

GENERAL CATALOG

1991

1992

COLLEGE OF THE SEQUOIAS

Welcome to

**College
of
the
Sequoias**

College of Sequoias is part of this nation's largest system of higher education. In California alone 1.5 million students enroll in community colleges every year. COS now serves more than 8,500 students.

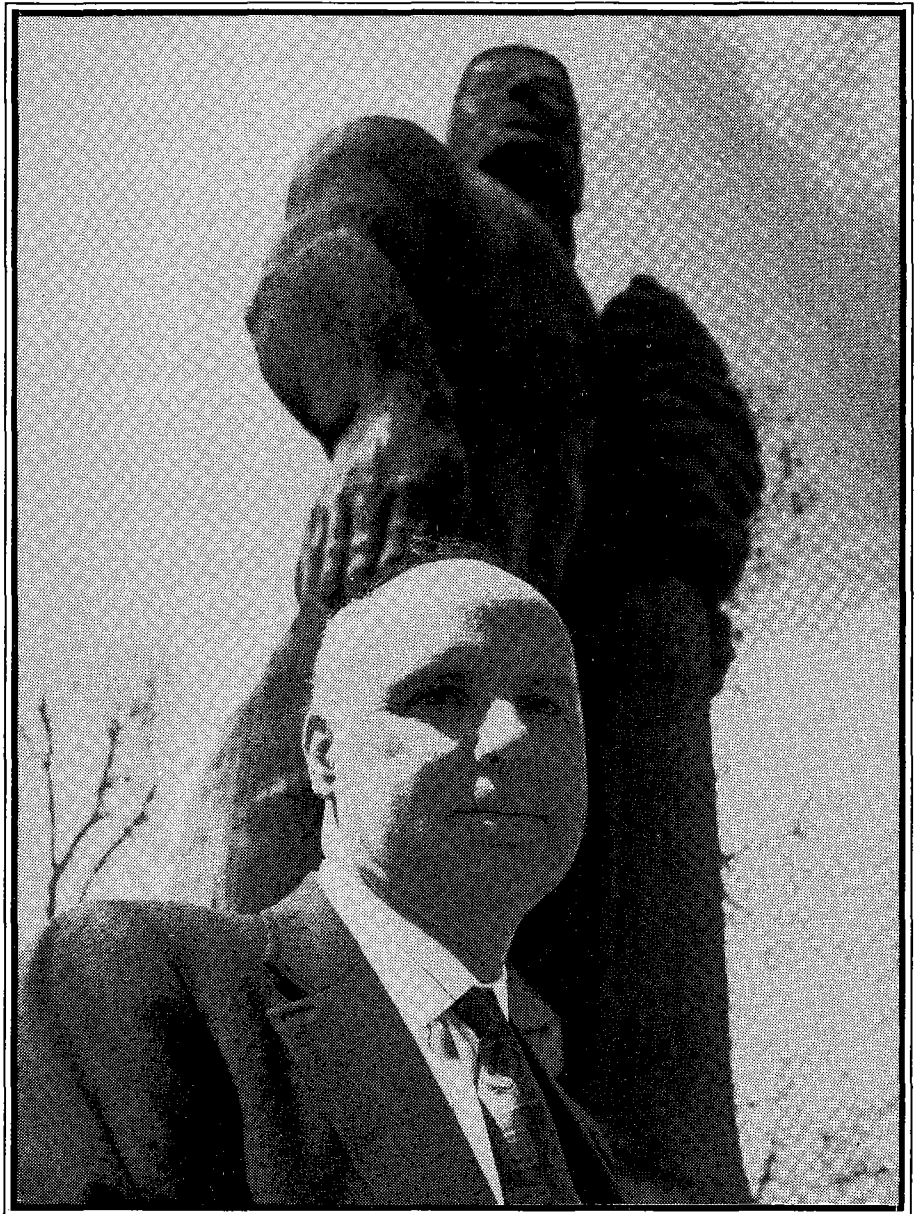
For the past four years, COS has experienced significant enrollment increases placing a greater demand on the existing facilities and equipment at the college. With the UC and CSU systems facing decreased funding and the rise in unemployment, more and more students will turn to community colleges for lower-division course requirements and retraining in new technologies.

The COS Board of Trustees supports an aggressive facilities construction plan to accommodate the increasing number of students seeking admission. Construction and planning for future construction will be a way of life at COS for the next several years.

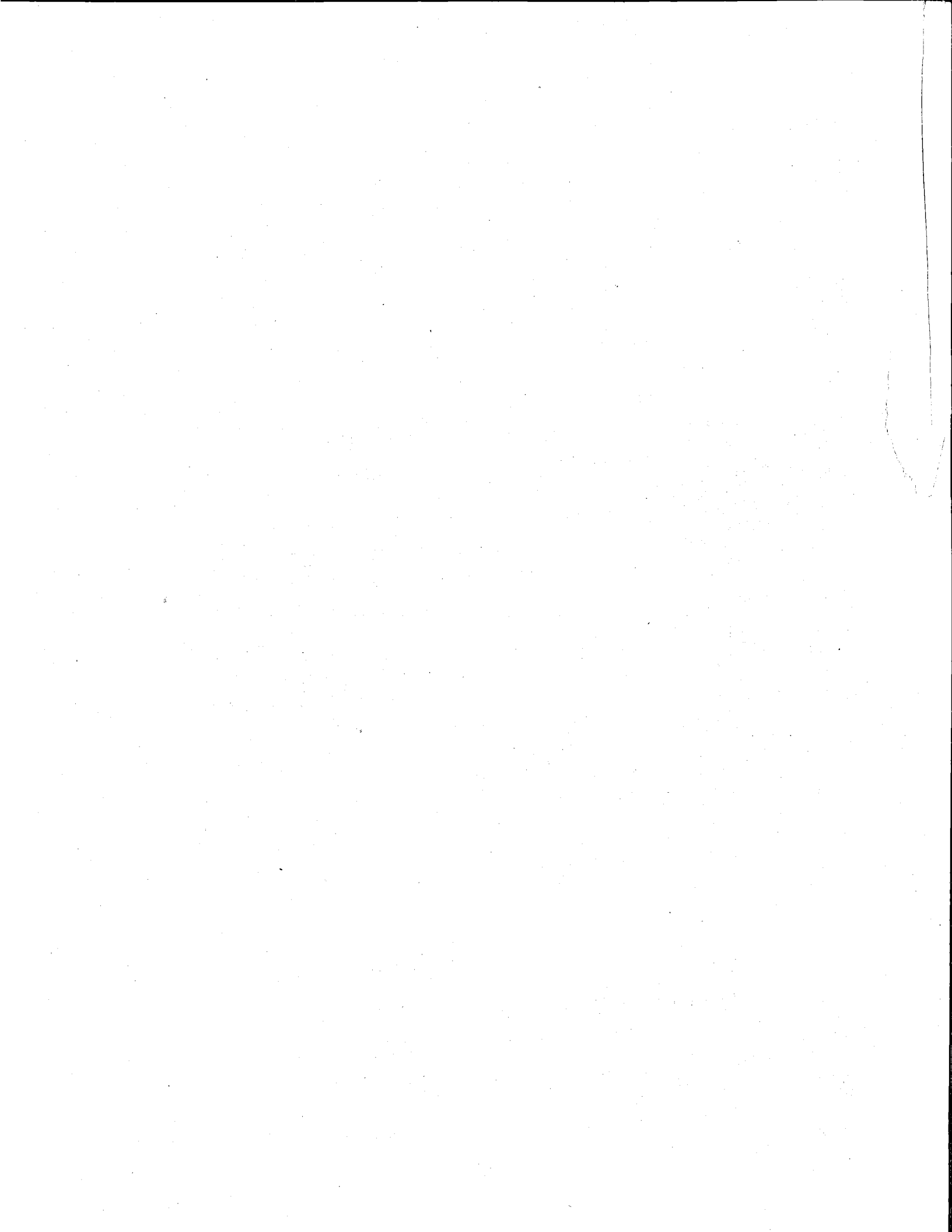
Recognizing the need for innovative solutions in difficult times, COS and Fresno State University have formed a partnership allowing many residents to further their education on the COS campus by taking upper division courses offered by Fresno State University.

COS will continue to explore partnerships with business and education with an emphasis on building for the future while adapting to the changing needs of the residents of our District.

**Robert A. Lombardi
Superintendent and President**



Keith Sheffield/Campus Staff



GENERAL INFORMATION

Catalog and Announcement of Courses

College of the Sequoias
A Public Community College

1991-1992



COLLEGE OF THE SEQUOIAS COMMUNITY COLLEGE DISTRICT
915 Mooney Boulevard
Visalia, California 93277
(209) 730-3700

Published by the Board of Trustees

The College of the Sequoias is a member of the American Association of Community and Junior Colleges and the Community College League of California. The college is officially accredited by the Western Association of Schools and Colleges and is approved for veteran training under both State and Federal laws. The University of California and other colleges and universities of high rank give full credit for appropriate courses completed at College of the Sequoias.

GENERAL INFORMATION

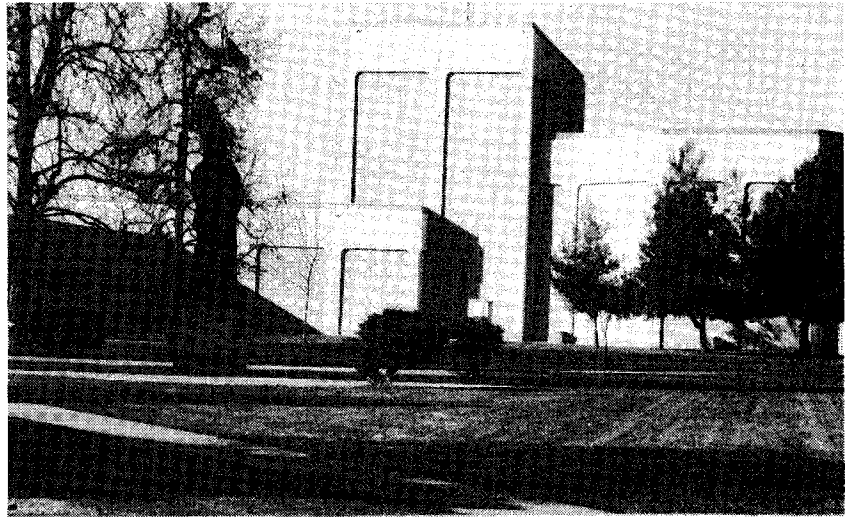
The College

College of the Sequoias Community College District was established in 1925 and moved to its current 55-acre site in 1940. In addition to the primary campus, COS conducts an agriculture program on a 120 acre farm as well as offering general education coursework in nearby communities including a college center in the City of Hanford.

Serving more than 8,500 students with a wide variety of academic and vocational programs, the college administration, faculty and staff are committed to the principle that society benefits when all its members have an opportunity to develop to their fullest potential. We are dedicated to reaching out to a diversified, changing population which has increased by more than 20 percent in the past decade.

Many of our students come to COS in order to take the first two years of undergraduate coursework before transferring to a four-year college or university.

