training	1	LE 72	Police Arsenal-Weapons	1
LE 70a	Criminal Investigation	3	LE 74	Arrest, Search & Seizure	3
LE 66	Criminal Law	3	Soc 12	Juvenile Delinquency	3
Engl 8	Written Communications & Reports	3	PE 72	Defensive Tactics	3
PE 3	Physical Education	1		Elective	3
		—			—
		14			16

\* Demonstrated typing ability will suffice to replace Bus 6 as a requirement. Bus 7 is recommended but not required.

Cadet training required providing necessary arrangements can be made with local police agencies.

At least 60 units required for graduation.

## Medical Record Technician

One of the most important members of the hospital team is the medical record technician, the historian of patient care. She assists in organizing and controlling the mass of reports which, once assembled, accurately states in uniform, scientific language, life's most anxious moments. The need for qualified people in this specialized field far exceeds the supply. Second year students will serve an internship in a large hospital.

### Suggested Sequence

<b>First Semester</b>		<b>Cr</b>	<b>Second Semester</b>		<b>Cr</b>
Engl 1	English 1	3	Spch 2	Speech	3
Zoo 20	Human Anatomy & Physiology	3	Hlth 42	Hygiene	3
Bus 7	Intermediate Typing	3	Bus 11	Intermediate Shorthand *	3
*Bus 10	Elementary Shorthand	3	PE 2	Physical Education	1
PE 1	Physical Education	1	Bus 81	Medical Terminology	3
Psych 1	Psychology	1	Bus 85a	Medical Record Science	3
		—			—
		14			16
<b>Third Semester</b>		<b>Cr</b>	<b>Fourth Semester</b>		<b>Cr</b>
Soc 1	Introduction to Sociology	3	Bus 97 Internship as Medical Record Technician		16
Bus 62	Office Procedures	3			
Fine Arts Elective		3			
PE 3	Physical Education	1			
Bus 83	Medical Transcription	3			
Bus 85b	Medical Record Science	3			
		—			
		16			

\*Shorthand suggested, but not required.

At least 60 units required for graduation.

## Medical Secretary

With continued expansion and improvement of health care for people of all ages, opportunities for medical secretaries are increasing.

Students who select this career program will increase their basic secretarial competencies while studying medical terminology and medical transcription, personal hygiene, anatomy, and general education subjects. Second year students will serve an internship in a large hospital. Graduates may find employment as medical secretaries or related workers with insurance companies, hospitals, or medical clinics.

*Suggested Sequence*

<b>First Semester</b>		<b>Cr</b>	<b>Second Semester</b>		<b>Cr</b>	
Engl 1	English 1	3	Spch	2	Speech	3
Zoo 20	Human Anatomy & Physiology	3	Hlth	42	Hygiene	3
Bus 7	Intermediate Typing	3	*Bus	11	Intermediate Shorthand	3
Bus 10	Elementary Shorthand *	3	PE	2	Physical Education	1
PE 1	Physical Education	1	Bus	4	Business Math <i>or</i>	
Psych 1	Psychology	1	Bus	1a	Principles of Accounting	3
		—	Bus	81	Medical Terminology	3
		—			—	
		14			16	
<b>Third Semester</b>		<b>Cr</b>	<b>Fourth Semester</b>		<b>Cr</b>	
Bus 62	Office Procedures	3	Bus 95	Internship as Medical Secretary		16
Bus 23	Personnel Psychology	3				
Soc 1	Introduction to Sociology	3				
	Fine Arts Elective	3				
PE 3	Physical Education	1				
Bus 83	Medical Transcription	3				
		—				
		16				

\*Shorthand suggested, but not required.

At least 60 units required for graduation.

## 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. Mid-Management students who do decide to continue their schooling will find that the majority of the course work will be accepted for transfer credits.

<b>Freshman Year</b>	<b>Total Hours</b>	<b>Sophomore Year</b>	<b>With Internship</b>	<b>Without Internship</b>
General Education Requirements	15	General Education Requirements	6	15
Business Administration Requirements	9	Business Administration Requirements	6	9
Mid-Management Core:		Mid-Management Core:		
Principles of Marketing	3	Problems of Distribution	3	3
Merchandising	3	Seminar: Trends & Practices in Marketing & Management	3	3
	—	Internship *	12	0
<b>Total Units</b>	<b>30</b>	<b>Total Units</b>	<b>30</b>	<b>30</b>

At least 60 units required for graduation.

\*Internship (on-the-job training) may be taken on a full-time basis during the student's fourth semester (total 12 hours + 3 hour Seminar) or during the student's third and fourth semester. The two-semester internship is dependent upon the student being placed locally in order that he (or she) may also attend classes on campus at Cochise College. During the two-semester internship, the student would receive 6 hours credit each semester for on-the-job training.

The Vocational Counselor will assist students in selecting appropriate business and general education requirements.

## Practical Nursing

The Practical Nursing program requires three semesters of study (or the equivalent thereof) and is designed to prepare students to function in a wide range of technical nursing skills under the supervision and guidance of the physician and professional nurse.

Classes are held on campus and in local hospitals where the class instruction and supervised practical nursing work aid the students to develop an understanding and competency of nursing, principles of skills. Upon completion of the program the student is eligible to take the state board examination for becoming a licensed practical nurse. This career program is open to men and women.

### Suggested Sequence

First Semester	Cr	Second Semester	Cr
Pnur 10 Professional-Vocational Relationships	1	Pnur 14b Medical-Surgical Nursing II	11
Pnur 12a Fundamentals of Nursing	6	Pnur 16 Mental Health	3
Pnur 14a Medical-Surgical Nursing	3	Engl 1 English Composition	3
Zoo 20 Human Anatomy & Physiology	3	PE 2 Physical Education	1
PE 1 Physical Education	1		—
Math 1x Fundamentals of Math	3		18
	—		
	17		

Summer Session	Cr
Pnur 14c Maternal-Child Nursing	8
Pnur 18 Advanced Professional Relationships	1
	9

## Secretarial Studies

Recent advances in business have opened a variety of opportunities in office careers. Interesting secretarial positions are available in government, foreign service, transportation, television, manufacturing, banking, and professional areas.

In accordance with the recommendations of office administrators the curriculum stresses mastery of office skills, English usage, and desirable personal traits.

In the program outlined, the student is advised to enter the skill classes which mark the present level of his or her proficiency in these fields. This career program is open to both men and women.

*Suggested Sequence*

<b>First Semester</b>	<b>Cr</b>	<b>Second Semester</b>	<b>Cr</b>
Bus 7 Intermediate Typing	3	Bus 8 Advanced Typing	3
Bus 10 Elementary Shorthand	3	Bus 11 Intermediate Shorthand	3
Bus 18 Calculating Machines	2	Bus 62 Office Procedures	3
Engl 1 English Composition <i>or</i>		Engl 2 English Composition <i>or</i>	
Engl 8 Written Communications & Reports	3	Spch 3 Fundamentals of Speech	3
Psych 1 Psychology	1	PE 2 Physical Education	1
PE 1 Physical Education	1	Fine Arts Elective	3
Social Science Elective	3		—
	—		16
	16		

<b>Third Semester</b>	<b>Cr</b>	<b>Fourth Semester</b>	<b>Cr</b>
Bus 4 Business Math <i>or</i>		Bus 31 Business Law	3
Bus 1a Principles of Accounting	3	Bus 64 College Secretarial Procedure	3
Bus 12 Advanced Shorthand	3	Bus 23 Personnel Psychology	3
Engl 8 Written Communications & Reports <i>or</i> Elective	3	PE 4 Physical Education	1
PE 3 Physical Education	1	Elective	3
Elective	3	Science Elective	3
Social Science Elective	3		—
	—		16
	16		

At least 60 units required for graduation.

## Transfer Programs

For the student who wishes to extend his education further 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 which are 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 for junior standing. Catalogs of major universities and colleges are available in the Library or the Student Personnel Office.

The student who plans to graduate from Cochise College and wishes to obtain junior standing in another college or university has five 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 fulfill the general education requirements of Co-chise College, see academic regulations section of this catalog;
- (5) He must earn a cumulative grade point average of 3.000 or better.

Students taking this program should carefully check the catalog of the college or university to which they will transfer and consult their advisor before planning a two-year program.

## ROTC Program

Under the provisions of the ROTC Vitalization Act of 1964, junior college men are now eligible to immediately 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 Students.

### GUIDED STUDIES

The program to be inaugurated in the current college year will include a basic program, specialized developmental courses for students in need of further preparation for college level academic work as well as an honors program in which the academically-talented will be challenged to study for enrichment or advanced standing in special interest areas.

## Courses of Instruction

### **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. 1a General Biology.

Courses carrying a letter designation X, viz. 1X Fundamental Mathematics, 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 credit given for the semester. The course description, 7 Plane Surveying 4, would indicate that the course is one semester in duration and that four units of credit are given. The number of lecture and laboratory hours per week is given 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, or 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.



## **Anthropology**

<b>1</b>	<b>INTRODUCTION TO ANTHROPOLOGY</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	<b>Origin and antiquity of man.</b>	
	<b>Lecture 3 hours.</b>	
<b>2</b>	<b>INTRODUCTION TO ANTHROPOLOGY</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	<b>Development of culture.</b>	
	<b>Lecture 3 hours.</b>	
<b>10F</b>	<b>ARCHAEOLOGICAL FIELD SESSION (Summer)</b>	<b>3 UNITS</b>
	<b>Prerequisite: Anthropology 35-36 or permission of the director.</b>	
	<b>Student will participate in excavation of a prehistoric site and gain a practical knowledge of Southwestern pre-history, archaeological concepts, techniques and methods.</b>	
<b>10T</b>	<b>CONDUCTED TOUR THROUGH INDIAN COUNTRY (Summer)</b>	<b>3 UNITS</b>
	<b>Prerequisite: Successful completion of a course in anthropology and permission of director.</b>	
	<b>Conducted tour through the Indian country will give student first hand information about the Indians of the Southwest.</b>	
<b>25, 26</b>	<b>CULTURAL ANTHROPOLOGY</b>	<b>3-3 UNITS</b>
	<b>Prerequisites: Anthropology 1, 2. Anthropology 25 is not prerequisite to Anthropology 26.</b>	
	<b>The student will learn Cultural Anthropology offers both theoretical and practical insight into subjects which affect man's way of life as he establishes an academic study for further field study.</b>	
	<b>Lecture 3 hours.</b>	
<b>35, 36</b>	<b>INTRODUCTION TO ARCHAEOLOGY</b>	<b>3-3 UNITS</b>
	<b>35, Theory and History of Archaeology</b>	
	<b>36, Practical applications of Archaeology</b>	
	<b>Prerequisites: Anthropology 1-2. Anthropology 35 is not a prerequisite to Anthropology 36.</b>	
	<b>In this introductory course, student will be offered theoretical and practical experience in the field of archaeology.</b>	
	<b>Lecture 3 hours, Field experience.</b>	

85	<b>NATIVE PEOPLES OF THE SOUTHWEST</b>	<b>2 UNITS</b>
<b>Prerequisite: None.</b>		
Prehistoric Indians.		
Lecture 2 hours.		
86	<b>NATIVE PEOPLES OF THE SOUTHWEST</b>	<b>2 UNITS</b>
<b>Prerequisite: None.</b>		
Modern Indian groups.		
Lecture 2 hours.		

## Art

3	<b>BASIC DESIGN</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Elements of visual perception and organization in two- and three-dimensional media.		
Lecture 2 hours, Studio 4 hours.		
6	<b>BASIC DRAWING</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Representational drawing and expressive pictorial design.		
Lecture 2 hours, Studio 4 hours.		
7	<b>SURVEY OF WORLD ART</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Analysis and appreciation of the art and architecture of Western civilization through the Gothic era and the world of prehistoric and primitive cultures.		
Lecture 3 hours.		
8	<b>SURVEY OF WORLD ART</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Analysis and appreciation of the art and architecture of Western civilizations from Renaissance through Modern times, and important Eastern cultures, tracing the development of their national styles.		
Lecture 3 hours.		
30	<b>TWO-DIMENSIONAL DESIGN</b>	<b>3 UNITS</b>
<b>Prerequisite: Art 3.</b>		
Manipulation, control, and structure of pictorial space, working with many materials. An historical and contemporary approach to composition.		
Lecture 2 hours, Studio 4 hours.		