A large portion of our students take specific vocational coursework as job preparation or to improve their skills and knowledge for positions of current employment. Classes for these students, as well as classes for self-satisfaction and personal improvement, are offered through a wide variety of day and evening classes on the campus and a number of community facilities.



College of the Sequoias, with its strategic location, its excellent buildings and facilities and well-trained staff, will continue to respond to the needs of the community by serving as a center of culture and intellectual vitality.

The Community

College of the Sequoias is located in Visalia, a community which has grown by more than 29 percent since 1980. The population of Visalia has reached approximately 75,000 while Tulare County reflected a similar growth rate in reaching a population of approximately 305,000.

Visalia which is situated just an hours drive from the mountains on the east and two hours from the ocean on the west is known as the Gateway to the Redwoods. Our small town catches the eye of many people passing through as a quiet, well-groomed town still with the small town image.

Visalians enjoy a symphony orchestra, two ballet groups and several theater groups. Visalia also features 20 city parks, 5 golf courses, 8 theaters and 2 hospitals.

Although Visalia enjoys a retail and professional sector, Tulare County is predominately agricultural. It is the second most productive agricultural county in the world.

The Student

College of the Sequoias' is well represented by a variety of ethnic backgrounds.

College of the Sequoias is represented predominately by students who live in Visalia, Exeter, Porterville, Hanford, Corcoran, Orosi, Tulare, Cutler, Farmersville, Lindsay, Woodlake.

GENERAL INFORMATION



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JASON ELLIS, Catalog Cover Designer

Jason Ellis designed the COS catalog cover in his COS graphic design class. Jason took four years of mechanical drawing at Mt. Whitney High School where he graduated in 1988. At COS he discovered how much he enjoyed taking art and graphics classes. He changed his major from architecture to graphic design and will transfer to CSU, Fresno next fall majoring in graphic arts.

Photographers:

Greg Halliwell, Bill Schell, and photographers from the college newspaper, The Campus.

GENERAL INFORMATION

Academic Calendar

Fall Semester, 1991

August 19, 1991—December 20, 1991

May 1	Last Day to Petition for Fall 1991 Readmission after Scholastic Disqualification
April*	Registration for Continuing Students
August*	Registration for Eligible Students
August 14	Registration for High School Accelerates
August 14	Last day to have application on file
August 14	Last day to take COS Placement test before Fall semester
August 19	Instruction begins
August 19-23	Program Changes (with instructor permission)
August 30	Last Day to Drop a Class Without a "W"
September 2	Labor Day Holiday (no classes)
September 27	Last Day to File for Associate Degree
October 11	Mid-Semester
November 1	Last Day to Petition for Spring 1992 Readmission After Scholastic Disqualification
November 11	Veterans Day Holiday (no classes)
November 15	Last Day to Drop Classes
November 28,29	Thanksgiving Holiday (no classes)
November*	Registration-Continuing Students
December 16-19	Extended Day Final Exams
December 16-20	Final Exams
December 20	End of Semester
December 20	Last Day to Remove Incomplete "I" Grade for the Spring 1991 Semester and 1991 Summer School
December 23-31	Christmas Recess (Holiday)
January 1-10	Recess Between Semesters

***Contact Registration Coordinator for specific dates.**

COS PLACEMENT TEST IS ADMINISTERED PERIODICALLY THROUGHOUT THE YEAR. CONTACT ASSESSMENT CENTER FOR SPECIFIC DATES AT 730-3737.

GENERAL INFORMATION

Academic Calendar

Spring Semester, 1992

January 13, 1992—May 27, 1992

November 1	Last Day to Petition for Spring 1992 Readmission After Scholastic Disqualification
January*	Registration for Eligible Students
January 8	Last Day to have Application on file
January 8	Registration of High School Accelerates
January 13	Instruction Begins
January 13-17	Program Changes (with instructor's permission)
January 20	Martin Luther King Jr.'s Birthday Holiday
January 27	Last Day to Drop a Class Without a "W"
February 7	Lincoln's Birthday Holiday (no classes)
February 17	Washington's Birthday Holiday (no classes)
February 28	Last Day to File for an Associate Degree
March 2	Cal Grant Financial Aid Deadline for New and Transferring Students
March 2	COS Scholarship Application Deadline
March 20	Mid Semester
April 13-17	Easter Recess
April 10	Last Day to Drop Classes
May 1	Last Day to Petition for Fall 1992 Readmission After Scholastic Disqualification
May 18-21	Extended Day Final Exams
May 20-27	Final Exams
May 27	Commencement/End of Semester
May 27	Last Day to Make Up Incomplete "I" grade for Fall 1991 Semester
May 25	Memorial Day Holiday (no classes)
June 15-July 24	Summer Session

***Contact Registration Coordinator for specific dates.**

COS PLACEMENT TEST IS ADMINISTERED PERIODICALLY THROUGHOUT THE YEAR. CONTACT ASSESSMENT CENTER FOR SPECIFIC DATES AT 730-3737.

GENERAL INFORMATION

Compliance Statement

BOARD OF TRUSTEES

Ned F. Baker
Vice President
(Ward 3)

Luther Khachigian
(Ward 1)

Lee M. Lockhart
President
(Ward 5)

Robert Lyman
Clerk
(Ward 4)

Louis E. Sweet
(Ward 2)

The College of the Sequoias Community College District has made every reasonable effort to determine that information stated in this catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the Administration of the College of the Sequoias Community College District for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District. The District further reserves the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.

College of the Sequoias does not discriminate on the basis of race, color, national origin, sex (including sexual harassment), handicap (or disability), or age in any of its policies, procedures, or practices, in compliance with Title VI of the Civil Rights Act of 1964 (Pertaining to race, color, and national origin), Title IX of the Education Amendments of 1972 (pertaining to sex), Section 504 of the Rehabilitation Act of 1973 (pertaining to handicap), and the Age Discrimination Act of 1975 (pertaining to age). This nondiscrimination policy covers admission and access to, and treatment and employment in, the College's programs and activities, including vocational education. Inquiries regarding the equal opportunity policies, the filing of grievance, or to request a copy of the grievance procedures covering discrimination complaints may be directed to:

**To be Named, Affirmative Action Officer
Mr. David Bockman, Title IX Coordinator
Mr. Donald Mast, Section 504 Coordinator**

**College of the Sequoias
915 South Mooney Boulevard
Visalia, California 93277
(209) 730-3700**

The lack of English language skills will not be a barrier to admission and participation in the college's vocational education programs.

College of the Sequoias recognizes its obligation to provide overall program accessibility throughout the College for handicapped persons. Contact the Section 504 Coordinator to obtain information as to the existence and location of services, activities, and facilities that are accessible to and usable by handicapped persons.

Inquiries regarding Federal laws and regulations concerning nondiscrimination in education or the District compliance with those provisions may also be directed to:

**Office for Civil Rights
U.S. Department of Education
221 Main Street, Suite 1020
San Francisco, California 94105**

College of the Sequoias is an equal opportunity-affirmative action employer.

GENERAL INFORMATION

College Administration

Dr. William Shawl
(Interim)
Vice President, Instruction

Dr. David C. Bockman
Dean of Instruction
Applied Sciences

Dr. Dianne Sharples
Dean of Instruction
Evening College & Liberal Arts

Dr. Lynn Mirviss
Associate Dean, Instruction
Nursing

Mr. Gary Kuncel
Director
Police Training/Public Safety

Mr. Larry Burge
Coordinator
P.O.S.T. Basic Police
Academy

Dr. Robert A. Lombardi
Superintendent/President

Mr. David J. Erickson
Vice President
Administrative Services

Mr. Dave Adams
Director of Campus Facilities and
Operations

Mr. Victor Collins
Personnel Manager

Mr. Joe Nemcek
Director
Information Services

Mr. Don Mast
Associate Dean
Enabler Program

Dr. Don Goodyear
Vice President
Student Services

Mr. Bill Bettencourt
Dean of Students

Mr. Robert G. Heath
Dean
Admissions and Records

Ms. Christina Knox
Associate Dean
Matriculation

Mr. Richard Grajeda
Associate Dean
EOPS

Mr. Ronald Hays
Dean
Special Student Services

Mr. Dale Norton
Director
Precollegiate Studies

College of the Sequoias Foundation

College of the Sequoias and the San Joaquin Valley are partners in progress, each relying upon the other for strength and support. The COS Foundation shares in this partnership. Supported by members of our area, the Foundation greatly enhances services the college provides to students.

The COS Foundation was organized in the fall of 1985 to assist the college in the attainment of its educational, cultural and scientific goals. It raises funds for the college and also solicits donations of property and other assets. Contributions are used for such things as construction, scholarships, equipment and other outlay needs. Donations can be given in a number of ways: cash, stock, real property, deferred gifts, memorials, matching gifts and scholarships.

Gifts to the Foundation aid the college in providing quality education at an affordable cost, ensuring that College of the Sequoias will continue to graduate well-trained, competent men and women who will take their places in the business, industry and service occupations of our valley.

Persons desiring to learn how they may contribute to the COS Foundation and the work of the College of the Sequoias are invited to contact Dr. Edmund Carlson in the Foundation Office at COS, 730-3861.

GENERAL INFORMATION

College of the Sequoias Facilities

Traditional facilities at the campus include lecture classrooms; science laboratories; computer laboratories in English, Math, Business, and Nursing; photography laboratory; a multi-purpose gymnasium; theater; an industrial and automotive technology complexes; a library and media center; a learning resource center; administrative and Student Services offices, an Enabler Skills complex; cafeteria, book store, and student activities office.

Recreational facilities include a track and field complex; outdoor tennis, racquet ball courts; basketball and volleyball courts (gym); softball, baseball, and football fields; weight room which utilizes both nautilus and free weights; and an outdoor stage.

In addition, College of the Sequoias has developed facilities that support its academic programs.

Children's Learning Center

Serving as a training laboratory for Child Development program majors as well as a child care center for students and community members, the professionally staffed Children's Learning Center offers an outstanding pre-school program. Facilities include a well-equipped playroom, cafeteria complex and fenced playground.

Farm

The COS Farm provides each agriculture student with hands on, learn-by-doing education in a wide range of skills. The laboratory consists of a 70-cow Registered Holstien herd which is one of the top herds in the area of milk production. A complete horticulture facil-

ity provides students with practical, current landscape practices while working in the unit during class laboratories or after hours at student work sites. The 120 acre laboratory provides students with worksites in animal science, horse production, dairy, ornamental horticulture, floriculture, turf culture, crop production, vegetable gardening and soils.

Hanford Center

College of the Sequoias has a center at 217 West 7th Street in Hanford, California. A wide variety of general education classes and some vocational classes are offered at that

site during day and evening hours. Services available to students including testing, orientation, counseling, registration, tutoring, and book sales. Call (209) 583-8373 for further information.

Off-Campus Sites

To make it easier for COS students to attend classes, the college offers regular accredited courses at nine off-campus locations within the district.

During registration, students may sign up for off-campus classes during regular registration hours on campus or during the first class session at off-campus sites.

OFF CAMPUS LOCATIONS

CORCORAN
Corcoran High School
Whitley & Letts Avenues

John Muir School
Letts and Bell Avenues

Kings Lake School
1520 Patterson Avenue

CUTLER/OROSI
Cutler-Orosi Unified High School
418 Road 128

EXETER
Exeter High School
820 San Juan Avenue

FARMERSVILLE
Farmersville Senior Center

HANFORD
Hanford COS Center
217 West 7th Street
Rooms: 1-4

Hanford Adult School
905 North Campus
Rooms: 1-10

Hanford High School-West
1150 West Lacey
Rooms: 101-758

Hanford High School-East
120 East Grangeville
Rooms: 21-95

LINDSAY
Lindsay High School
1701 East Tulare Road

WOODLAKE
Woodlake Union High
400 West Whitney

THREE RIVERS
Three Rivers Elementary School
41932 Sierra Drive

TULARE
Tulare Union High School
755 East Tulare

GENERAL INFORMATION

California State University, Fresno

The CSUF/COS Visalia Center is a cooperative effort involving California State University, Fresno and College of the Sequoias in an effort to expand public higher education in the south valley region. The primary goals of this Center are to provide an opportunity for upper division and post baccalaureate students to complete their educational goals, and to provide effective student support services that will meet the individual needs of each student.

Academic Programs

The following Degree and Credential programs are offered through the CSUF/COS Center:

Bachelor Degrees
Liberal Studies B.A.; Business B.S. (partial); Nursing B.S. (partial)
Master of Education Degree
Option in Administration and Supervision; Option in School Counseling (partial)
Master of Special Education (Partial)
California Education Credentials
Multiple Subject Credential; Single Subject Credential; Administrative Services
Credential; Pupil Personnel Services Credential (partial)

Student Services

The following Student Affairs Services are available to students.

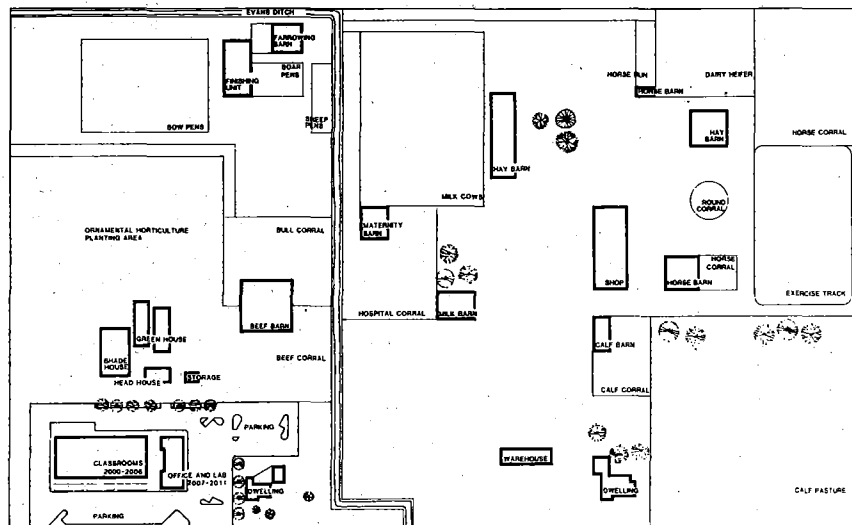
Admissions
Career Planning
Transfer Agreements

Academic Advising
Registration
Outreach Services

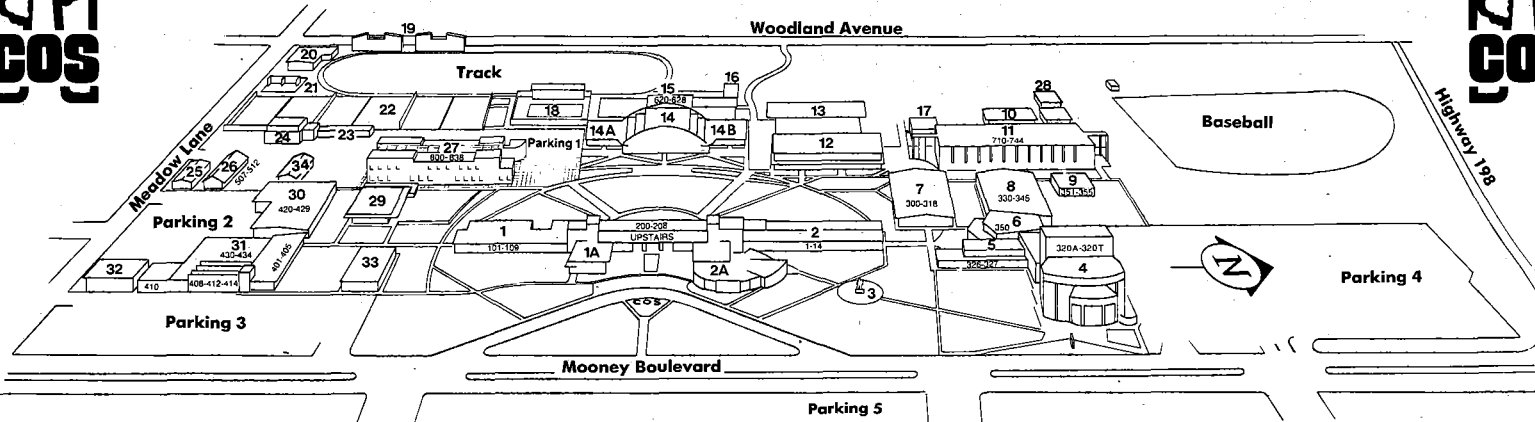
Reentry Services
Financial Aid

For Further Information

The CSUF/COS Center is located west of the Business Building and north of the Library (Building 17). Hours are 8:00 a.m. - 7:30 p.m., Monday through Thursday, and 8:00 a.m. - 5:00 p.m. on Fridays. Telephone number: 625-3950.



**Map of the
College Farm**



REVISED 1991

April Dallas Sherrill

GENERAL INFORMATION

◆ COLLEGE ◆
OF THE



NUMERICAL LIST

- | | | |
|----------------------------|--------------------------------|--------------------------------|
| 1. Administration South | 11. 700 Building | 22. Tennis |
| 1A. Student Services | 12. Library | 23. Safety Services |
| 2. Health Center | 13. Instructional Media Center | 24. Transportation |
| 2A. Administrative Offices | 14. Gymnasium | 25. Print Shop |
| 3. Giant Statue | 14A. Athletic Office | 26. Journalism |
| 4. Theatre | 14B. Student Activities Office | 27. Consumer/Family Studies* |
| 5. Music | 15. Gym Annex | 28. Gain |
| 6. Lecture Hall | 16. Adaptive P.E. | 29. Student Union |
| 7. Life Sciences/Math | 17. CSUF/COS Center | 30. Industry & Technology West |
| 8. Social Sciences | 18. Pool | 31. Industry & Technology East |
| 9. Portable Classroom | 19. Racquetball | 32. Building Trades |
| 10. Nursing | 20. Facilities Shops | 33. Bookstore |
| | 21. Handball | 34. Home Economics |

ALPHABETICAL LIST

- | | | |
|--------------------------------------|-------------------------------------|-------------------------------------|
| Adaptive P.E. 16 | Drafting Technology 31 | Mill Cabinet Lab 30 |
| Administration 2A | EOP&S 1 | Music 5 |
| Administration of Justice 11 | Electronics Technology 30 | Music Library 5 |
| Admissions & Records 1 | Enabler Classroom 12 | Nursing Lab 10 |
| Air Conditioning Technology 31 | Enabler Office 13 | Nursing Office 10 |
| Architectural Technology 31 | English 11 & 27 | Photography 26 |
| Art 1 | Facilities Shops 20 | Physics 2 |
| Art Gallery 4 | Facilities and | Pool 18 |
| Assessment & Testing 1A | Operations Office 32 | Portable Classroom 9 |
| Athletic Office 14A | Financial Aids 1 | Print Shop 25 |
| Automotive Technology 30 | Foreign Language 11 | Public Information Office 13 |
| Biology 7 | Foundation Office 13 | Racquetball 19 |
| Board Room 2A | Giant Statue 3 | Receiving 32 |
| Bookstore 33 | Gymnasium 14 | Scholarship Services 1 |
| Box Office 4 | Gym Annex 15 | Science 2 & 7 |
| Business 11 | Handball 8 | Social Sciences 8 |
| California State University | Health Center 2 | Student Activities Office 14B |
| Fresno/COS Center 17 | Home Economics 34 | Student Services Center 1 |
| Career Center 12 | Industry & Technology .. 30 & 31 | Student Union 29 |
| Cashier's Office 2A | Information 2A | Tennis 22 |
| Chemistry 2 | Instructional Media Center 13 | Theatre 4 |
| Community Services 2A | Journalism 26 | Training Room 14A |
| Computer Services 11 | JTPA/GAIN 28 | Transfer Center 1A |
| Construction Technology 32 | Lecture Hall 6 | Transportation 24 |
| Consumer/Family Studies 27 | Library 12 | Veteran Services 1 |
| Cooperative Education | Maintenance Technology 31 | Welding Technology 31 |
| Office 2 | Metals Lab 31 | Women's Locker Room 14B |
| Counseling Center 1A | Math 7 | 700 Building 11 |
| Dance Studio 15 | Men's Locker Room 15 | |

*to be built in 1992

GENERAL INFORMATION

Mission and Goals of the College

COLLEGE MISSION

The College of the Sequoias is a community oriented, open-door lower division educational institution dedicated to the principle that society benefits when all its members have an opportunity to develop to their fullest potential.

We are dedicated to reaching out and serving a diversified, changing population during their lifelong learning process through the development of a current, responsive, flexible, creative and meaningful curriculum and teaching framework.

In pursuit of its four-fold mission in the areas of transfer, vocational, and remedial education and community service, COS will endeavor to:

- * **Remain sensitive to the needs of the students by providing appropriate assessment, matriculation, career guidance, and cultural awareness;**
- * **Respond to the needs of the community by serving as a center of culture and intellectual vitality;**
- * **Meet the needs of the staff by nurturing their intellectual, professional, emotional and personal growth; and**
- * **Operate in the most accountable, creative, cost-effective manner possible.**

COLLEGE OBJECTIVES

The instructional offerings and support services are designed to meet a variety of educational needs of the community and include the following objectives:

RESPONSIBILITY TO AND INVOLVEMENT OF THE COMMUNITY

The district's primary responsibility is to meet the changing educational needs of its adult population. This responsibility is achieved through community participation in planning, educational offerings and community services.

OPEN ACCESS PRINCIPLE

The district maintains an open access admissions policy. Enrollment is open to any person who is a high school graduate or who is 18 years of age or over and

able to benefit from instruction. Enrollment is also open to high school students who qualify for enrollment.

STUDENT SERVICES AND PROGRAMS

General Education

To provide courses that help students value cultural similarities and differences, attain a sense of self-worth and personal emotional stability, develop critical thinking, maintain physical health and fitness, gain aesthetic awareness, understand the environment and its ecology, and increase the student's abilities to cope with everyday living as an adult in a rapidly changing world.

Transfer Curriculum

To provide quality programs which develop the intellectual potential and other prerequisite courses so students may successfully transfer with advanced standing to four-year colleges and universities.

Vocational and Technical Training

To provide degree and certificate programs and special courses designed to prepare students with skills and competencies leading to successful competition in the job market.

Citizenship Education

To provide training and experiences which will prepare every student to function effectively as a patriotic citizen with pride in the United States of America.