31	<b>THREE-DIMENSIONAL DESIGN</b>	<b>3 UNITS</b>
<b>Prerequisite: Art 3.</b>		
A studio course with an inquiry into the use of volume and mass relationships as they exist in actual space. Experimentation in the use of various materials, and an emphasis upon the establishment of visually meaningful relationships.		
Lecture 2 hours, Studio 4 hours.		
45	<b>BEGINNING FIGURE DRAWING</b>	<b>3 UNITS</b>
<b>Prerequisite: Art 6 or permission of the professor.</b>		
Drawing of the human figure, with the emphasis on the organic form, relationships, motion, rhythm, and gesture, with a secondary emphasis on the figure in its environment.		
Studio 6 hours.		
65	<b>BEGINNING COMMERCIAL DESIGN</b>	<b>3 UNITS</b>
<b>Prerequisite: Art 3.</b>		
The course content is a study of the principles of commercial design and the techniques of advertising layout and their practical application. It is also concerned with the tools and materials used in the fields of advertising.		
Lecture 2 hours, Studio 4 hours.		
80	<b>BEGINNING PAINTING</b>	<b>3 UNITS</b>
<b>Prerequisites: Art 3, Art 6 or permission of the professor.</b>		
Elementary course in pictorial organization and in methods and techniques of oil painting.		
Studio 6 hours.		

## Biology

1a-1b	<b>GENERAL BIOLOGY</b>	<b>4.4 UNITS</b>
<b>Prerequisites: 1a is a prerequisite for 1b.</b>		
Principles and concepts of biology, including historical development, with reference to organization, function, heredity, and evolution of micro-organisms, plants, and animals.		
Lecture 3 hours, Laboratory 3 hours.		
12	<b>FOUNDATIONS OF SCIENCE: BIOLOGY</b>	<b>3 UNITS</b>
<b>Prerequisites: Chemistry 12 and Physics 12 or equivalent courses.</b>		
Basic concepts of both animals and plants, with emphasis on the processes and interrelationships of living things with each other and their surroundings.		
Lecture 2 hours, Laboratory 3 hours.		

## Botany

1	<b>GENERAL BOTANY</b> <b>Prerequisites: Chemistry 2a, Chemistry 12 or high school chemistry.</b> Basic course in botany for students of plant or animal science. An introduction to the principles of botany as illustrated by plants, with emphasis on morphology and physiology. Lecture 3 hours, Laboratory 3 hours.	<b>4 UNITS</b>
---	--	----------------

## Business

1a-1b	<b>PRINCIPLES OF ACCOUNTING</b> <b>Prerequisite: 1a is a prerequisite for 1b.</b> Recording transactions, theory of debit and credit, classification of accounts, and preparation and interpretation of financial statements as applied to sole proprietorships, partnerships, and corporations. Lecture 3 hours, Laboratory 2 hours.	<b>3-3 UNITS</b>
-------	--	------------------

3a-3b	<b>INTERMEDIATE ACCOUNTING</b> <b>Prerequisites: Business 1a and 1b.</b> Basic process and concepts of accounting: form and content of income statements and balance sheets, accounting for stockholder's equity, theory, and problems involved in accounting assets and liabilities, income determination, analysis and interpretation of financial statements. Lecture 3 hours, Laboratory 2 hours.	<b>3-3 UNITS</b>
-------	--	------------------

4	<b>BUSINESS MATH (Programmed)</b> <b>Prerequisites: None.</b> The student will demonstrate an understanding of the fundamentals of business mathematics and the ability to communicate with the "number language" of today's business world. This course is programmed learning in which the student advances at his own rate, benefitting from increased speed and efficiency of learning, higher achievement levels, possible enrichment of his work and an opportunity to gain complete and thorough mastery of subject matter.	<b>3 UNITS</b>
---	--	----------------

5	<b>TYPING REVIEW</b> <b>Prerequisite: Prior typing experience.</b> Student will review skills and the mechanical functions of an electrical typewriter, review letter format, tabulation and manuscripts.	<b>1 UNIT</b>
---	---	---------------

6	<b>ELEMENTARY TYPING</b> Prerequisite: None. Development of basic typewriting skills and techniques. Introduction to letter styles and forms, tabulations, and manuscript writing. Students who have had typing in high school should enroll in Business 7. Lecture-Laboratory 5 hours.	<b>3 UNITS</b>
7	<b>INTERMEDIATE TYPING</b> Prerequisite: Business 6, or high school typing, or permission of the professor. Improvement of typewriting skills; stresses techniques and accuracy in problem typing, as well as net rate in time writings. Includes all styles of business letters and business forms. Lecture-Laboratory 3 hours.	<b>3 UNITS</b>
8	<b>ADVANCED TYPING</b> Prerequisite: Business 7 or permission of the professor. Further development of typewriting skills, special problems in business letters, manuscripts, tabulation, and various business forms. Lecture-Laboratory 3 hours.	<b>3 UNITS</b>
9	<b>SURVEY OF AMERICAN BUSINESS</b> Prerequisite: None. Fundamental characteristics and functions of modern business, with emphasis on career opportunities and business finances. Lecture 3 hours.	<b>3 UNITS</b>
10	<b>ELEMENTARY SHORTHAND</b> Prerequisites: Business 6 or equivalent, a minimum grade of 3 in English, or permission of the professor. Emphasis on theory. Students are expected to attain a minimum speed of 60 words a minute on familiar material and to make accurate transcriptions. Students who have had shorthand in high school should enroll in Business 11. Lecture-Laboratory 4 hours.	<b>3 UNITS</b>
11	<b>INTERMEDIATE SHORTHAND</b> Prerequisite: One year of shorthand in high school, or Business 10 with a grade of 3 or better, or permission of the professor. Improvement of shorthand skills; development of dictation speed to a minimum of 80 words a minute on new material. Lecture-Laboratory 4 hours.	<b>3 UNITS</b>

12 **ADVANCED SHORTHAND & TRANSCRIPTION 3 UNITS**  
**Prerequisite: Business 11 with grade of 3 or better, or two years of shorthand in high school, or permission of the professor.**  
Emphasis on dictation, vocabulary development, and transcription. Students are expected to attain a minimum skill of 100 words a minute on new material.  
Lecture-Laboratory 4 hours.

13 **SHORTHAND REVIEW 1 UNIT**  
**Prerequisite: Previous shorthand experience, approximately one year; ability to communicate in written English.**  
Student will review principles and theory, Diamond Jubilee shorthand changes introduced, review basic materials and/or introduction to D.J. for business use or for admission to Business 11, Intermediate Shorthand. Dictation at suitable speeds can be given in communications laboratory.  
Lecture-Laboratory 3 hours for 8 weeks.

18 **CALCULATING MACHINES 2 UNITS**  
**Prerequisite: None.**  
Practice and development of skill in operating rotary calculators, key-driven calculators, ten-key and full-key adding machines, and printing calculators.  
Lecture-Laboratory 2 hours.

19 **BUSINESS STATISTICS 3 UNITS**  
**Prerequisite: Business math or permission of the professor.**  
Student will learn descriptive statistics, averages, dispersion, elementary statistical inference, index numbering, time series, correlations, chi-square testing, point and interval estimation, applied to business and economic problems.  
Lecture 3 hours.

21 **TAXATION PRINCIPLES AND PROCEDURES 3 UNITS**  
**Prerequisites: Business 1a, 1b or permission of the professor.**  
Tax laws, accounting procedures, and preparation of required United States and Arizona Income Tax Returns as they apply to individuals and business. This course is intended for those who do not anticipate specialization beyond the junior college level, but is of college level and may in some cases be accepted for transfer.  
Lecture 3 hours.

31	<b>BUSINESS LAW</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	Basic legal principles involved in laws of contracts, negotiable instruments, property and business organizations. Special attention given to Arizona Statutes and court cases. Intended for those who do not anticipate specialization beyond the junior college level, but is of college level and may in some cases be accepted for transfer.	
	Lecture 3 hours.	
51	<b>INSURANCE</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	Principles and practices of insurance including coverage available, buying methods, procedures for settling claims, and analysis of contracts and forms purchased by the average individual.	
	Lecture 3 hours.	
52	<b>MERCHANDISING</b>	<b>3 UNITS</b>
	<b>Prerequisite: Principles of Marketing (Bus. 55)</b>	
	The student will demonstrate a sensitivity to consumer demand resulting in product planning, development, promotion and distribution to profitably perpetuate product demand and consumption. This will be applied to salesmanship, sales promotion, merchandise policies, merchandise control and knowledge of the consumer.	
	Lecture 3 hours.	
53	<b>SALESMANSHIP</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	Career opportunities in sales work, practical and psychological factors in selling, development of desirable sales personality, current techniques in conducting sales campaigns. Members of the class will engage in practical sales demonstrations.	
	Lecture 3 hours.	
55	<b>PRINCIPLES OF MARKETING</b>	<b>3 UNITS</b>
	<b>Prerequisite: Approval of Mid-management Coordinator.</b>	
	The student will gain a basic understanding of the marketing function in the U. S. economy and international affairs. He will also develop his knowledge of the decision-making process and ability to think and express himself within the communicative framework of marketing and the business world by analyzing case studies.	
	Lecture 3 hours.	

57	<b>PROBLEMS OF DISTRIBUTION</b>	<b>3 UNITS</b>
	<b>Prerequisites:</b> Business 55 and 52.	
	This course will enable the mid-management student to demonstrate an understanding of principles of business management through sound decision-making procedures in case studies. Involved will be research, analysis of findings and sound decisions regarding personal development and requirements of the management function.	
	Lecture 3 hours.	
59	<b>PRINCIPLES OF ADVERTISING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> None.	
	Role of advertising in distribution, including advertising media, advertising organizations, advertising copy, layout, and production.	
	Lecture 3 hours.	
62	<b>OFFICE PROCEDURES</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> None.	
	General office procedures, including duties of office workers, personal qualifications, systems of filing, preparation of reports, handling mail, and operation of duplication machines most commonly found in business offices.	
	Lecture 3 hours.	
64	<b>COLLEGE SECRETARIAL PROCEDURES</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Business 11.	
	Finishing course for secretarial students, including study of office organization, layout, work flow, procedure, standards, personnel, and supervision procedures.	
	Lecture 3 hours.	
72	<b>INTRODUCTION TO DATA PROCESSING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> None.	
	Survey of data processing, including the history of tabulating machines and electronic computers and the role of the punch card in data processing descriptions. Functions of various machines, introduction to the use of programming of electronic computers, study of systems, procedures, and charting.	
	Lecture 3 hours.	

81	<b>MEDICAL TERMINOLOGY</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Permission of the professor.	
	The study of prefixes first, suffixes and the principles for combining the two to make compounds followed by a comprehensive study of a list of diagnostic, operative, symptomatological and drug terms and abbreviations frequently encountered in medical records.	
	Lecture 3 hours.	
83	<b>MEDICAL TRANSCRIPTION</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Business 8.	
	Transcribing histories, physicals, admission and discharge notes, and surgical dictation from the audiotograph equipment. (Students will be expected to visit the operating rooms to observe surgery during this time.)	
	Lecture-Laboratory 4 hours.	
85a	<b>MEDICAL RECORD SCIENCE I</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Anatomy.	
	The student will participate in a study of the history of medicine, hospitals and medical records; a breakdown of professional ethics and personal conduct; a development of securing, evaluating and using medical records; quantitative and qualitative analysis of the medical record with a view of orienting the student to the basic course in medical record-keeping theory and practice.	
	Lecture 3 hours.	
85b	<b>MEDICAL RECORD SCIENCE II</b>	<b>3 UNITS</b>
	The student's efforts will be directed toward principles involved in numbering, filing and preservation of medical records; compiling statistics for hospitals; preparation of daily census reports; analysis of hospital service; special reports. The basic principles in classification of diseases will also be presented.	
	Lecture 3 hours.	
91	<b>TRENDS AND PRACTICES IN MARKETING MANAGEMENT</b>	<b>12 UNITS</b>
	<b>Prerequisite:</b> Business 57.	
	Culminating effort of students enrolled in the middle management program. Consists of paid supervised employment in wholesaling, retailing, service, or other distributive occupations. Students will normally live off campus in market areas.	
	Seminars by appointment.	