Employment Development

To provide training and assistance in obtaining the knowledge and skills for pursuing employment opportunities.

Support Services

To provide a broad base of support services to assist students in successfully attaining their academic and occupational goals. Included are comprehensive counseling and guidance services, assessment, financial aid and scholarships, job placement, veterans' assistance, tutorial programs, disabled student programs and extended opportunity services.

GENERAL INFORMATION

COLLEGE OBJECTIVES (Continued)

Remediation

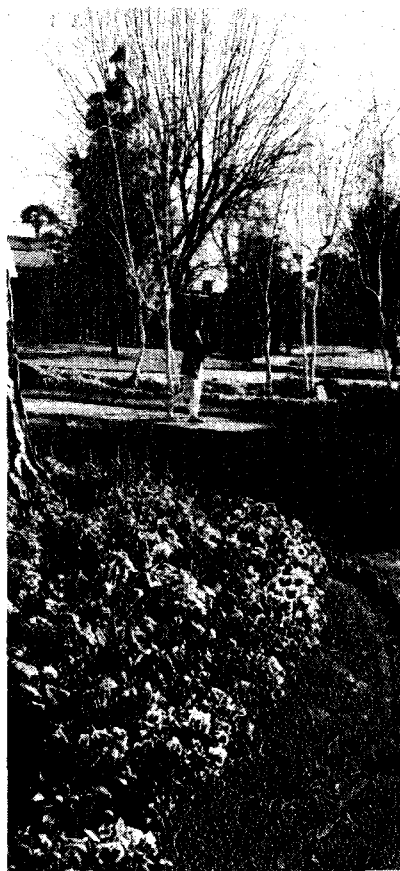
To provide courses that enable students to acquire language skills to enhance their ability to benefit from the college's instruction programs.

Community Services

To provide fee-based educational opportunities including professional growth, personal enrichment and athletic/recreational opportunities.

Adult and Lifelong Learning Education

To provide courses leading to upgrading of educational skills, new skill preparation, or instruction to meet the needs of adults in the district.



History of the College

The college was established by the Visalia Union High School Board of Trustees as Visalia Junior College in 1925, and offered the first post-high school instruction to students of this area beginning September, 1926. College classes were housed in the Visalia Union High School plant until September, 1940. At that time, the college moved to its own campus southwest of Visalia where new buildings had been completed.

On January 18, 1949, the voters of Tulare Union High School District and the Visalia Union High School District elected to organize the area in these two high school districts into a junior-college district. During the spring the students voted on a name for the newly-formed junior-college district. From the names suggested by the students, the Board of Trustees chose the name, College of the Sequoias.

In 1950, voters in the Exeter Union High School, Woodlake Union High School and Lindsay Unified District voted to join the COS District. In 1962, the Orosi Union High School, Corcoran Unified, Hanford High School and Westside Unified Districts elected to join the district. In 1976, the Strathmore High School District joined the COS District.

ADMISSION



ADMISSION

Eligibility for admission

Any graduate of an accredited high school may be admitted to College of the Sequoias. Also, any person having successfully completed the California High School Proficiency Examination (CHSPE) or the General Educational Development Test (G.E.D.) with scores of 45 overall and with no subtest lower than 35 may be admitted.

Upon completion of applicable admission requirements, registration permits are issued by the Admissions and Records Office. For dates relating to registration, check the calendar in the front of the catalog or inquire at the college Office of Admissions and Records, Room 107.

Placement Tests

College of the Sequoias requires that all students entering directly from high school take the COS Placement Test prior to program advising and admission to the college. All others who have an AA/AS degree objective or which to enroll in any English or Math class or any class with a math and/or English prerequisite, must also take the test. Tests are administered on several days throughout the year. Information on test dates and test registration may be obtained by contacting Student Services. Math Placement test scores are valid for only three semesters. Students not enrolling during this time will be required to retake the COS Math Placement test. Also, all students who wish to enroll in Chemistry 1 must take the Chemistry Placement Test.

Provisional Admission of Students

The college may admit other persons 18 years of age or over when the evidence indicates that the individual will benefit from college level instruction. Students are encouraged to complete high school prior to enrolling in the college.

An applicant to a district college who is 18 years of age or over and is not a high school graduate may enroll as a provisional student for 12 semester units or more for one semester as a full-time student, he/she must earn a 2.0 GPA in the units attempted. This regulation does not apply to part-time students.

Summary of Admission Requirements for Full-Time Students (12 or more units)

Full matriculation will be required of any student who intends to enroll for 12 or more units of credit. A part-time student is one who enrolls for less than 12 units. Full matriculation shall require that a prospective student:

1. File a completed admission application prior to the deadline as specified in the catalog.
2. If you are under 21 years of age, request the last high school attended to send one transcript of work completed or attempted. If you have attended college, we require only college transcripts. Transcripts are to be official copies sent directly from previous schools to the Admissions and Records Office, College of the Sequoias, 915 S. Mooney Blvd., Visalia, CA 93277.
3. If the G.E.D. Test or the California High School Proficiency Examination (CHSPE) was taken in the last two years, have the G.E.D. scores or a copy of the CHSPE Certificate sent to the Admissions and Records Office.
4. Request each college of attendance to send one complete transcript of work attempted, whether or not credit was earned. Transcripts are to be official copies sent directly from the previous schools to College of the Sequoias. The first official copy of the transcript should be mailed to the ADMISSIONS OFFICE at COS. Also an official copy and any other transcripts required should be mailed to the offices listed below IF participating in any of the following programs:
1) Financial Aids Office; 2) Veterans' Office;
3) Mini-Corps Office; 4) Nursing Office.

Summary of Admission Requirements for Part-time Students (11 1/2 or Fewer Units)

1. File a completed admission application prior to the deadline as specified in the catalog.
2. File one transcript of all previous high school and/or college academic records if the student wishes to:
 - a. Apply for a Certificate of Achievement or an Associate Degree

ADMISSION

- b. Apply for financial assistance (EOPS, financial aid, veterans)
- c. Apply for special programs, particularly in the health arts and sciences
- d. Validate that a prerequisite has been met either in high school or at another college

Advanced Placement

College of the Sequoias recognizes high achievement by students who have successfully completed one or more Advanced Placement Examinations as authorized by the College Entrance Examination Board.

Students who have successfully completed courses in the Advanced Placement Program with a score of 3, 4, or 5 shall be granted credit for purposes of general education certification, graduation, advanced placement in the college's sequence courses, and for curriculum requirements.

Students desiring credit for Advanced Placement Examinations shall submit their requests to the Dean of Admissions and Records. Requests should be made prior to registration or as soon as possible during the first semester of attendance.

Classification of Students

Freshmen:

Students with fewer than 30 units of college credit.

Sophomores:

Students who have completed 30 units or more of college credit.

Other:

Students who have completed more than 60 units of college credit.

Full-time Students:

Students carrying 12 units or more.

Part-time Students:

Students carrying less than 12 units.

Continuing Students:

Students currently enrolled.

Former/Returning Students:

Students who were not enrolled during the previous semester.

New Students:

Students who have never attended COS.

Registration

Registration should be completed before the beginning of each semester. In addition, students must verify their intention to attend by being present at the first meeting of each class in which they have enrolled.

STUDENTS MAY BE WITHDRAWN FROM ALL CLASSES IN WHICH THEY WERE ABSENT ON THE FIRST MEETING OF THE SEMESTER.

If unusual circumstances prevent the student from attending, the student should notify the Dean of Students' office. However, the decision to retain a student in the class is the decision of the faculty member.

NOTE:

Before scheduling a counseling appointment and admission to the College:

- (1) students must have a completed application on file;
- (2) have taken the COS Placement test;
- (3) and have the appropriate transcripts on file

prior to the first day of instruction, to be a full-time student.

Extended Day students may register in person during announced dates in the calendar section of the catalog. Counseling services from the counseling staff are available to Extended Day students by appointment.

Resident Regulations

Residency determination shall be made on the basis of a residence statement completed at the time of registration.

A "resident" is a student who has residence in the state for more than one year immediately preceding the residence determination date (EC68017).

ADMISSION

Resident Regulations (Continued)

A student shall be required to present evidence of physical presence in California, intent to make California a home for other than a temporary purpose and if the student was classified as a non-resident in the preceding term, financial independence (T554010).

The residence determination date is that date immediately preceding the opening day of instruction of the semester (EC68023/T554002).

Physical presence within the state solely for educational purposes does not constitute establishing California residence regardless of the length of that presence (T554022).

Residents of another state are non-residents of California (T554030). The burden is on the student to demonstrate clearly both physical presence in California and intent to establish California residence (T554026).

A student who is a member of the Armed Forces of the United States stationed in this State on active duty, except those assigned for educational purposes to State-supported institutions of high education, shall be entitled to resident classification until he/she has resided in the State the minimum time necessary to become a resident (EC68075).

A student who is a natural or adopted child, stepchild (under 18 years of age), or spouse who is a dependent of a member of the Armed Forces of the United States stationed in this State on active duty shall be entitled to resident classification until he/she has resided in the State the minimum time necessary to become a resident (EC68074).

College Level Examination Program (CLEP)

College of the Sequoias awards credits for the five General Examination sections of the College Level Examination Program. Six units of credit may be awarded for each examination that a student completes with a score of 500 or more.

Only students who are enrolled and matriculated at College of the Sequoias may receive credit on a College of the Sequoias transcript. The CLEP will not be applied to the General Education Certification requirement. For further information, contact the Dean of Admissions, Room 107.

Foreign Student Program

College of the Sequoias accepts a limited number of foreign students each year. In order to keep a well-balanced representation of the various nations of the world, the number of students accepted from any one country is restricted.

Transcripts of academic records and good health verification are required to qualify for admission. To be admitted, foreign students are required to make a score of at least 500 on the Test of English as a Foreign Language (TOEFL), which is administered in their own country or at a test center in the United States. The foreign student's annual tuition fee of \$3,060 is the same as for other non-resident students. Payment of \$1,530 tuition for the first semester must be paid upon being accepted by the college. Payment should be by bank draft or money order and must be received before the Form 1-20 will be issued by the college. Tuition for subsequent semesters will be paid at the time of registration.

All foreign students are required to purchase medical insurance, the cost of which is approximately \$250 for the school year. The money to cover the insurance should be sent with the non-resident tuition.

No scholarships from the College of the Sequoias are available to foreign students. Working during the first semester is generally not allowed and students must have sufficient funds to defray expenses. Each application must be accompanied by a certified statement regarding monies which are available.

Students on an "F" or "J" type visa are required to register for a minimum of 12 units and they must maintain the same scholastic standards as other students.

The deadline for application is April 1 for the fall and October 1 for the spring semester. Requests for application forms should be sent to the Dean of Admissions.

Transcripts

Applicants must file certified transcripts of their high school record with College of the Sequoias. Applicants who have attended another college or university must, in addition, file transcripts from each college or university attended showing all attempted work. College of the Sequoias grants credit for lower division work from accredited colleges or universities.

ADMISSION

COS requires two official transcripts as follows:

1. The first official copy of the transcript should be mailed to the Admissions Office at COS.
2. An official copy and any other transcripts required should be mailed to the offices listed below IF participating in any of these programs:
 - a. Financial Aids Office
 - b. Veterans Office
 - c. Mini-Corps Office
 - d. Nursing Office

Failure to file transcripts will delay or prevent admission or graduation. Transcripts should be sent directly from the high school or college to College of the Sequoias. All transcripts become the property of the College and will not be returned.

Exception: The high school transcript requirements may be waived for:

1. Those who have attended college.
2. Those who have attained a college degree.
3. If 21 years or older.

Fee Assistance

The California Legislature has made funds available to low-income students who desire to attend a community college but who are prevented from doing so by the mandatory enrollment fee. The Board of Governors' Financial Assistance Program provides several ways to help lower-income students pay the enrollment fee. Students who qualify for the Board of Governors Fee Assistance Program are exempted from payment of the mandatory Health Fee (AB2336/BOG 73352.1). Please contact the Special Student Services, Room 103, for eligibility information.

Fees and Expenses

Effective with the Fall 1991 Semester, laws passed by the State of California mandate that a \$60 maximum per semester enrollment fee be charged of any student who registers for more than ten (10) units. An additional tuition fee of \$102 per unit will be charged to all nonresident students. Refunds of enrollment fees will be made according to an established refund policy.

Health Fee

A \$7.50 health fee is charged of all COS students enrolled in classes for units or who are repeating a class under the Community Service Option.

Material Fees

A material fee may be levied in certain courses approved by the Board of Trustees. Textbooks and school supplies average approximately \$250 per semester. These costs, however, vary according to the student's major. New and used textbooks and essential supplies may be purchased at the COS Book store.

The college also has two **optional** fees:

1. **Parking Fee:** A fee for those students who wish to park their vehicle on the main campus or college farm property.
2. **A Student Association Fee:** Students may purchase Associated Student Body Memberships. The ASB card entitles the student to participate in or attend all activities sponsored by the ASB.

Non Resident Tuition Fees

The non-resident tuition fee for the academic year 1991-92 is \$102 per semester unit, payable each semester upon registration. Foreign students are subject to the same fees as other non-residents. Fees are applicable whether non-residents enroll for credit or non-credit.

Parking Fees

Students who park on campus must pay a parking fee. Semester parking permits may be purchased for a fee of \$20.00 per semester per vehicle for students taking 12 or more units; and \$10.00 for students taking 11 units or less. Parking permits for summer session will be \$10.00. Motorcycle and moped parking is free. Parking permits may also be purchased on a daily basis from red permit dispensers located in Lots 1, 3, 4, and the COS Farm for 50 cents (two quarters) per day. Daily permits are valid from time of purchase until 10:00 p.m.

Refund Policy

Enrollment, Health and Parking fees for students who completely withdraw from college prior to the end of the SECOND WEEK OF INSTRUCTION will be as follows:

ADMISSION

Refund Policy (Continued)

Enrollment and Health Fees

- Full refunds less a \$5.00 handling fee will be mailed approximately 6 to 8 weeks **after** instruction begins.
- **NO REFUNDS WILL BE GIVEN FOR CLASSES DROPPED AFTER THE FIRST TWO WEEKS OF SCHOOL.**

Parking Fees

Parking refunds will be available to students withdrawing from school prior to the end of the second week of instruction. Students withdrawing from school after the second week will not receive refunds.

- Apply for parking refunds at the Public Safety Office in Lot 1.
- A \$2 service fee will be deducted from all refunds.
- Parking permits or remanents must be returned to the Public Safety Office before refunds will be processed.
- A refund check will be mailed in 6-8 weeks.
- Full-time students dropping units to part-time status may, **during the third week only**, file for a partial refund.
- Permits must be picked up as soon as purchased as a limited number will be issued.

Scholastic Regulations

The scholastic average is obtained by dividing the total number of grade points by the total number of units for which the student was registered. Grade points are assigned as follows:

- Grade A - receives 4 points per unit;**
- Grade B - receives 3 points per unit;**
- Grade C - receives 2 points per unit;**
- Grade D - receives 1 point per unit;**
- Grade F - receives 0 points per unit**

Satisfactory Scholarship

Satisfactory scholarship means at least a "C" (or 2.0) average. To achieve at least a "C" (or 2.0) average, students must have a minimum of twice as many grade points as they have units attempted.

Transfer Students

Any student transferring from another college shall be subject immediately to these same scholastic regulations.

It is the responsibility of all students to compute their current grade point averages for their own guidance in determining whether their scholastic records are meeting their needs.

As an example of computing a grade point average, let us assume a student undertook the subjects shown below and earned grades as indicated:

Subjects	Units Attempted	Units Passed	Grade	Points
PE	1	1	C	2
English	3	0	F	0
Chem	5	5	A	20
Geol 1	4	4	B	12
Math 154	3	0	F	0
Hyg 1	0	0	W	0
Total	16	10		34

The grade point average equals 34 divided by 16, or 2, 12.

Explanation: Since Hygiene 1 was dropped with a "W," it does not count as units attempted. All other subjects which were carried count as units attempted, including Math 154 in which the grade was "F" and English 1 in which the grade was "F."

Scholastic Honors

Special recognition is granted to top scholars each semester. The President of the college acknowledges, on the Deans' List, those students who attain both a cumulative and a semester grade point average of 3.0 (B) or better. In addition, he also recognizes on the President's Honor List those special students who attain both a cumulative and a semester grade point average of 3.5 or better. Qualification for either honor requires enrollment in a minimum of twelve units with a letter grade.

A record of these accomplishments becomes a part of the student's permanent scholastic record. In addition to the academic recognition, the student also will receive special priority to early appointment for program planning.

ADMISSION

Fees

Enrollment Fee

Fewer than 10 units \$6.00 per unit
 \$3.00 per 1/2 unit

10 units, or more \$60.00 flat fee

(Fee waivers are available for low income students)

Refunds: Enrollment fee refunds must be requested in person at the Accounts Receivable Office. Refunds will be mailed to students within 6-8 weeks.

100% refund is given to students if they completely withdraw from classes prior to the first day of the semester or the class is cancelled by the college.

Health Service Fee

The health services fee helps support campus health services, including student accident insurance.

All students \$7.50 per semester

Fee Waivers are available for low income students

Refunds: 100% refund is given to students if they completely withdraw from classes prior to the first day of the semester or the class is cancelled by the college.

Parking Fee

Parking fees have been instituted to provide the resources needed to repair and maintain COS Parking Lots.

(Per Semester)
Students using .50 per sticker per day
parking lots \$10.00 11 units or less
 \$20.00 12 units or more
 \$10.00 Summer Session
Motorcycle and Moped
parking is free

Fresno State
Students \$10.00 per semester
Refunds: Parking fee refunds must
 be requested at Public Safety.

Purchase of a parking permit does not guarantee a space will be available. The College District is not responsible for losses due to theft or damage.

Class Material Fees

Nominal material fees are charged for some classes. Fees vary and are noted in the Schedule of Classes.

Refunds: 100% refund is given to students if they completely withdraw from classes prior to the first day of the semester or the class is cancelled by the college.

ASB Photo ID Fee

Optional purchase of an ID card entitles you to all the privileges of Associated Student Body membership, including local merchant discounts.

Price: \$15.00 per year

Refunds: Through ASB Office

Non-resident Tuition

Students who have not been legal residents of California for a full year prior to registration, must pay a tuition fee in addition to the enrollment fee.

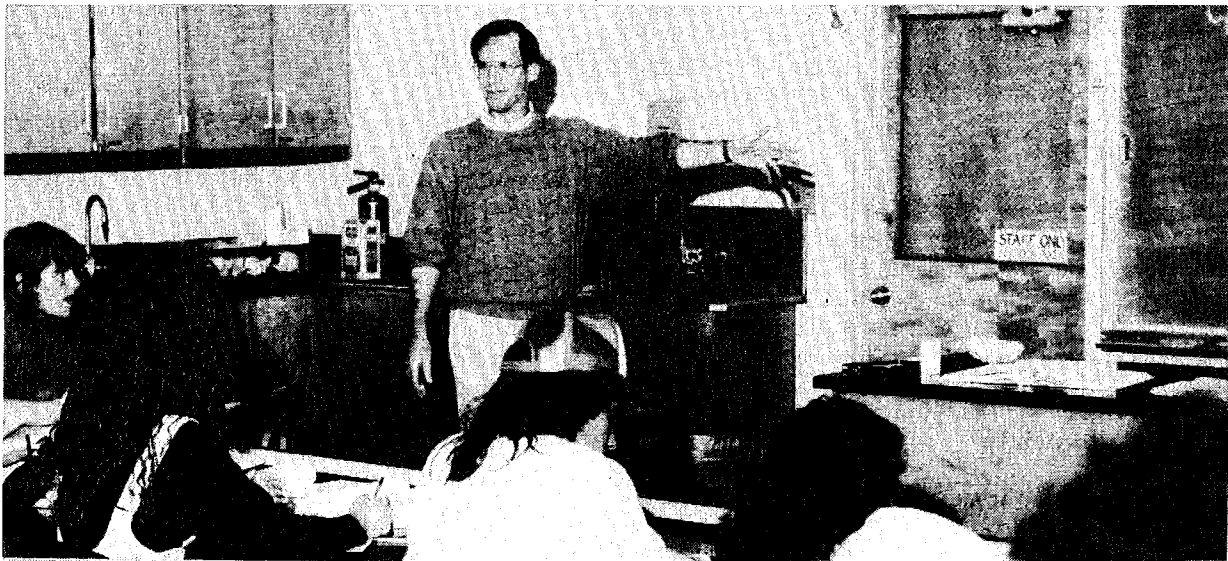
Non-resident Tuition: \$102 per unit

Refunds: Contact Admissions
 Office, Room 107

ADMISSION



Academics



Academics

Grading Procedures

All college work is measured in terms of both quantity and quality. The measure of quantity is the unit, and the measure of quality is the grade point.

High school courses for which credit was received in high school may be repeated as remedial work in college for improvement in grade, but no college credit will be granted for such work.

For purposes of grading or transfer to other collegiate institutions, it is necessary for the student to obtain a "C" average.

"A," "B," "C," and "D" are passing grades, corresponding to excellent, good, satisfactory, and passing. "F" is failure. A grade of "I" (incomplete) will be given in cases of extenuating circumstances. The student is entitled to all grade points upon satisfactory completion of assignments within one semester.

It is understood that instructors' grades when handed in are final and not subject to change by reason of revision of judgment on the part of the instructor. Grade changes may be made by the instructor only in cases of mistakes in grade calculation.

Maximum Unit Limit

The normal requirement for a college schedule comprises 15-16 units of work. No student will be granted credit in excess of 21 units a semester, except in the case of a student of proven ability or one who needs additional units to complete required work for graduation. In addition, a student on academic probation shall be subject to dismissal if the student earned a cumulative grade point average of less than 2.0 in 30 units of precollegiate basic skills courses.

Prerequisites:

Prerequisites are prescribed courses covering information that is normally expected to be acquired prior to enrolling in another course. The intent of prerequisites is to ensure that any student enrolling in a course in which specific information is required will have the necessary background so that every opportunity exists for experiencing success. Therefore, any course with prerequisites presumes that subject matter will be acquired in a sequential way.