<b>91ab</b>	<b>INTERNSHIP IN MARKETING</b>	<b>12 UNITS</b>
	<b>Prerequisites:</b> Business 55, 52, 57. (Business 57 may be taken concurrently with Business 91a.) All students enrolled in Business 91ab must have prior approval of Mid-management Coordinator.	
	A planned program of independent research, observation, study and paid work experience in selected business establishments is a basic factor of this course. Programs are designed to correlate classroom study with internship experiences. Selected business establishments will include retailing, wholesaling and service industries (such as the hotel-motel industry), direct sales and other areas of professional sales work.	
	Laboratory.	
<b>93</b>	<b>SEMINAR — TRENDS AND PRACTICES IN MARKETING AND MANAGEMENT</b>	<b>3 UNITS</b>
	<b>Prerequisites:</b> Business 55, 52, 57.	
	The mid-management student will learn to utilize his background of business knowledge in actual or simulated applications. He will apply such knowledge to management of people, capital, merchandise and time through decision-making situations.	
	NOTE: Business 93 will be taken concurrently by those enrolled in Business 91b (Internship in Marketing) during their fourth semester and by other mid-management students not employed during their fourth semester.	
	Lecture 3 hours.	
<b>95</b>	<b>INTERNSHIP AS MEDICAL SECRETARY</b>	<b>9 UNITS</b>
	<b>Prerequisite:</b> Concurrent enrollment in Bus. 81 & Bus. 83.	
	Experience in a hospital business office designed to dovetail theory and practice. Problems encountered by students in their hospital training stations will be discussed.	
	Lecture-Laboratory experience at Tucson Medical Center.	
<b>97</b>	<b>INTERNSHIP AS MEDICAL RECORD TECHNICIAN</b>	<b>9 UNITS</b>
	<b>Prerequisite:</b> Concurrent enrollment in Bus. 81 & Bus. 83.	
	Experience in a hospital medical records library designed to dovetail theory and practice. Problems encountered by students in their hospital training stations will be discussed.	
	Lecture-Laboratory experience at Tucson Medical Center.	

# Chemistry

<b>2a</b>	<b>GENERAL CHEMISTRY</b>	<b>4 UNITS</b>
<p><b>Prerequisites:</b> One year of high school chemistry, or Chemistry 12 with a grade of 3 or better, or Math 11. Introduction to the general principles of chemistry with emphasis upon quantitative relationships; properties of matter are related wherever possible to present concepts of atomic structure.</p>		
<p>Lecture 3 hours, Laboratory 3 hours.</p>		
<b>2b</b>	<b>GENERAL CHEMISTRY</b>	<b>4 UNITS</b>
<p><b>Prerequisite:</b> Chemistry 2a.</p> <p>Continuation of Chemistry 2a with emphasis upon chemical equilibrium and a study of the elements through group relationships on periodic tables. Principles of ionic equilibrium are studied in the laboratory by means of experiments in acid-base equilibria, solubility products, and a modified scheme of qualitative analysis.</p>		
<p>Lecture 3 hours, Laboratory 3 hours.</p>		
<b>12</b>	<b>FOUNDATIONS OF SCIENCE: Chemistry</b>	<b>3 UNITS</b>
<p><b>Prerequisite:</b> No previous chemistry background is assumed, and any mathematics needed will be developed in the course.</p> <p>The classification and structure of matter and the principles of chemical reactions.</p>		
<p>Lecture 2 hours, Laboratory 3 hours.</p>		
<b>20a</b>	<b>QUANTITATIVE ANALYSIS</b>	<b>4 UNITS</b>
<p><b>Prerequisites:</b> Math 20 and Chemistry 2b.</p> <p>Introduction to quantitative chemical analysis involving the fundamentals of volumetric and gravimetric analysis. Careful manipulative technique, integrity, and accuracy are stressed in the laboratory.</p>		
<p>Lecture 2 hours, Laboratory 6 hours.</p>		
<b>20b</b>	<b>QUALITATIVE ANALYSIS</b>	<b>4 UNITS</b>
<p><b>Prerequisites:</b> Math 20 and Chemistry 2b.</p> <p>Theory and practice of qualitative inorganic analysis. Should be taken by students who plan to teach chemistry, study medicine, or do research work in science.</p>		
<p>Lecture 2 hours, Laboratory 6 hours.</p>		
<b>40a-40b</b>	<b>ORGANIC CHEMISTRY</b>	<b>4.4 UNITS</b>
<p><b>Prerequisite:</b> Chemistry 2b.</p> <p>General principles of organic chemistry; laboratory preparation of organic compounds.</p>		
<p>Lecture 3 hours, Laboratory 3 hours.</p>		

# Civil Technology

1	<b>ORIENTATION TO CIVIL TECHNOLOGY</b>	<b>2 UNITS</b>
	<b>Prerequisite:</b> None.	
	The role of the technician in the field of civil engineering and land surveying; basic engineering principles, concepts of measurement, construction techniques, and related elementary problems emphasizing the use of slide rule.	
	Lecture 2 hours.	
7	<b>PLANE SURVEYING</b>	<b>4 UNITS</b>
	<b>Prerequisite:</b> Civil Technology 1.	
	The use, care, and adjustment of surveying instruments; measuring distances; direct, differential, and profile leveling; plotting profiles, cross-sectioning, laying grade lines; computation; mapping; measuring angles and directions; traversing vertical and simple curves.	
	Lecture 2 hours, Laboratory 4 hours.	
9	<b>TOPOGRAPHICAL SURVEYING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Civil Technology 7.	
	Use of transit stadia, plane table; astronomical observations; highway curves; mineral, private, and public land surveys; triangulation and application.	
	Lecture 1 hour, Laboratory 4 hours.	
26	<b>ROUTE SURVEYING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Civil Technology 7.	
	A review of instrument adjustment, stadia and celestial observations. Advanced problems in horizontal, vertical, and easement curves will also be discussed.	
	Lecture 3 hours.	
50	<b>ELEMENTS OF CONSTRUCTION</b>	<b>2 UNITS</b>
	<b>Prerequisite:</b> Civil Technology 26.	
	Basic elements of construction such as construction scheduling, equipment, and methods. Students will perform calculations in analysis of construction operation to determine such factors as cost, production, and economics of equipment use.	
	Lecture 3 hours.	
51	<b>GENERAL LAND SURVEYING</b>	<b>3 UNITS</b>
	<b>Prerequisites:</b> Math 24 or 44 and Civil Technology 26.	
	Theory of measurements and errors; vertical and horizontal control methods; topographic, public land, and construction surveys; use of surveying instruments.	
	Lecture 2 hours, Laboratory 3 hours.	

52	<b>MATERIALS OF CONSTRUCTION</b>	<b>2 UNITS</b>
<b>Prerequisite: Civil Technology 1.</b>		
Principal materials used in the construction of highways, buildings, utilities, and other structures.		
	Lecture 2 hours, Laboratory 3 hours.	
54	<b>CONCRETE MATERIALS</b>	<b>4 UNITS</b>
<b>Prerequisite: Civil Technology 52.</b>		
The study of aggregates, Portland cement, and Portland cement concrete, with laboratory exercises in standard testing procedures.		
	Lecture 3 hours, Laboratory 3 hours.	
55	<b>SOIL MECHANICS</b>	<b>3 UNITS</b>
<b>Prerequisites: Math 20, College Algebra or Math 24, Trigonometry or current enrollment.</b>		
Student should develop a theoretical and practical insight into soils problems at the level at which they are encountered by a civil engineer. Lecture portion will provide theoretical and practical understanding for soil problems most frequently met in field and laboratory, while laboratory portion will provide student with working knowledge of testing aspects and results derived from tests as applied to problems of foundations design.		
	Lecture 2 hours, Laboratory 3 hours.	
65	<b>INTRODUCTION TO HYDRAULICS AND HYDROLOGY</b>	<b>2 UNITS</b>
<b>Prerequisite: Civil Technology 26.</b>		
Includes fundamental principles of liquid flow in pressurized conduits and open channels, hydraulic cycle, run-off collection, systems and steam flow.		
	Lecture 2 hours.	
66	<b>CONSTRUCTION LAW</b>	<b>2 UNITS</b>
<b>Prerequisite: None.</b>		
Legal aspects of building codes, contractor's licenses, workmen's compensation, social security, state safety regulations, lien laws. Interpretations and applications of the laws pertaining to the construction industry.		
	Lecture 2 hours.	

67	<b>WELDING PROCESSES</b>	<b>2 UNITS</b>
	<b>Prerequisite:</b> Permission of the professor.	
	Introduction to welding equipment and processes, with training in basic knowledge and the understanding of safety, equipment, and set-up, iron ore smelting, and refining of metals.	
	Lecture-Laboratory 3 hours.	
68	<b>HIGHWAY SURVEYING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> 10 hours of surveying and Drafting Technology 49.	
	The fundamental principles of surveying and their application to problems involving highway construction.	
	Lecture 1 hour, Laboratory 4 hours.	

## Drafting Technology

10	<b>MECHANICAL DRAWING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> None.	
	Mechanical drafting as pertains to lettering, orthographic and pictorial dimensioning, sections, conventions, working drawings, and blueprint reading; for students who have not had mechanical drawing in high school.	
	Lecture 2 hours, Laboratory 4 hours.	
22	<b>TECHNICAL DRAFTING</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Drafting Technology 10.	
	Elementary course for students who have limited drawing experience. Use of templates, fundamentals of drawing and drafting room practice, symbols and standards; emphasis placed on construction and interpretation of typical industrial drawings.	
	Lecture 1½ hours, Laboratory 4½ hours.	
23	<b>APPLIED DESCRIPTIVE GEOMETRY</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Drafting Technology 22.	
	A study of graphic analysis and the solution of typical three-dimensional space problems through the application of the principles of multiview projection. Fundamental problems are related to points, lines, planes, intersections, and development of plane and curved surfaces, revolution, and vector geometry.	
	Lecture 2 hours, Laboratory 4 hours.	
31	<b>DRAFTING AND DESIGN FOR ELECTRICITY-ELECTRONICS</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Drafting Technology 10, 22.	
	The study of wiring diagrams, schematics, cable diagram, and logic as applied to modern drafting techniques.	
	Lecture 2 hours, Laboratory 4 hours.	