While many courses prescribe prerequisites, students must understand that any course/courses

requiring a prerequisite presupposes that the student is prepared with a set of skills to successfully engage the next level.

Students enrolling in courses without the appropriate prerequisite may find they are ill-prepared to continue their studies in that course. Prerequisites are designed to enhance success.

Student Progress

If satisfactory progress through College of the Sequoias' specialized support service programs (i.e., the Learning Assistance Center, Developmental Studies program, etc.) is not made during two semesters, life-goal setting and career counseling will occur with the individual student involved. The Academic Review Board and selected faculty members will determine, for referral purposes, the most appropriate educational or community-based agency to better serve the student's need.

Probation and Dismissal

Academic Probation

A student who has attempted at least 12 cumulative semester units as shown by the official academic record at College of the Sequoias shall be placed on academic probation if the student has earned a grade point average below 2.0 in all units which were graded on the basis of the grading scale.

Unit Limitation

A student on academic probation may be limited to 15 units plus a physical education activity course or to a maximum load recommended by the student counselor.

Academic Probation Removal

A student on academic probation for a grade point deficiency shall be removed from probation automatically when the accumulated GPA is 2.0 or higher.

Computation

Grade point Average equals:

Total Grade Points Earned divided by Total Units Attempted with Letter Grade.

Academics

Academic Dismissal Procedures

A student on academic probation shall be subject to dismissal if the student earned a cumulative grade point average of less than 2.0 in all units attempted in each of the three consecutive semesters which were graded on the basis of the grading scale. In addition, no student will be granted credit in excess of 30 units for precollegiate basic skills courses, except in the case of a student who has applied for and received a waiver from the Director of Precollegiate Studies.

The term "consecutive semesters of enrollment" is defined on the basis of student enrollment. For example, a student enrolled in two fall semesters and not enrolled for the spring semester between would have two consecutive semesters of enrollment. Summer session is considered a semester of enrollment for dismissal purposes.

Students on academic probation will not be dismissed after their third semester of below satisfactory work (below 2.0 cumulative GPA) if during that third semester and every subsequent semester they maintain a 2.0 GPA until their cumulative GPA is above the probationary level.

Academically disqualified students will be so informed by letter and on their grade report and notice of their status will be entered on their permanent record. A student who has been dismissed shall not be eligible for reinstatement or readmission until one semester has elapsed after the dismissal. Students may be notified of other requirements which must be fulfilled prior to submitting a petition for readmission. A petition for a readmission is required prior to enrollment and is available from the Dean of Admissions and Records Secretary in Room 107.

Any students readmitted after disqualification remains on probation until probation removal requirements have been fulfilled. Students dismissed for the second time are not eligible to re-petition for admission until another semester of non-attendance has elapsed.

Academic Forgiveness

A student may petition the Academic Review Board to have "WF" and "F" grades disregarded from inclusion in the totals and grade points as listed on the permanent record. Prior to petitioning for the removal of a "WF" grade, condition (1) and (2) below must be met before the Academic Review Board will accept a petition for the removal of a "F" grade.

(1) Fifteen or more semester units of college work with a 2.0 ("C") or better grade point average at College of the Sequoias or another accredited institution of higher learning must be completed following the semester in which the "WF" grade were earned.

(2) At least three years must have elapsed since the "F" grades were received. Instructors who originally assigned the "F" grades must give written approval for their removal. In case where the faculty members cannot be located, the final decision for removal of "F" grades will reside with the Academic Review Board.

Progress Probation

A student who has enrolled in a total of at least 12 cumulative semester units as shown by the official academic record at College of the Sequoias shall be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W," "I," and "NC" are recorded reaches or exceeds 50 percent.

After the second progress probation, students who satisfactorily complete 50 percent or more of units registered each semester will continue on progress probation rather than be dismissed (even if insufficient units have been completed to remove them from probation.) If students complete 49 percent or fewer of units enrolled in any semester while they continue on progress probation, they will be subject to progress dismissal.

Progress Probation Removal

A student on progress probation because of an excess of units for which entries of "W," "I," and "NC" are recorded shall be removed from probation when the percentage of units in this category drops below 50 percent.

Computation **Progress Percentage equals:**
Total Units with "W," "I," and "NC"
divided by
Total Units Enrolled.

Progress Dismissal Procedures

A student who has been placed on progress probation shall be subject to dismissal if the percentage of units in which the student has been enrolled for which entries of "W," "I," and "NC" are recorded in at

Academics

Credit by Examination

CONDITIONS AND REQUIREMENTS FOR CREDIT BY EXAMINATION

1. Students must be currently registered and in good standing at COS. Good standing is defined as not on probationary status.
2. Students must file a petition for approval to challenge a course by examination with the Admissions and Records office.
3. Students must furnish strong proof to the satisfaction of the instructor/department, division chair person the Vice President of Instruction that previous background, experience or training would insure a reasonable measure of success in the challenge.
4. If the petition is approved, the examination or series of tests shall be administered by the appropriate instructor as designated by the division chairperson. The course, with units and letter grade as signed, shall be entered on the student's record and will be reflected in the student's cumulative grade point average.
5. The student's academic record shall be clearly annotated to reflect that credit was earned by examination. A maximum of 12 units may be earned through credit by examination. (This limitation is waived in the case of registered nursing students.) Units for which credit is given pursuant to the provisions of this section shall not be counted in determining the 12 semester hours of credit in residence required for an associate degree.
6. Any course listed or qualified to be listed in the college catalog is available for challenge within the limits of condition "3" above.
7. Once the student receives approval for credit by examination, the examination must be completed within the same semester unless extenuating circumstances are shown to justify an extension of time. In the event the examination is not completed within the semester approval was obtained, an NC (no credit) grade will be assigned. If a NC grade is assigned, the student will not be allowed to challenge the same course again.
8. A non-refundable material and processing fee of \$15 will be assessed for each credit by examination petition.

Honors Program

The Honors Program is open to highly motivated students who wish to participate in innovative classes where dialogue, writing and the interdisciplinary nature of knowledge are stressed. The Honors in the General Education portion of the program involves courses in English, Humanities, Science and History each of which is accompanied by an Honors Colloquium that will develop and present workshops with visiting scholars and public figures. These courses will be part of the student's general education program and when combined with one of COS's academic majors, provides excellent preparation for transfer to four-year colleges and universities.

The program is open to students in all majors and is designed to provide small classes where students can develop effective communication and reasoning skills. Applications for the program can be obtained from the Honors Coordinator.

Independent Study

The purpose of an independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement existing courses. The independent study requires a minimum of 54 hours of academic work per unit.

Before a student may enroll.....

- the student must have completed **ALL** beginning level courses offered at the college in the subject. **Only in very unusual cases may students be enrolled in independent study without completing the beginning level courses.**
- students must have written approval from:
 - the instructor
 - the division chairperson
 - Vice President, Instruction

Credit for Independent Study is accepted at the CSUs.

Independent Study Application Procedure

1. A student who has completed all beginning level courses and wishes to pursue a subject of interest may obtain an independent study application form in the Admissions Office, Room, 107. **A student must be registered for the semester in which the independent study credit is being sought.**
2. The student seeking independent study should outline his/her proposal and discuss it with an appropriate instructor. The student should then complete the independent study application form.
3. The student should present the completed independent study application form to the supervising instructor.
4. The form should then be passed from instructor to division chairperson to the Vice President, Instruction.
5. If approved, the form is sent from the Office of Instruction to the Admissions Office and entered on the student's schedule of classes. Registration is complete at this point. A copy of the approved form is then sent to the student by mail.
6. If disapproved, the reason for the disapproval is written (stated) on the form and returned to the instructor and/or division chairperson who approved the independent study. The **instructor** then notifies the student as to the reason for the denial.
7. Roll sheets will be distributed to the appropriate instructors by the Office of Instruction.
8. At the end of the semester, grade reports for independent study classes **MUST** be turned in to the Admissions Office **at the same time as are those for regularly schedule classes.**
9. If the independent study project must continue beyond the semester's end, a grade of "I" (incomplete) will be assigned to the student. An incomplete must be made up according to the stated procedure in the college catalog.
10. A complete roster of all independent study students will be kept by semester for a given year and filed in the Admissions Office.

Leaves of Absence

Students finding it necessary to be absent for a period of three days or more are requested to obtain and complete a leave of absence form available in the Dean of Students' Office. The reason for the absence is to be indicated on this form, as well as the dates of the proposed absence. If the leave is granted by the instructor, the student has the right to make up the work missed to the satisfaction of the instructor(s).

Academics

Student Progress

If satisfactory progress through College of the Sequoias' specialized support service programs (i.e., the Learning Assistance Center, Developmental Studies program, etc.) is not made during two semesters, life-goal setting and career counseling will occur with the individual student involved. The Academic Review Board and selected faculty members will determine, for referral purposes, the most appropriate educational or community-based agency to better serve the student's need

Community Service Option

A student who has taken a course designated as repeatable the total number of times allowed for credit, may then opt, with the instructor's permission, to repeat certain classes under the auspices of Community Service for no credit. Students will not be allowed to enroll for the community service repetition option until the **THIRD** week of school. Instructor permission forms can be obtained in Administration Office from the Community Service Secretary and fees paid at the Accounts Receivable Office. Fees for students enrolled in Community Services shall be \$6 per unit plus a \$7.50 Health Fee. Since Community Service is a separate account, no funds can be transferred from credit to Community Service accounts or vice versa. If students choose to drop a class they are taking for credit and take it as a Community Service class, they must pay the additional Community Service Fee.

A course must have a minimum of 15 students enrolled in the course for credit. If there are fewer than 15 students enrolled for credit, the course will be cancelled. It may then be offered under the auspices of Community Services and the fee will be set according to the Community Service fee formula. When this occurs, the instructor may restructure the class to reduce the number of hours it meets as a means of reducing fees to students.

For a list of courses that may use the Community Service repetition option, please contact the Community Service Secretary in the Administration Office.

NO PERSON MAY ATTEND OR PARTICIPATE IN A CLASS WITHOUT BEING PROPERLY ENROLLED DUE TO INSURANCE STIPULATIONS.

Auditing Credit Classes

No class can be taken on an audit basis at College of the Sequoias.

Dropping a Class

It is the student's responsibility to drop a class in which he/she no longer wishes to be enrolled. The student can obtain the necessary form from the Admissions Office or the instructor. After completing the necessary information return the form as follows:

- If during the first two weeks of school, to Room 1.
- If after the first two weeks school, the Admissions Office, Room 107.

Drop Fee

No drop fees are being charged by the college at this time.

Withdrawal from College

Any student wishing to totally withdraw from college must obtain and complete a withdrawal form and file it with the Dean of Admissions and Records for day students and the Extended Day Office in the Administration Building for night students.

Each student who withdraws from college must complete the required clearance form in order to receive a complete withdrawal.

Please refer to the section above regarding Dropping a Class for grading policies, fees and effect on the students' record relative to withdrawals.

Extenuating Circumstances

Title 5, Section 55758 defines extenuating circumstances as those which apply to the following college drop-date procedures: verified cases of accidents, illness, death in the immediate family, jury duty, family displacement, job displacement, and/or other circumstances which are justifiable in the judgement of the administrators in Student Services and Instruction, but preferably the Vice President, Student Services.