34	<b>MACHINE DRAWING</b>	<b>3 UNITS</b>
<b>Prerequisite: Drafting Technology 22.</b>		
Advanced study and applications of detail and assembly drawings of machines, including technical sketching, precision dimensioning and tolerancing; representations and symbols.		
Lecture 1½ hours, Laboratory 4½ hours.		
45	<b>TECHNICAL DESIGN</b>	<b>3 UNITS</b>
<b>Prerequisite:</b>		
The principles involved in machine and tool design involving jigs and fixtures, strength of materials and class of fits.		
Lecture 2 hours, Laboratory 4 hours.		
46	<b>ARCHITECTURAL DRAFTING &amp; DESIGN</b>	<b>3 UNITS</b>
<b>Prerequisite: Drafting Technology 34.</b>		
Architectural design, methods and types of construction of important details of modern structures.		
Lecture 1½ hours, Laboratory 4½ hours.		
47	<b>STRUCTURAL DRAFTING</b>	<b>3 UNITS</b>
<b>Prerequisite: Drafting Technology 22.</b>		
Covers layout and detail drawing showing the design and construction of buildings, bridges, and other structures using such materials as steel, concrete, and timber.		
Lecture 1½ hours, Laboratory 4½ hours.		
49	<b>TOPOGRAPHICAL DRAFTING</b>	<b>3 UNITS</b>
<b>Prerequisite: Drafting Technology 22.</b>		
Topographic maps drawing; road maps as used by civilian and military agencies; contour and relief models, map projections. Descriptions of land, drawings of parcels and tracts of land; subdivision layout; boundary records and legal terms.		
Lecture 1½ hours, Laboratory 4½ hours.		

## Drama

1	<b>ACTING</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Theories of dramatic art and practice in acting.		
Lecture 3 hours.		
2	<b>ACTING</b>	<b>3 UNITS</b>
<b>Prerequisite: Drama 1.</b>		
The understanding of the major factors in developing characterizations in all types of dramatic literature, including theories of dramatic art and practice in acting.		
Lecture 3 hours.		

3	<b>PRINCIPLES AND TECHNIQUES OF PLAY PRODUCTION</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> <b>None.</b>	
	Theories and practices of dramatic art: acting, directing, scene designing, costuming, stage lighting, makeup, organization, and a brief history of the theatre.	
	Lecture 3 hours.	
4	<b>PRINCIPLES AND TECHNIQUES OF PLAY PRODUCTION</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> <b>Drama 3.</b>	
	Techniques and materials used in producing the play or dramatic program, covering all elements and phases of production.	
	Lecture 3 hours.	
10	<b>THEATER WORKSHOP</b>	<b>1 UNIT</b>
	<b>Prerequisite:</b> <b>Permission of the professor (audition).</b>	
	Actual participation in a college dramatic production either in an acting or a production role. No student will be awarded more than <b>four</b> such credits.	

## Economics

2	<b>PRINCIPLES OF ECONOMICS</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> <b>None.</b>	
	The American economic system, fundamental principles, basic areas of economic analysis, economic theories, and practical applications to current economic problems.	
	Lecture 3 hours.	
3	<b>PRINCIPLES OF ECONOMICS</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> <b>Economics 2.</b>	
	Price theory for the product market models, factor prices, international economics.	
	Lecture 3 hours.	

## Education

11	<b>INTRODUCTION TO EDUCATION</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> <b>Sophomore standing or permission of the professor.</b>	
	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.	

## Engineering

17	<b>MECHANICS OF MATERIALS</b>	<b>4 UNITS</b>
<b>Prerequisites: Physics 3a and 3b.</b>		
Material behavior; relationship between external forces acting on elastic and inelastic bodies, and the resulting stress and strain; combined stresses.		
	Lecture 3 hours.	
80	<b>FIELDS OF STATIC AND MOVING CHARGES</b>	<b>3 UNITS</b>
<b>Prerequisites: Math 51, 52, 53.</b>		
Introduction to static and time varying electric and magnetic fields, Coulomb's law, Gauss' law, Laplace's equation, Biot-Savart law, Ampere's law, and introduction to the interaction of electric and magnetic fields with materials.		
	Lecture 3 hours, Seminar 1 hour.	

## English

X	<b>ENGLISH FUNDAMENTALS</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Emphasis on reading and writing; intensive review of grammar, spelling, and other fundamentals. Cannot be transferred to a four-year institution.		
	Lecture 3 hours.	
1X	<b>CONVERSATIONAL ENGLISH</b>	<b>3 UNITS</b>
Students who have had little reading background in English and little speaking proficiency in English, will find this course designed for their needs.		
	Lecture 3 hours.	
2X	<b>CONVERSATIONAL ENGLISH</b>	<b>3 UNITS</b>
Students who have about the equivalent of Grade 4 background in vocabulary and who speak a little more proficiently in English than 1X will find this course beneficial.		
	Lecture 3 hours.	
3X	<b>CONVERSATIONAL ENGLISH</b>	<b>3 UNITS</b>
Students who have about the equivalent of a Grade 6 background in vocabulary and who speak a little more proficiently in English than those in 2X will find this course adapted to their needs.		
	Lecture 3 hours.	

<b>4X</b>	<b>CONVERSATIONAL ENGLISH</b>	<b>3 UNITS</b>
	The fourth and final of the series in Conversational English is for even a more advanced group — those who have the equivalent of a Grade 9 background in vocabulary and who speak a little more proficiently in English than 3X.	
	Lecture 3 hours.	
<b>1</b>	<b>COMPOSITION</b>	<b>3 UNITS</b>
	<b>Prerequisite: English placement test or a grade of 3 or better in English X.</b>	
	Expository reading and writing, review of paragraph development, study of the larger units of composition, basic study of style, and preparation of reference papers.	
	Lecture 3 hours.	
<b>2</b>	<b>COMPOSITION</b>	<b>3 UNITS</b>
	<b>Prerequisite: English 1.</b>	
	Advanced work in composition. Special emphasis on argumentative and persuasive writing and preparing research papers.	
	Lecture 3 hours.	
<b>4</b>	<b>INTRODUCTION TO LITERATURE</b>	<b>3 UNITS</b>
	<b>Prerequisites: English 1 and 2 or permission of the instructor.</b>	
	Analysis of literary expression, the poem, drama, essay, novel, and short story.	
	Lecture 3 hours.	
<b>5</b>	<b>ENGLISH FOR BILINGUAL AND FOREIGN STUDENTS</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	For students whose native speech is not English. Will not meet English requirements in four-year institution.	
	Lecture 3 hours.	
<b>7</b>	<b>NARRATIVE WRITING</b>	<b>3 UNITS</b>
	<b>Prerequisites: English 1 and 2 or permission of the professor.</b>	
	A three-hour lecture and workshop in writing with emphasis on the creative aspects: short stories, novel, narrative sketch, etc.	
	Lecture 3 hours.	

8 **WRITTEN COMMUNICATIONS AND REPORTS 3 UNITS**  
**Prerequisite: English placement test or a grade of 3 in English X.**  
Development of skills for effective written communication. Stresses organization of factual and statistical materials, basic report style and format, and the functions and purpose of formal business communications.  
Lecture 3 hours.

20 **SURVEY OF ENGLISH LITERATURE 3 UNITS**  
**Prerequisites: English 1 and 2 or permission of the professor.**  
A chronological study of some of the leading writers of English literature from the Old English period to the present day.  
Lecture 3 hours.

21 **SURVEY OF ENGLISH LITERATURE 3 UNITS**  
**Prerequisites: English 1 and 2 or permission of the professor.**  
Based upon the later English literature.  
Lecture 3 hours.

24 **AMERICAN LITERATURE 3 UNITS**  
**Prerequisites: English 1 and 2 or permission of the professor.**  
A critical study of selected works of American prose and poetry.  
Lecture 3 hours.

25 **AMERICAN LITERATURE 3 UNITS**  
**Prerequisites: English 1 and 2 or permission of the professor.**  
The influence of westward expansion, the growth of regionalism, the literature of social protest.  
Lecture 3 hours.

26 **WORLD LITERATURE 3 UNITS**  
**Prerequisites: English 1 and 2 or permission of the professor.**  
Selections from the great literature of the world in translation concluding with the period of the Renaissance.  
Lecture 3 hours.

27 **WORLD LITERATURE 3 UNITS**  
**Prerequisites: English 1 and 2 or permission of the professor.**  
Selections from the leading works of literature after the Renaissance.  
Lecture 3 hours.

## French

<b>1a-1b</b>	<b>ELEMENTARY FRENCH</b>	<b>4-4 UNITS</b>
	<b>Prerequisite: French 1a is a prerequisite for 1b.</b>	
	Conversation, comprehension of the tongue, pronunciation, grammar, reading and writing skills.	
	Lecture 4 hours.	

## Geography

<b>1</b>	<b>ELEMENTS OF GEOGRAPHY WORLD GEOGRAPHY</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	Introduction to basic geographical concepts, such as climate, drainage, soils, plant and animal life, topography. General analysis of the modes of human adjustment and interaction with the physical world. Basic elements of cartography are also stressed.	
	Lecture 3 hours.	
<b>2</b>	<b>ELEMENTS OF GEOGRAPHY WORLD GEOGRAPHY</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	Discussion of the world's regions with special emphasis on the relationships between various cultures and their physical surrounding. Each region is considered in terms of its particular arrangement of climate, soil, topography, etc., including culture.	
	Lecture 3 hours.	
<b>5</b>	<b>ECONOMIC GEOGRAPHY</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	The world's resources and industries; agriculture, mineral resources, manufacturing, trade routes, and trade centers.	
	Lecture 3 hours.	

## Geology

7	<b>INTRODUCTION TO MINERALOGY</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Chemistry 2b.	
	Determination of important minerals, their origins, and relationship, by physical and chemical tests.	
	Lecture 2 hours, Laboratory 3 hours.	
12	<b>FOUNDATIONS OF SCIENCE: GEOLOGY</b>	<b>3 UNITS</b>
	<b>Prerequisites:</b> Chemistry 12 and Physics 12.	
	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 2 hours, Laboratory 3 hours.	
51	<b>PHYSICAL GEOLOGY</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> None.	
	Principles of physical geology for students who plan to major in geology, hydrology, engineering, and agriculture.	
	Lecture 2 hours. Laboratory 3 hours, including field trips.	

## Government

2	<b>AMERICAN NATIONAL GOVERNMENT</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> None.	
	The national government of the United States, including constitutional principles, structure, and functions. This course is not open to those with credit in Govt. 57. It fulfills the federal constitution requirement for an Arizona teaching certificate.	
	Lecture 3 hours.	
57	<b>CONSTITUTIONAL GOVERNMENT — NATIONAL &amp; ARIZONA GOVERNMENT</b>	<b>3 UNITS</b>
	<b>Prerequisite:</b> Sophomore standing.	
	The Constitution of the United States and the Constitution of Arizona. One-half of the time is given to the study of the Constitution of Arizona. The national and Arizona section of this course are both approved for teacher certifications. Students majoring in political science and planning to transfer to a four-year institution should take Govt 2 and not Govt 57.	
	Lecture 3 hours.	

## Health

42	<b>PERSONAL HEALTH</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
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.		
	Lecture 3 hours.	
70	<b>FIRST AID AND SAFETY</b>	<b>2 UNITS</b>
<b>Prerequisite: None.</b>		
This class includes both the standard and advanced Red Cross courses in first aid. Theory and practice in immediate and temporary care given in case of accident or sudden illness.		
	Lecture 2 hours.	

71	<b>SCHOOL AND COMMUNITY HEALTH</b>	<b>3 UNITS</b>
<b>Prerequisite: Sophomore standing or permission of the professor.</b>		
The basic plan of the school health program; health services, health instruction, and healthful school environment. The role of the teacher in relation to the school health program and the community health program.		
	Lecture 3 hours.	

## History

1	<b>HISTORY OF THE UNITED STATES</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
The development of the United States, stressing the forces which culminated in the Civil War. A development of the cultural, social, economic, diplomatic, and political factors involved in the evolution of the American society.		
	Lecture 3 hours.	
2	<b>HISTORY OF THE UNITED STATES</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
United States after the Civil War. An understanding of reconstruction, the growth of big business, and domestic and foreign problems developed as a basis for a comprehensive and intelligent evaluation of current problems.		
	Lecture 3 hours.	
4	<b>HISTORY OF WESTERN CIVILIZATION</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Ancient civilizations, fusion of Mediterranean and Germanic cultures in the medieval period, the Renaissance, the Reformation and the spread of western civilization to the Americas and Asia.		
	Lecture 3 hours.	

5	<b>HISTORY OF WESTERN CIVILIZATION</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Rise of modern liberalism and democracy, the French Revolution, tensions of the 19th century, and latest world developments.		
Lecture 3 hours.		

## **Humanities**

50	<b>HUMANITIES</b>	<b>4 UNITS</b>
<b>Prerequisites: Sophomore standing and English 1 and 2, or six units of freshman English.</b>		
Western man's cultural and philosophical development from ancient times to the present. Emphasis on the development of music, art, philosophy, and literature in an historical context.		
Lecture 4 hours.		

51	<b>HUMANITIES</b>	<b>4 UNITS</b>
<b>Prerequisites: Sophomore standing and English 1 and 2, or six units of freshman English.</b>		
An integrated course designed to develop a discriminating appreciation of art, music, literature, philosophy, and religion.		
Lecture 4 hours.		

## **Journalism**

1	<b>NEWS WRITING AND REPORTING</b>	<b>3 UNITS</b>
<b>Prerequisite: Eligibility for English 1 or completion of English 1 with a grade of 3 or better, or permission of the professor.</b>		
Introductory lecture course in journalism, with emphasis on the development of skills needed for the gathering and reporting of news, with additional consideration of such topics as the newsworthiness of events, public relations, the newspaper as a mass medium, news coverage of specific types of events, news and feature writings, and newspaper ethics. News Writing Laboratory 2 or 3 may be taken concurrently.		
Lecture 3 hours.		

2	<b>NEWS WRITING LABORATORY</b>	<b>3 UNITS</b>
<b>Prerequisite: Eligibility for English 1 or completion of English 1 with a grade of 3 or better, or permission of the professor.</b>		
Practical experience in news writing, feature writing, editing, make-up, headline writing, and advertising layout and copy. Students in the News Writing Laboratory may comprise the staff of the student newspaper. May be taken concurrently with Journalism 1.		
Lecture and Laboratory 3 hours.		

3	<b>NEWS WRITING LABORATORY</b>	<b>3 UNITS</b>
<b>Prerequisite: Eligibility for English 1 or completion of English 1 with a grade of 3 or better, or permission of the professor.</b>		
Journalism laboratory open to editorial staff of the College newspaper, yearbook, and literary magazine.		
Lecture and Laboratory 3 hours.		
10	<b>PUBLICATIONS WORKSHOP</b>	<b>1 UNIT</b>
<b>Prerequisite: Permission of the professor.</b>		
Actual participation in the reporting, writing, or photographic functions of the College publications. No student will be awarded more than <b>three</b> such credits. (Not open to students enrolled in scheduled journalism courses.)		

## Law Enforcement

60	<b>INTRODUCTION TO LAW ENFORCEMENT</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
Course focuses on three fields of concern to potential law officers: A career in law enforcement — what it demands, what student needs to bring to it, how student may begin such a career; Crime — criminal law and how law enforcement actually works; Police Organization — how it developed, functions and solves the problems of public relations and police ethics.		
Lecture 3 hours.		
61	<b>CRIMINOLOGY</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
This training gives the student an opportunity to study crime and to gain an insight into scientific efforts to explain crime, to understand man in relation to crime phenomena, to view crime as an indicator of social change, to study each type of criminal in terms of behavior, and social and scientific roots underlying and nourishing that behavior, to explode myths about crime and to sharpen insight into the criminal mind, to broaden student's understanding of society.		
Lecture 3 hours.		

62	<b>POLICE ORGANIZATION AND ADMINISTRATION</b>	<b>3 UNITS</b>
<b>Prerequisite: LE 60 or permission of the instructor for in-service, personnel.</b>		
Principles of organization and administration of law enforcement, including recruitment, selection, training, discipline and promotion.		
Lecture 3 hours.		

62a	<b>POLICE FIELD TRAINING</b> Prerequisite: Concurrent with LE-60 (Police Organization and Administration).	1 UNIT
	Course designed for the prospective law enforcement officer and not for in-service training. Student introduced to the atmosphere of the local police department; performs trainee-administrative work, including booking procedures, desk functions, administrative tasks eight hours per week.	
	Laboratory.	
64	<b>POLICE PATROL FUNCTIONS</b> Prerequisite: LE-62 (Police Organization and Administration), LE-62a (Police Field Training).	3 UNITS
	Police patrol administration discussed along with techniques to supplement the patrolmen, the use of patrol-women, reserves, police dogs, integrated police-fire personnel, and police cadets. Patrol planning process is explored, including tactical and operational plans. Special equipment required by modern patrol force is examined to include communications, vehicles, weapons and patrol stations. Supervision, inspection, assignment, training and reporting requirements discussed.	
	Lecture 3 hours.	
64a	<b>POLICE FIELD TRAINING</b> Prerequisite: LE-62a and concurrently with LE-64 (Police Patrol Functions).	1 UNIT
	Continuation of the student's field training in police department.	
	Laboratory.	
66	<b>CRIMINAL LAW</b> Prerequisite: LE 62 (Police Organization and Administration) or permission of the professor.	3 UNITS
	Course is designed to acquaint beginner with procedural criminal law. Conventional area of criminal prosecution covered with an attempt to limit discussion to less-controversial areas and to remain as much as possible in an area of intelligent layman's understanding. Course is a brief and non-technical description of how legal machinery works.	
	Lecture 3 hours.	

70a	<b>CRIMINAL INVESTIGATION</b>	<b>3 UNITS</b>
<b>Prerequisite: LE-66 (Criminal Law) or permission of the professor.</b>		
Course is designed to assist the two-year terminal student, in-service personnel or students desiring to continue studies with a goal of a BS degree in Police Science. Intended to provide training for patrolman so he can adequately assist prosecutor and the expert, as well as help himself in successful investigations and prosecutions. Lecture 2 hours, Laboratory 3 hours.		
70b	<b>CRIMINAL INVESTIGATION</b>	<b>3 UNITS</b>
<b>Prerequisite: LE-70a (Criminal Investigation).</b>		
Student, in continuing from LE-70a, will prepare for future as investigator in law enforcement agencies. Emphasis placed on importance of crime laboratory, understanding of criminalistics and data in entire field with goal of equipping policemen in small communities to complete investigations which would be turned over to specialists in larger departments.		
Lecture 2 hours, Laboratory 3 hours.		
72	<b>POLICE ARSENAL AND WEAPONS TRAINING</b>	<b>1 UNIT</b>
<b>Prerequisite: LE-64 (Police Patrol Functions).</b>		
Handling, care and use of firearms to enable policemen to cope with situations in which firearms are needed. Lectures supplemented by intensive range program in deliberate, point and defense shooting.		
Laboratory 2 hours.		
74	<b>ARREST, SEARCH AND SEIZURE</b>	<b>3 UNITS</b>
<b>Prerequisite: LE-66 (Criminal Law)</b>		
Laws of arrest, search and seizure discussed; use of warrants, force, entry into land or buildings in arrest, searching of prisoners, confessions and seizure incident to arrests and disposition of property seized are emphasized.		
Lecture 3 hours.		
Health 70 or LE-75	<b>FIRST AID AND SAFETY</b>	<b>2 UNITS</b>
<b>Prerequisite: None.</b>		
Standard and advanced Red Cross courses in first aid, theory and practice in immediate and temporary care in case of accidents or sudden illness major studies.		
Lecture 2 hours.		

PE-72 or LE-76	DEFENSIVE TACTICS	1 UNIT
<b>Prerequisite: LE-64 and LE-64a (Police Patrol Functions and Police Field Training)</b>		
Course is concerned with training individual officer or prospective officer in self-defense tactics. Use of the baton and yawara stick explained, calisthenics and body building exercises emphasized.		
Laboratory 3 hours.		

## Mathematics

IX	<b>FUNDAMENTAL MATHEMATICS</b>	3 UNITS
<b>Prerequisite: Indicated mathematics deficiency.</b>		
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 toward Associate degree only.		
Lecture 3 hours.		
2X	<b>ELEMENTARY ALGEBRA</b>	3 UNITS
<b>Prerequisite: Acceptable score in placement examination or grade of 3 or better in Math IX.</b>		
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	<b>PLANE GEOMETRY</b>	3 UNITS
<b>Prerequisite: One year high school algebra or Math 2X.</b>		
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.		

11	<b>INTERMEDIATE ALGEBRA</b>	3 UNITS
	<b>Prerequisites:</b> One year of high school algebra and one year of high school geometry or Math 3X.	
	Covers the content of advanced high school algebra, hence not open for credit to students who have earned credit in such a course. Includes real number system, polynomials, fractions, first and second degree equations, radicals, functions and graphs, simultaneous systems, sequence and series, exponential and logarithmic functions. Lecture 3 hours.	
12	<b>BASIC CONCEPTS OF NUMBER</b>	3 UNITS
	<b>Prerequisite:</b> 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.	
19	<b>STATISTICS</b>	3 UNITS
	<b>Prerequisite:</b> Bus. Math or permission of the professor.	
	After completing the course, students should be able to apply fundamental calculations, organization of data and the use of analytical skills to problematic business or economic problems. Applications of statistical induction will be drawn from economics and business to illustrate use of this tool of analysis. Lecture 3 hours.	
20	<b>COLLEGE ALGEBRA</b>	3 UNITS
	<b>Prerequisites:</b> High school plane geometry or Math 3X together with one and one-half years of algebra in high school or Math 11.	
	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	<b>PLANE TRIGONOMETRY</b>	3 UNITS
	<b>Prerequisite:</b> 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, areas and circumference of circles, square root, cube root, logarithms, trigonometric functions, theory and practice of placing decimal point in all operations.

Lecture 1 hour.

44

**COLLEGE ALGEBRA AND TRIGONOMETRY 5 UNITS**

**Prerequisites:** High school plane geometry or Math 3X together with two years of high school algebra or Math 11. Includes sets, logic of 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 4 UNITS**

**Prerequisite:** Four years of high school mathematics with permission of the professor or Math 20 and Math 24 or Math 44.

A brief review of absolute value and inequality, relations, functions and graphs. Geometry using algebraic methods (the straight line, circle, and selected special functions). Limits, continuity, definition of the derivative and anti-derivative. Definition of the definite integral. Differentiation of algebraic functions with applications to geometric and physical problems.

Lecture 4 hours.

52

**ANALYTICAL GEOMETRY WITH CALCULUS 4 UNITS**

**Prerequisite:** Math 51 with grade of 3 or better.

The conic sections, differentiation of trigonometric and exponential functions and their inverses, parametric equations, arc length, polar coordinates, vectors in a plane, formulas and methods of integration, and some applications of integration.

Lecture 4 hours.

53

**ANALYTICAL GEOMETRY WITH CALCULUS 4 UNITS**

**Prerequisite:** Math 52 with grade of 3 or better.

Solid analytic geometry, functions of several variables, partial differentiation, multiple integrals, infinite series. Lecture 4 hours.

54

**CALCULUS AND DIFFERENTIAL EQUATIONS 4 UNITS**

**Prerequisite: Math 53 with grade of 3 or better.**

Ordinary differential equations including series solutions. Topics from vector analysis, orthonormal functions, and complex variables.

Lecture 4 hours.

## Music

1

**INTRODUCTION TO MUSIC**

**2 UNITS**

**Prerequisite: None.**

An introduction to music listening illustrated with recordings of important musical literature of the eighteenth through twentieth centuries.

Lecture 2 hours.

2

**INTRODUCTION TO MUSIC**

**2 UNITS**

**Prerequisite: None.**

Special emphasis is placed on style characteristics of music from the Renaissance to the present.

Lecture 2 hours.

3

**BEGINNING CHOIR**

**1 UNIT**

**Prerequisite: None.**

The Beginning Choir (College Glee Club, Mixed Chorus) studies basic singing skills and performs the standard choral library.

Daily rehearsal.