Academics

In Progress (IP)

The "IP" symbol shall be used to denote that the class extends beyond the normal end of an academic term. It indicates that work is "in progress," but that assignment of a substantive grade must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and appear on the student's record for the term in which the course is completed. The "IP" shall not be used in calculating grade point averages.

Additional information may be obtained in the Cooperative Education Office which is located in Office 4 of the Administration building. Students must fill in an application in this office to register.

Credit-No Credit

Student evaluation on a credit--no credit basis is limited to those courses so designated in the Schedule of Classes.

CAN (California Articulation Number)

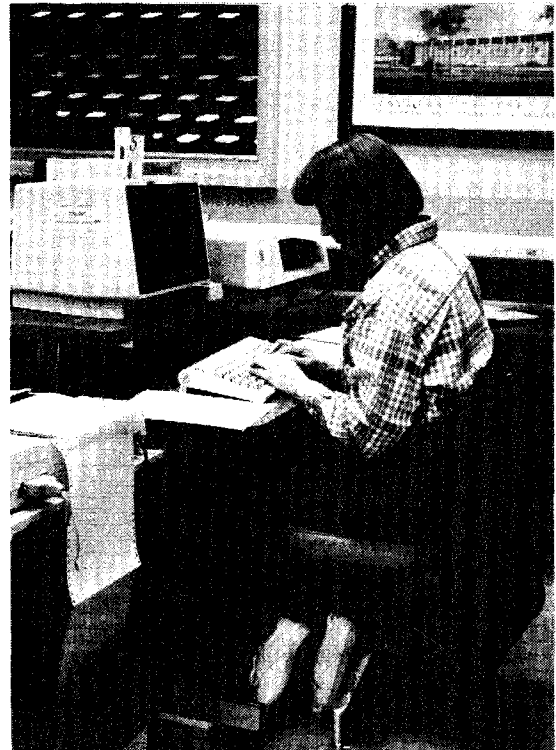
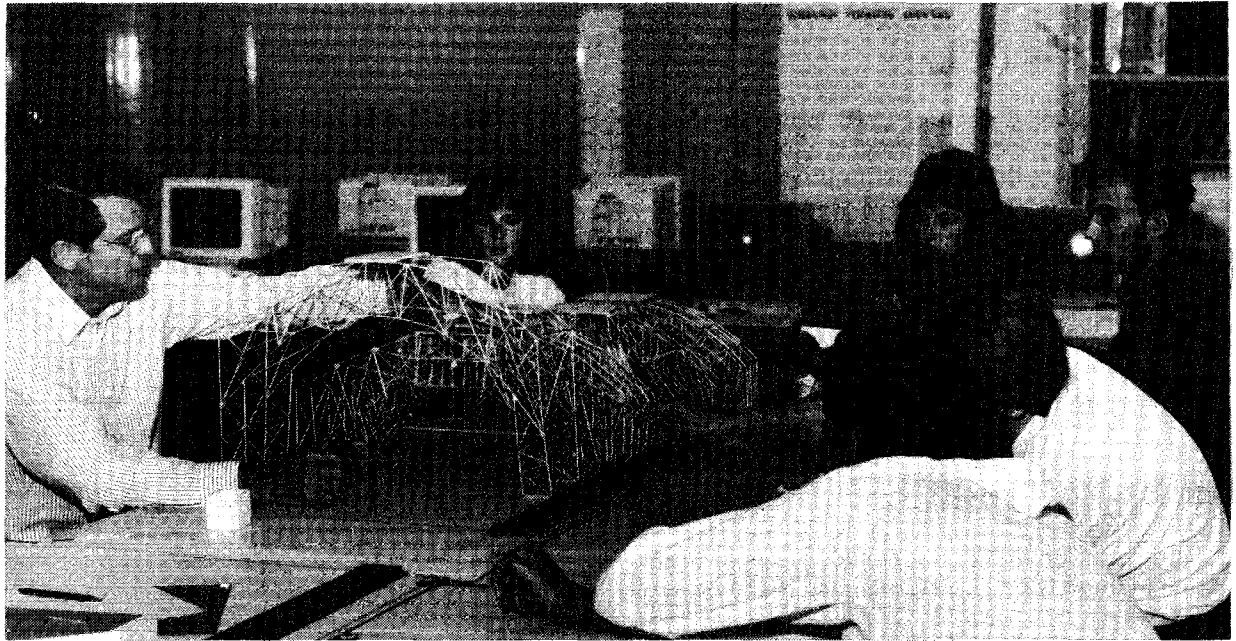
Applicable CAN numbers are printed at the end of courses listed in the "Course Descriptions" portion of this catalog. Check for the specific course/s in which you have interest in the "Course Descriptions" to see if they are designated as "CAN" referenced

Cooperative Education Program

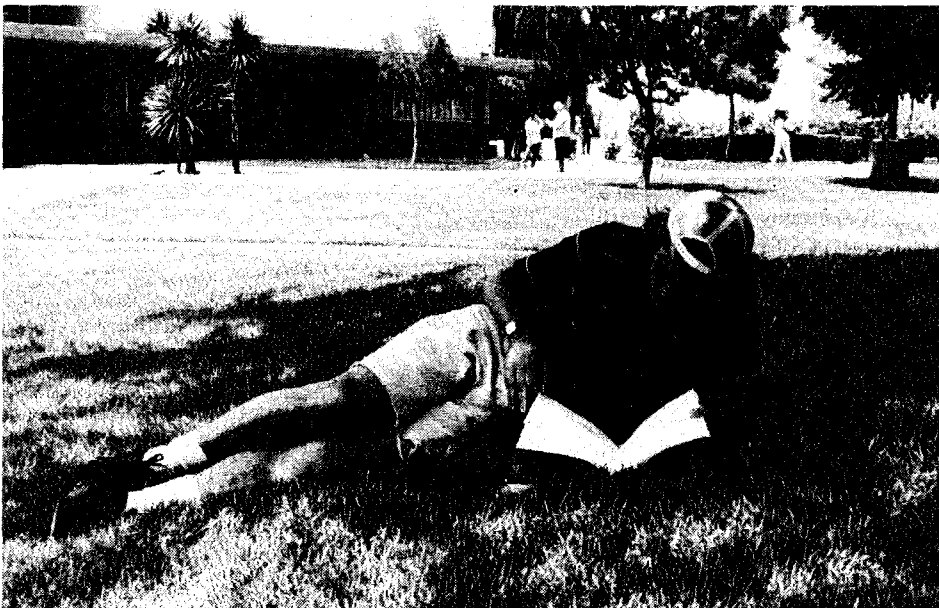
The Cooperative Education Program offers students an opportunity to use their work experience to earn college credit. Any student who is employed (paid or volunteer) and can meet the criteria to qualify may participate. The employer must be willing to assist the student in setting measurable learning objectives, which will be accomplished during the grading period and evaluated as to degree of accomplishment.

Each semester one to four units can be earned depending on the type of employment and the hours worked. Students must register in Leadership Training 1 if participating for the first time and Leadership Training 2 if participating for the second semester. Some division offerings may have different requirements in place of the Leadership class.

Academics



Student Rights and Responsibilities



Students Rights and Responsibilities

Code of Student Conduct

Students are subject to charges of misconduct for any of the following acts on the college campus, an extension of the campus, or at a college-sponsored activity:

1. Cheating or plagiarism in connection with the academic program.
2. Forgery, alteration or misuse or college documents or knowingly furnishing false information to the college.
3. Misrepresentation of oneself or an organization as an agent of the college.
4. Obstruction or disruption of the college's educational, administrative or other college process.
5. Physical abuse or the threat of abuse to any member of the college process.
6. Theft of or damage to college property or property owned by a member of the college community.
7. Unauthorized entry into, unauthorized use or misuse of college property.
8. Possession of or being under the influence of alcohol or unlawful narcotics.
9. Possession or use of explosives or weapons.
10. Indecent or obscene behavior.
11. Abusive behavior or hazing.
12. Gambling.
13. Any other cause identified as good cause by the Education Code or other laws governing a community college.

Students charged with misconduct may be subject to the following penalties:

1. **Reprimand:** Written warning that continued misconduct will result in more serious disciplinary action.
2. **Temporary Exclusion:** Removal from class or college activity for the duration of its scheduled period.
3. **Suspension:** Exclusion from classes, activities, and/or student privileges for a specified number of days, up to a maximum of five days.
4. **Expulsion:** Termination of student status at this college.

Certain members of the campus community are authorized to impose the above penalties as follows:

1. Any instructor may temporarily exclude the offending student from his class for the remainder of the class session and the next class day.
2. Any administrator may temporarily exclude the student from any college sponsored activity for the remainder of the activity time.
3. The Dean of Students may impose reprimand or temporary exclusion, or may recommend suspension or expulsion.
4. The President of the College may impose suspension or recommend expulsion.
5. The Board of Trustees may impose expulsion.

Attendance

Regular class attendance not only is essential to the maintenance of satisfactory grades, but also is the means by which the college obtains financial support. So, your absences hurt you as a student and mean a loss of revenue to the college.

Each instructor has his/her own attendance policy which he/she will announce early in the semester.

Students should be aware that some courses and activities include trips and that they are responsible, first, for informing their instructors when they will be absent because of these trips and, second, for completing the work missed. If the instructor is late for class, students are obligated to wait for 10 minutes from the time the class is officially to begin before leaving.

If illness or accident make extended absence (five days or more) necessary, the office of the Dean of Students should be notified.

If a student has prior knowledge that he/she will be missing class for a day or more, he/she should go to the Dean of Students' office and obtain a leave of absence form for his instructors to sign. However, an excused leave of absence in no way relieves the student of the responsibility of completing all work to the satisfaction of the instructors involved.

Student Rights and Responsibilities

Dropping a class

IT IS THE STUDENTS RESPONSIBILITY TO DROP A CLASS IN WHICH HE/SHE NO LONGER WISHES TO BE ENROLLED.

The student can obtain the necessary form from the Admissions Office or the instructor. After completing the necessary information return the form as follows:

- ✓ If during the first two weeks of school, to Room 1.
- ✓ If after the first two weeks school, the Admissions Office, Room 107.

Eating

Eating is allowed in the Student Union and areas outside of buildings, **BUT IS NOT PERMITTED IN CLASSROOMS OR CONFERENCE ROOMS.**

Liquor and Drugs

Students and guests of students, regardless of age, may not use or be in possession or under the influence of alcohol or unauthorized drugs on either the main campus, college farm or at COS sponsored events. Violation of this regulation may result in citation and/or suspension or expulsion from college. (25608 Business and Professional Code)

Smoking

The College of the Sequoias Board of Trustees has adopted a policy which does not allow the sale of cigarettes or any other tobacco products on the college campus and prohibits smoking in any of the college buildings. COS ordinance #204, per 76033e Educational Code.

Pets

Pets are not permitted on campus without approval.