**10(B)a-d COLLEGE BAND**

**1-1-1-1 UNITS**

**Prerequisite: Audition.**

The College Band studies and performs outstanding musical literature transcribed from orchestral repertory or composed for band. The Band performs in concerts and at selected athletic events. Open to all students with playing experience who can demonstrate sufficient proficiency on their instrument.

Daily rehearsal.

**10(C)a-d COLLEGE CHOIR**

**1-1-1-1 UNITS**

**Prerequisite: Interview with director.**

The College Choir performs outstanding literature from various periods of musical composition. Open to all students. Previous choral experience is not required.

Daily rehearsal.

<b>20(I) a-d</b>	<b>ENSEMBLE</b>	<b>1-1-1-1 UNITS</b>
<b>Prerequisite: Two or three years playing experience in high school, or its equivalent.</b>		
<b>Duets, trios, quartets or larger ensembles of mixed or like instruments will study and perform music appropriate to the groups.</b>		
<b>Rehearsal 3 hours.</b>		
<b>20(V)a-d</b>	<b>ENSEMBLE</b>	<b>1-1-1-1 UNITS</b>
<b>Prerequisite: One or two years singing experience in high school, or its equivalent.</b>		
<b>Solos, duets, trios, or larger ensembles will study and perform appropriate vocal literature. Principally for the student specializing in voice.</b>		
<b>Rehearsal 3 hours.</b>		
<b>13(V)a-b</b>		
<b>14(V)a-b</b>	<b>VOICE - Individual Instruction</b>	<b>1-1-1-1 UNITS</b>
<b>Prerequisite: Permission of the professor.</b>		
<b>Student prepares recital literature for jury performance.</b>		
<b>Weekly lesson.</b>		
<b>13(I) a-b</b>		
<b>14(I) a-b</b>	<b>INSTRUMENT - Individual Instruction</b>	<b>1-1-1-1 UNITS</b>
<b>Prerequisite: Permission of the professor.</b>		
<b>Student prepares recital literature for jury examination.</b>		
<b>Weekly lesson.</b>		
<b>30</b>	<b>KEYBOARD HARMONY</b>	<b>1 UNIT</b>
<b>Prerequisite: To be taken concurrently with Music 32.</b>		
<b>Special work on ear training, keyboard harmonization, and the realization of theory as applied to the keyboard.</b>		
<b>Laboratory 2 hours.</b>		
<b>32a-32b</b>	<b>THEORY</b>	<b>3.3 UNITS</b>
<b>Prerequisite: 32a is a prerequisite for 32b.</b>		
<b>A systematic study of the rules of music. Ear training and sight singing are emphasized.</b>		
<b>Lecture 4 hours.</b>		
<b>Philosophy</b>		
<b>11</b>	<b>INTRODUCTION TO PHILOSOPHY</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
<b>A study of man's interpretation of the nature and meaning of reality, conduct, and of his own thinking.</b>		
<b>Lecture 3 hours.</b>		

20 **PHILOSOPHIES OF THE EAST** **3 UNITS**  
**Prerequisite: None.**  
A study of Hinduism, Confucianism, Taoism, and Buddhism.  
Lecture 3 hours.

## Physical Education

**Prerequisites: First six courses, none. All 2 hours.**

1W **PHYSICAL EDUCATION,**  
**FRESHMEN WOMEN (Fall Semester)** **1 UNIT**  
Laboratory course involving study, participation in several sports.

1M **PHYSICAL EDUCATION,**  
**FRESHMEN MEN (Fall Semester)** **1 UNIT**  
Students will study and participate in several physical educational activities.

2W **PHYSICAL EDUCATION,**  
**FRESHMEN WOMEN (Spring Semester)** **1 UNIT**  
This laboratory course involves study of and participation in several sports.

2M **PHYSICAL EDUCATION,**  
**FRESHMEN MEN (Spring Semester)** **1 UNIT**  
Study of and participation in several sports.

1WS -  
2WS **BEGINNING SWIMMING (Women)** **1 UNIT**  
The female non-swimmer will be guided through primary phases of learning to swim.

1MS -  
2MS **BEGINNING SWIMMING (Men)** **1 UNIT**  
The male non-swimmer will be guided through primary phases of learning to swim.

**Prerequisites: Next nine courses, Physical Education 1 and 2, Sophomore standing or permission of professor. Lecture and Laboratory, 2 hours each.**

3A-4A **COED GYMNASTICS** **1 UNIT**  
This laboratory course involves study of and participation in several gymnastics events.

**3B-4B** **WEIGHT TRAINING & WRESTLING (Men only)** **1 UNIT**  
 The student will be introduced to basic skills in this activity.

**3C-4C** **MODERN DANCE (Women only)** **1 UNIT**  
 Participation and study in individual and group physical exercise and modern dance interpretations is the aim.

**3D-4D** **COED BADMINTON/VOLLEYBALL** **1 UNIT**  
 Mastery of the fundamental skills of these two games is the goal of this course.

**3E-4E** **COED BOWLING** **1 UNIT**  
 In this beginning bowling course, the emphasis will be on mastery of fundamental skills.

**3F-4F** **COED TENNIS** **1 UNIT**  
 Emphasis on beginning skills of this sport.

**3G-4G** **COED GOLF** **1 UNIT**  
 Fundamental skill mastery is the goal.

**3H-4H** **COED FOLK AND SOCIAL DANCE** **1 UNIT**  
 Various ballroom steps in social dancing in this course should result in mastery of the art as well as the more traditional European and American folk dances.

**3I-4I** **COED ARCHERY** **1 UNIT**  
 Participation in target archery and clout shooting.

**1J-2J**  
**3J-4J** **COED ADAPTED PHYSICAL EDUCATION** **1 UNIT**  
 Prerequisite: Written statement from a licensed physician requiring a limited activities program.  
 Men and women who have physical defects and handicaps will find this course is designed for their needs.  
 Lecture and Laboratory 2 hours.

**3K-4K** **BEGINNING HANDBALL (Men only)** **1 UNIT**  
 Prerequisite: PE 1 and 2, sophomore standing or permission of the professor.  
 Emphasis is on beginning skills of handball.  
 Lecture and Laboratory 2 hours.

<b>3R-4R</b>	<b>INTERMEDIATE COED SWIMMING</b>	<b>1 UNIT</b>
<b>Prerequisite: PE 1S or 2S or permission of the professor.</b>		
Improvement of beginning skills and development of good swimming and diving habits.		
Lecture and Laboratory 2 hours.		
<b>3S-4S</b>	<b>ADVANCED COED SWIMMING AND WATER SPORTS</b>	<b>1 UNIT</b>
<b>Prerequisite: PE 1 and 2, PE 3R or 4R or permission of the professor.</b>		
Variations of the three fundamental strokes, with additions of miscellaneous water skills are the goals of this course, along with synchronized swimming and other aquatic activities.		
Lecture and Laboratory 2 hours.		
<b>3T-4T</b>	<b>COED LIFE SAVING AND WATER SAFETY</b>	<b>1 UNIT</b>
<b>Prerequisite: PE 1 and 2, PE 3S or 4S, permission of the professor.</b>		
Standard Red Cross requirements leading to certification in senior life saving or water safety instruction.		
Lecture and Laboratory 2 hours.		
<b>3V-4V</b>	<b>VARSITY SPORTS</b>	<b>1 UNIT</b>
<b>Prerequisite: Permission of the professor.</b>		
Students competing in varsity collegiate sport will comprise membership of this class.		
<b>55</b>	<b>ORIENTATION TO PHYSICAL EDUCATION</b>	<b>3 UNITS</b>
<b>Prerequisite: None.</b>		
The nature and scope of physical education, historical development, basic philosophy and objectives, changing concepts, scientific foundations and professional opportunities will be provided in this course.		
Lecture 3 hours.		
<b>72</b>	<b>DEFENSIVE TACTICS</b>	<b>1 UNIT</b>
<b>Prerequisite: LE 60 or permission of the professor.</b>		
Development of necessary physical coordination and self-defense skills for combatting attackers		
Laboratory 2 hours.		

171	<b>ORIENTATION TO RECREATION</b>	<b>2 UNITS</b>
	<b>Prerequisite: None.</b>	
<p>In an orientation to the nature and scope of the field of recreation, its historical development, philosophy and objectives, changing concepts, scientific foundations and professional opportunities, student will gain: Basic understanding of recreation in American life, understanding of roles of various levels of government in recreation, awareness of relationships between physical education, health, camping and outdoor recreation.</p>		
	Lecture 2 hours.	
189	<b>ELEMENTARY SCHOOL PHYSICAL EDUCATION</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
<p>Student will be instructed in the scope and values of physical education and movement education in the elementary school. Methods, materials and practice in recommended activities including games, rhythms, self-testing activities and recreation. Course is designed for prospective elementary education classroom teachers, physical education majors and minors. In addition, the student will gain an understanding of the teaching designs for primary and intermediate grades pertaining to physical education as well as knowledge necessary to evaluate physical education programs.</p>		
	Lecture 3 hours.	
<h2>Physics</h2>		
2a-2b	<b>GENERAL PHYSICS</b>	<b>4.4 UNITS</b>
	<b>Prerequisite: Math 11. 2a is a prerequisite for 2b.</b>	
<p>Lectures, demonstrations, and problems in mechanics, properties of matter, heat, sound, light, electricity and magnetism, and atomic and nuclear physics.</p>		
	Lecture 3 hours, Laboratory 3 hours.	
3a-3b	<b>INTRODUCTORY PHYSICS WITH CALCULUS</b>	<b>4.4 UNITS</b>
	<b>Prerequisite: Math 51.</b>	
<p>Lecture the same as 2a-2b. Laboratory sections use calculus.</p>		
	Lecture 3 hours, Laboratory 3 hours.	
12	<b>FOUNDATIONS OF SCIENCE: Physics</b>	<b>3 UNITS</b>
	<b>Prerequisite: No previous physics background is assumed, and any mathematics needed will be developed in the course.</b>	
<p>Presentation of basic concepts of physics with particular emphasis on modern physics.</p>		
	Lecture 2 hours, Laboratory 3 hours.	

# Practical Nursing

10	<b>PROFESSIONAL-VOCATIONAL RELATIONSHIPS</b>	<b>1 UNIT</b>
	<b>Prerequisite: Admission into the nursing program.</b>	
	Introduction to practical nursing, history of nursing and medicine, vocational interest in nursing, qualifications, practical nursing as a profession, basic ethical and legal considerations, organizations in nursing.	
	Lecture 2 hours.	
12a	<b>FUNDAMENTALS OF NURSING I</b>	<b>6 UNITS</b>
	<b>Prerequisite: Admission into the nursing program.</b>	
	Principles involved in planning and giving basic nursing care to patients. Basic nutrition, fundamentals of pharmacology, micro-biology, and community and personal health; guided experience in nursing care of selected patients in the hospital; discussion of and observation in clinics and community agencies; introduction to social and economic implications of illness; clinical work in local hospitals and agencies.	
	Lecture 7 hours, Laboratory 10 hours.	
12b	<b>FUNDAMENTALS OF NURSING II</b>	<b>4 UNITS</b>
	<b>Prerequisite: Successful completion of first semester nursing courses.</b>	
	Advanced principles and procedures involved in planning and giving nursing care to patients; guided experience in giving nursing care to patients in the hospital situation; continuation of social and economic implications of illness; instruction, observation and experience in central supply, out-patient clinic, and diet kitchen.	
	Lecture 2 hours, Laboratory 5 hours.	
14a	<b>MEDICAL-SURGICAL NURSING I</b>	<b>3 UNITS</b>
	<b>Prerequisite: Admission into the nursing program.</b>	
	Nursing problems of adults with medical and surgical conditions. Clinical pharmacology, clinical nutrition, rehabilitation, introduction to medical and surgical asepsis, emotional aspects of illness. Stress on interpersonal relationships, careful planning for total nursing care of a few patients.	
	Lecture 3 hours, Laboratory 9 hours.	

<b>14b</b>	<b>MEDICAL-SURGICAL NURSING II</b>	<b>7 UNITS</b>
<b>Prerequisite: Successful completion of first semester nursing courses.</b>		
Continuation of basic medical-surgical nursing of adults: drug therapy, diet modification, emotional aspects of illness, stress on the patient, careful planning of total patient care of a few patients, clinical experience in local hospitals.		
Lecture 4 hours, Laboratory 9 hours.		
<b>14c</b>	<b>MATERNAL-CHILD NURSING</b>	<b>8 UNITS</b>
<b>Prerequisite: Successful completion of the first two semesters of nursing.</b>		
Physical and emotional changes in mother during normal maternity cycle; normal growth and development of child from birth through adolescence; medical management, principles and techniques of nursing pertaining to normal maternity cycle and the newborn; care of the child during common illnesses in relation to growth and development factors; observation in clinics, nursery school and other child care agencies.		
Lecture 13 hours, Laboratory 25 hours.		
<b>16</b>	<b>MENTAL HEALTH</b>	<b>3 UNITS</b>
<b>Prerequisite: Successful completion of first semester nursing.</b>		
Nurse's role in care, treatment, and rehabilitation of the mentally ill; social and economic implications of mental illness; interpersonal skills and principles applicable to all areas of nursing. Discussion of community agencies concerned with mental health. Guided experience caring for patients in a general hospital.		
Lecture 3 hours.		
<b>18</b>	<b>ADVANCED-PROFESSIONAL-VOCATIONAL RELATIONSHIPS</b>	<b>1 UNIT</b>
<b>Prerequisite: Successful completion of the first two semesters of nursing.</b>		
Advanced concepts of interpersonal relationships, the nursing team, professional ethics, position applications. Will involve seminars, conferences, socio-dramas.		
Lecture 2 hours.		

# Psychology

<b>1</b>	<b>PSYCHOLOGY</b> <b>Prerequisite: None.</b> Psychology I is designed as a group counseling course for the full-time freshman student, directed by a member of the counseling staff. Self evaluation is initiated through individual test interpretation, supplemental testing, study skills, vocational or occupational planning, reading improvement skills, and adjustment to college life. Lecture 1 hour.	<b>1 UNIT</b>
<b>2a-2b</b>	<b>ELEMENTARY PSYCHOLOGY</b> <b>Prerequisite: None.</b> The behavior of man and animals through an analysis of the factors relating to total organismic function. Includes description of basic research techniques. Lecture 3 hours.	<b>3-3 UNITS</b>
<b>13</b>	<b>CHILD PSYCHOLOGY</b> <b>Prerequisite: None.</b> The principal changes in human beings from birth to adolescence. Lecture 3 hours.	<b>3 UNITS</b>
<b>14</b>	<b>ADOLESCENT PSYCHOLOGY</b> <b>Prerequisite: None.</b> The principal changes in human behavior from the beginnings of adolescence to maturity; problems of social, vocational, and family adjustment. Lecture 3 hours.	<b>3 UNITS</b>
<b>23</b>	<b>PERSONNEL PSYCHOLOGY</b> <b>Prerequisite: None.</b> Introduction to human behavior as it occurs in business and industry. Psychological views will be combined with business experiences in such areas as selection, training, evaluation, promotion, and supervision of employees. Course will also consider consumer behavior and the impact of consumer research, advertising, and selling. Lecture 3 hours.	<b>3 UNITS</b>

## Spanish

<b>1X-2X</b>	<b>CONVERSATIONAL SPANISH</b>	<b>2-2 UNITS</b>
	<b>Prerequisite: A want or need for the conversational aspects of the course.</b>	
	Students converse in groups using topics provided by texts, recordings, pictures, study guides and real life situations. Credit cannot be transferred to four-year institution. 1X is not prerequisite for 2X.	
	Lecture and Laboratory 2 hours.	
<b>1a-1b</b>	<b>ELEMENTARY SPANISH</b>	<b>4.4 UNITS</b>
	<b>Prerequisite: 1a is a prerequisite of 1b.</b>	
	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.	
	Lecture 4 hours, Laboratory 2 hours arranged.	
<b>3a-3b</b>	<b>INTERMEDIATE SPANISH</b>	<b>4.4 UNITS</b>
	<b>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.</b>	
	Review of grammar, reading, writing, and speaking; introduction to simple literature (short stories, novels, plays).	
	Lecture (Spanish) 4 hours.	
<b>75a-75b</b>	<b>INTERMEDIATE COMPOSITION AND CONVERSATION</b>	<b>2-2 UNITS</b>
	<b>Prerequisite: Spanish 3b or completion of course similar to Spanish 3b (Mexican schooling above 6th grade, four years of high school Spanish).</b>	
	Topic-centered composition and discussion. Student will apply grammar and increase vocabulary from a variety of readings.	
	Lecture (Spanish) 3 hours.	

**104a-104b INTRODUCTION TO SPANISH LITERATURE 3-3 UNITS**  
**Prerequisites: Spanish 3b and permission of the professor or completion of course similar to Spanish 3b (Mexican schooling above 6th grade, four years of high school Spanish) and permission of the professor.**  
 An introduction to the works of many Spanish authors. An historical look at the literature of Spain. Spain as a background for its authors and as the origin of ideas that later permeate the Hispanic World.  
 Lecture (Spanish) 3 hours.

## Speech

**2 FUNDAMENTALS OF SPEECH 3 UNITS**  
**Prerequisite: None.**  
 Provides experience in assembling, organizing, and delivering speeches in an effective manner.  
 Lecture 3 hours.

**10 PUBLIC SPEAKING 3 UNITS**  
**Prerequisite: Speech 2 or permission of the professor.**  
 Beginning course in public speaking, with emphasis upon organization of effective thinking and effective delivery; required of all speech majors.  
 Lecture 3 hours.

## Sociology

**1 INTRODUCTION TO SOCIOLOGY 3 UNITS**  
**Prerequisite: None.**  
 Basic concepts and principles of sociology and an analysis of group behavior. Social institutions, processes, and change.  
 Lecture 3 hours.

**2 SOCIAL PROBLEMS 3 UNITS**  
**Prerequisite: None.**  
 Nature and origins of the principal social problems of our time. Consequences of industrialization, rapid technological change, and resultant tensions of changing roles and status in groups and individuals. Types of remedial social action applicable in each situation.  
 Lecture 3 hours.

**10 EDUCATION FOR MARRIAGE 3 UNITS**  
**Prerequisite: None.**  
 Courtship, choosing a mate, marriage, marital adjustment, handling personality conflicts, family budgeting, parenthood, and other aspects of family life.  
 Lecture 3 hours.

12	<b>JUVENILE DELINQUENCY</b>	<b>3 UNITS</b>
	<b>Prerequisite: None.</b>	
	Delinquency viewed as a product of the society; the social factors of apprehension, treatment, and prevention.	
	Lecture 3 hours.	

## Zoology

1a-1b	<b>GENERAL ZOOLOGY</b>	<b>4-4 UNITS</b>
	<b>Prerequisite: Chemistry 2a or Chemistry 12 or high school chemistry. 1a is prerequisite to 1b except by special permission of the professor.</b>	
	An introduction to animal biology and structure, classification of vertebrates, and a survey of vertebrate groups. Principles of genetics, ecology, and embryology. Dissection of typical vertebrate.	
	Lecture 2 hours, Laboratory 6 hours.	
20	<b>HUMAN ANATOMY &amp; PHYSIOLOGY</b>	<b>4 UNITS</b>
	<b>Prerequisite: None; no previous background in anatomy or physiology is assumed.</b>	
	Students who do not plan to specialize beyond the junior college level, such as the practical nurse, medical secretary or medical record librarians, will find this course of value. Includes microscopic examination of tissues which introduces student to functional uses of organs of body; morphological and physiological aspects of skeletal, muscular, digestive, urogenital, reproductive and nervous system will be introduced in lectures and laboratories.	
	Lecture 3 hours, Laboratory 3 hours.	
40	<b>MAMMALIAN ANATOMY</b>	<b>4 UNITS</b>
	<b>Prerequisite: None.</b>	
	Consideration of the structure and dynamics of the mammalian mechanism.	
	Lecture 2 hours, Laboratory 6 hours.	



Dr. Charles Di Peso  
Chairman  
of Board



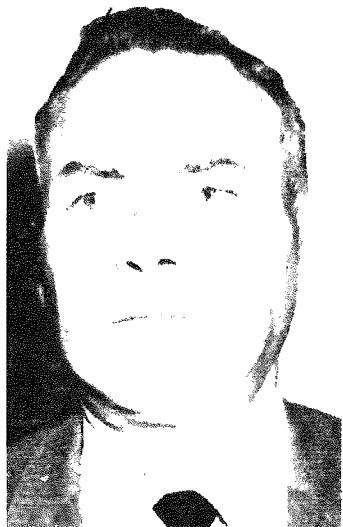
Dr. Jack R. Netcher  
Pres. of College,  
Clerk



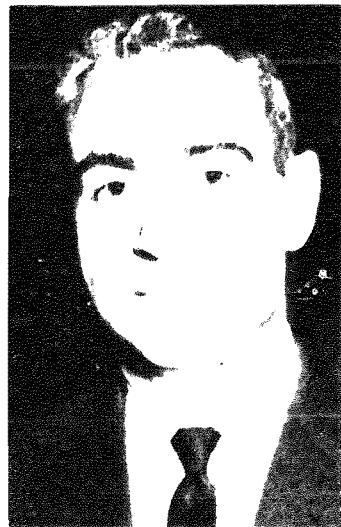
Calvin Jones  
Secretary  
of Board



Martin Gentry  
Member



Charles Bloomquist  
Member



Fred Dunsmore  
Member

## Administration

### ADMINISTRATIVE OFFICERS

JACK R. NETCHER, H.S.D.	President
JOHN M. EATON, Ph.D.	Dean of Instruction
JOHN T. CONDON, Ed.D.	Dean of Institutional Research and Planning
JOHN J. CORKERY, M.A.	Dean of Student Personnel
IRVIN VON DESTINON, M.A.	Dean of Business Services
ALLAN S. PETERSEN, M.S.	Associate Dean of Instruction- Technical Education
RICHARD OLIVANTI, M.A.	Associate Dean of Instruction- Community Services

<b>ANDERSEN, L. LEGRAND</b>	<b>Music</b>
B.S., University of Utah; M.A., Sacramento State College; University of Arizona 1965. Cochise College 1965.	
<b>ATKINSON, RICHARD E.</b>	<b>Athletics</b>
University of Missouri; B.S., Kansas State College; M.S., Kansas State University. Cochise College 1966.	
<b>BEATY, ROBERT L.</b>	<b>Athletics</b>
B.S.E., M.Ed., Doctorate Program, University of Arkansas; Doctorate Program, Arizona State University. Cochise College 1964.	
<b>BOYSEN, VIVIAN L.</b>	<b>Mathematics</b>
A.B. Cum Laude, M.A., University of South Dakota; University of Wisconsin, University of Alabama. Cochise College 1966.	
<b>CAMPBELL, DONALD R.</b>	<b>Mathematics</b>
A.B., San Jose State College; M.A., Graduate Study, Stanford University. Cochise College 1964.	
<b>CHAMPLAIN, ROBERT A.</b>	<b>Biology</b>
A.S., Mitchell College; B.A., John Hopkins University; Ph.D., Ohio State University. Cochise College 1966.	
<b>COLLINS, JOHN E.</b>	<b>Drafting Technology</b>
B.A., Arizona State University; M.S., Graduate Assistant, Brigham Young University. Cochise College 1965.	
<b>CONDON, JOHN T.</b>	<b>Dean of Institutional Research and Planning</b>
A.A., Hartnell College; A.B., Whittier College; M.S.Ed., University of Southern California; Ed.D., Stanford University. Cochise College 1964.	
<b>CORKERY, JOHN J.</b>	<b>Dean of Students</b>
B.S., West Chester State College; M.A., Ohio State University. Cochise College 1964.	
<b>DEWITT, HOWARD A.</b>	<b>History, Government</b>
B.A., Western Washington State College; M.A., University of Oregon; Doctoral work, University of California, University of Arizona; Research Assistant, University of Oregon; Summer School, University of Paris, Sarbonne. Cochise College 1965.	
<b>DOTY, JOHN</b>	<b>English</b>
A.B., M.S. Ed., University of Southern California; M.A., pending California State College at Los Angeles. Cochise College 1966.	

**EATON, JOHN M.** **Dean of Instruction**  
B.A., College of Wooster; M.A., Michigan State College; Ph.D., Michigan State University. Cochise College 1964.

**FORYS, WALTER** **Law Enforcement**  
B.S., Public Administration, Law Enforcement and Corrections; M.P.A., Corrections and Law Enforcement, University of Arizona. Cochise College 1966

**GILLILAND, JOE D.** **English, Philosophy**  
B.A., M.A., University of Texas; Graduate Study, Arizona State University. Cochise College 1964.

**GUERRERO, CHARLES N.** **Physical Education**  
B.A., Oklahoma City University; M.A., University of Oklahoma; Advance Degree work, University of Oklahoma. Cochise College 1966.

**HALLORAN, JACK** **Professor of Business**  
B.A., Sacramento State College; M. Ed., University of California; Graduate Study, Claremont Graduate School, Orange State College, National Finance Fellowship, University of California. Cochise College 1965.

**HUNCHOVSKY, CECIL G.** **Mathematics**  
B.S., M.S., University of North Dakota; Graduate Study, University of California, New Mexico State University, San Jose State College, Cochise College 1964.

**JANSSEN, ARLO** **Speech**  
B.A., M.A., University of Arizona. Cochise College 1966.

**JEWELL, JOHN W.** **Biology, Chemistry**  
B.A., Northland College, Wisconsin; M.A., New Mexico Highlands University. Graduate Study, University of Minnesota, University of New Mexico, University of Washington, Oklahoma State University. Cochise College 1965.

**JOHNSON, DONALD R.** **English**  
Stanford University, Mexico City College, Center Universitaire Mediterraneen; B.A., San Francisco State College; M.A., Los Angeles State College; Summer Session San Jose State College, Stanford University, University of Arizona. Cochise College 1964.

**LARSON, GARY E.** **Director of Housing and  
Director of Financial Aid**  
A.A., Phoenix College; B.S. University of Arizona. Cochise College 1966.

<b>LEVRA, RAYMOND E.</b>	<b>Art</b>
B.S., Montana State University; M.F.A., University of Oregon. Cochise College 1965.	
<b>LUBKER, JUNE S.</b>	<b>Nursing</b>
R.N., St. Helena Hospital; B.S., College of the Holy Names; Graduate Study, University of California, San Francisco State College. Cochise College 1964.	
<b>MALIK, ALICYA</b>	<b>English</b>
A.B., Wayne University; M.B.A., M.A., University of Michigan. Cochise College 1964.	
<b>McCLANAHAN, DONALD E.</b>	<b>Business</b>
B.S. Business Administration, University of Colorado; M.S. Business Administration, Arizona State University; Institute in Marketing, Michigan State University. Cochise College 1965.	
<b>MINKLER, THOMAS</b>	<b>Art</b>
B.S., Indiana University; M.F.A., University of Michigan; Tamarind Fellow, University of New Mexico. Cochise College 1964.	
<b>MOORE, JAMES E.</b>	<b>Music</b>
B.S., Wayne State University; M.Mus., University of Michigan; Dissertation, three hours, University of Michigan. Cochise College 1964.	
<b>MYERS, RICHARD D.</b>	<b>Anthropology, History</b>
B.A., University of New Mexico; M.A., Northern Arizona University; Post Graduate, University of Arizona, University of New Mexico. Cochise College 1964.	
<b>NETCHER, JACK R.</b>	<b>President</b>
B.S., Carson-Newman College; M.S., University of Tennessee; Director Health Safety, Doctor Health and Safety Administration, Indiana University; research, Springfield College, Geo. Peabody School for Teachers. Cochise College 1966.	
<b>OJEDA, IDA</b>	<b>Librarian</b>
B. A., Arizona State University; M.A., Arizona State College; Graduate study, University of Denver, University of California, University of Chicago, University of Arizona, Junior College Workshop, Arizona State University. Cochise College 1965.	
<b>OLIVANTL, RICHARD A.</b>	<b>Associate Dean of Instruction Community Services</b>
B.A., Michigan State University; M.A., Northern Michigan University; Graduate study, University of Colorado. Cochise College 1966.	

**OROZCO, CECIL** **Spanish**

B.S., M.A., Arizona State College; Graduate study, University of Arizona, University of Colorado. Cochise College 1964.

**PALLISTER, PATRICIA** **Associate Dean of Students**

B.A., Michigan State University; M.A., University of Maryland; Graduate study, University of Arizona. Cochise College 1965.

**PETERSEN, ALLAN** **Associate Dean of Instruction  
- Technical Education**

B.S., M.S., University of Utah; Graduate study, University of Utah, University of Maryland, Utah State University. Cochise College 1964.

**RASSI, JAMES** **Director of Admission, Placement**

B.S., M.A., Business Administration; M.A., Psychology, Guidance and Counseling License, Business, Psychometrist License, Ball State University; Graduate Study, University of Arizona. Cochise College 1966.

**RIGGS, E. GENE** **Chemistry**

B.S., M.Ed., M.S., Oklahoma State University; Graduate Study Wichita State University, Stanford University Shell Merit Fellow, Texas Technological College, University of Southern California, New Mexico Highlands University. Cochise College 1966.

**SCHOLFIELD, WARREN A.** **Spanish, French**

B.A., M.A., Arizona State University. Cochise College 1965.

**SHERMAN, JAMES** **Civil Technology**

B.S., Wisconsin Institute of Technology; M.S., University of Arizona; post M.S. Study, University of Arizona. Cochise College 1966.

**SHOWN, HAZEL B.** **Campus Nurse**

R.N., Baylor Hospital School of Nursing; B.S.N.E., Incarnate Word College, San Antonio; Graduate Study, Santa Rosa School of Nursing; Extension Course, University of Texas; Humanities European Tour, University of Arizona. Cochise College 1964.

**SKERRITT, LINDA E.** **Assistant Librarian**

B.A., Western New Mexico University; M.A., University of Denver; University of Arizona, Newark State Teachers College. Cochise College 1964.

<b>STUART, KEITH E.</b>	<b>Psychology</b>
B.Sc., M.Sc., University of Oregon; Graduate Study, University of Washington, Chico State College, University of Texas; N.D.E.A. Counselling of Sec. Ed. and Junior College, University of Arizona. Cochise College 1964.	
<b>SWEENEY, ROBERT E.</b>	<b>Business, Economics</b>
B.S., M.A., Northern Illinois University; Graduate Study, University of Iowa, Western Illinois University, Oxford University, University of Hawaii, N.S.F. Fellow University of Missouri. Cochise College 1964.	
<b>SWIERENGA, DIANA</b>	<b>Business</b>
AB Elementary Education, Calvin College; M.A. Secondary Education, Northwestern University and University of Michigan; Extension Classes, University of Michigan; doctoral program in Business Education, Arizona State University. Cochise College 1966.	
<b>TURNER, BAYSOL</b>	<b>English, Journalism</b>
A.A., Phoenix College; B.A., Arizona State University; Arizona State University, Laverne College, Clarement Graduate School, Long Beach State, University of California; M.A., Arizona State University; University of San Francisco, Northern Arizona University, University of Arizona. Cochise College 1966.	
<b>WAGER, MAXWELL</b>	<b>Drama, English, Speech</b>
B.S., M.A., Northern Arizona University. Cochise College 1966.	

# Index

## A

Academic Council .....	15
Academic Dismissal .....	16
Academic Probation .....	16
Academic Suspension .....	16
Accounting .....	48
Accreditation .....	3
Administrative Officers .....	88
Admission Procedures for Evening Students .....	25
Admission Procedures for Full Time Students .....	24
Admission Requirements .....	23
Admissions .....	9
Advisory Committees .....	5
Aims and Objectives .....	3
Anthropology .....	45
Art .....	46
Attendance Policy .....	19
Audit .....	16

## B

Band .....	74
Bilingual, English .....	62
Biology .....	47
Botany .....	48
Business .....	48
Business Law .....	51

## C

Calendar, College .....	iv, v
Campus Facilities .....	5
Career Programs .....	35

Change of Grade .....	31
Change of Program .....	18
Chemistry .....	55
Choir .....	74
Civil Technology .....	36, 56
Classification of Students .....	15
Community Services .....	6
Counseling .....	9
Credit by Examination .....	18
Cultural Programs .....	11
Curriculum Guides .....	36

## D

Data Processing .....	52
Degree .....	4
Drafting Technology .....	36, 58
Drama .....	59

## E

Economics .....	60
Employment, Student .....	11
Engineering .....	61
English .....	61
Evening College and Extension Programs .....	5

## F

Faculty .....	89
Fees .....	27
Final Examinations .....	18
Food Services .....	10
Foreign Students .....	24
French .....	64

<b>G</b>	<b>Loans</b>	<b>10</b>
Geography .....	64	
Geology .....	65	
Governing Board .....	88	
Government .....	65	
Government, Student .....	11	
Grade Points .....	16	
Grade Reports .....	17	
Grading System .....	15	
Graduation Requirements .....	25	
Guided Studies		
Programs .....	35, 41	
<b>H</b>		
Health .....	66	
Health Services .....	11	
History .....	66	
History, Cochise College .....	3	
Honors .....	30	
Housing .....	10	
Housing Regulations .....	29	
Humanities .....	67	
<b>I</b>		
Insurance .....	51	
Intercollegiate Activities .....	12	
Intramurals .....	12	
<b>J</b>		
Journalism .....	67	
<b>L</b>		
Late Registration .....	28	
Law Enforcement .....	37, 68	
Learning Resources Center .....	5	
Literature .....	62	
Load Limitations .....	25	
<b>M</b>		
Machines, Calculating .....	50	
Marketing .....	53	
Mathematics .....	71	
Medical Secretary .....	38	
Medical Record Technician .....	38	
Middle Management .....	39	
Music .....	74	
<b>N</b>		
Narrative Writing .....	62	
Notice of Intent to Graduate .....	30	
Nursing .....	80	
<b>O</b>		
Objectives of Cochise College .....	3	
Organizations .....	11	
Orientation .....	9	
Out-of-State Students .....	24	
<b>P</b>		
Philosophy .....	75	
Philosophy of Education .....	3	
Physical Education .....	76	
Physics .....	79	
Placement .....	12	
Practical Nursing .....	40, 80	
Psychology .....	82	
<b>R</b>		
Readmission .....	25	
Readmission after Academic Dismissal .....	17	

Refunds .....	28
Registration .....	25
Registration for Physical Education .....	31
Registration and Records .....	12
Removal from Academic Probation .....	16
Repetition of Courses .....	18
Residence Requirements .....	23
R. O. T. C. .....	42

### S

Scholarships and Financial Aids .....	10
Secretarial Studies .....	40
Semester Fee Schedule .....	27
Shorthand .....	49
Sociology .....	84
Spanish .....	83
Speech .....	84
Student Activities .....	11
Student Union .....	5

### T

Table of Contents .....	vi, vii
Testing .....	9
Transcripts .....	19
Transfer Credit .....	31
Transfer Programs .....	35, 41
Transfer Students .....	17
Tuition .....	27
Typing .....	49

### U

Unit Load Limitations .....	25
-----------------------------	----

### V

Veterans .....	24
----------------	----

### W

Withdrawal from College .....	19
-------------------------------	----

### Z

Zoology .....	85
---------------	----