Messages

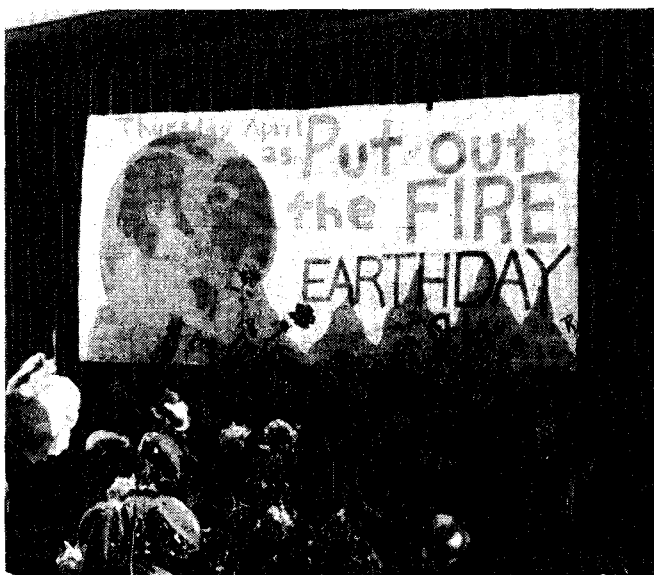
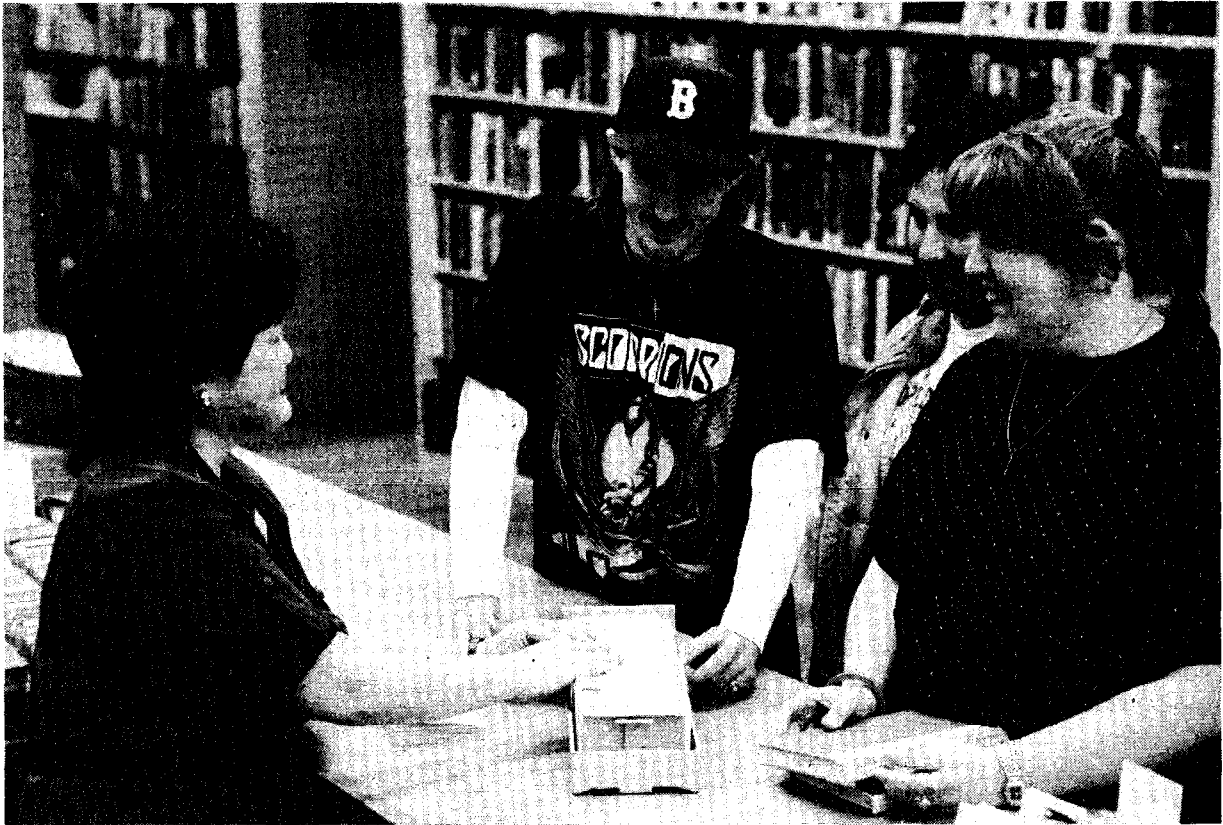
The college cannot relay any personal communication for such things as medical appointments, car breakdowns, lost keys, employer contacts, transportation problems, jury duty, etc.

Posting of Materials

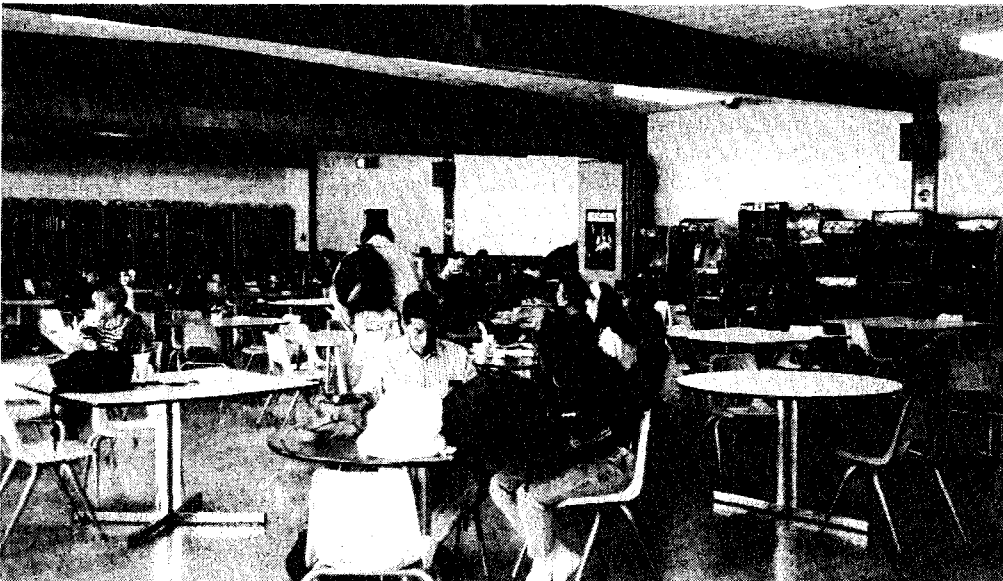
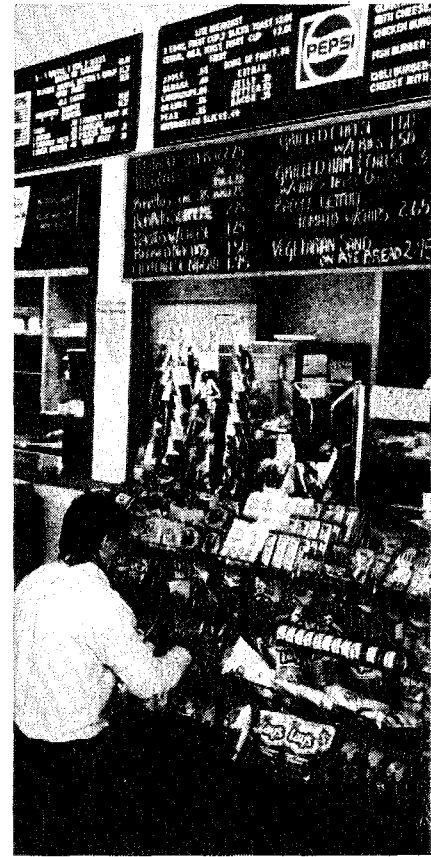
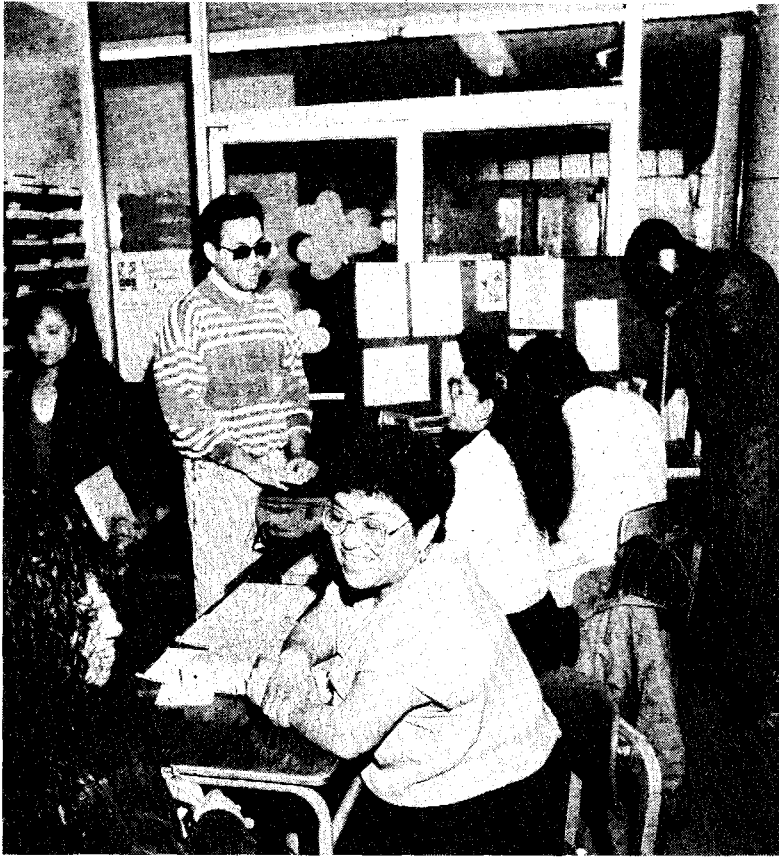
Clearance must be obtained from the Student Activities Office for posting or distribution of any materials on campus. If there is any question of appropriateness, materials may be referred to the Dean of Students for clearance.

Materials may be posted only on bulletin boards that say "Approved for Posting" across the top. There is also a special "For Sale" bulletin board by the Student Services Office. General Advertisements (for sale, roommates or transportation needed, etc.) may be placed on cards available in Student Activities.

Students Rights and Responsibilities



Student Services



Student Services



Counseling Services

College of the Sequoias provides complete counseling, educational guidance, and career development services. These include degree and transfer information, registration and re-entry assistance, as well as counseling for personal or social concerns as they relate to college success. Students are encouraged to take advantage of these services offered at no cost.

The goal-purpose of counseling is to help students succeed in their studies through self-evaluation, decision-making, careful planning, and commitment. Because accurate information is essential, our counselors are dedicated to insuring that students receive current and correct information.

Counselors are available during the day either by appointment or on a walk-in basis. Evening counseling may be available on a limited basis by appointment only. It is advised that students make appointments well in advance of registration because of the high demand for counseling. Walk-in students should be aware that they may have to wait to see an available counselor.

College of the Sequoias' students wishing to make an appointment may call or stop by the Counseling Office located in the Student Services Center. The telephone number is (209) 730-3741, or 730-3715.

Student Financial Aid Programs

College of the Sequoias recognizes that many students need financial assistance to pursue their educational goals and strives to provide this assistance to as many students as possible. The College offers a coordinated program of scholarships and grants, loans and employment opportunities to assist students in meeting their college expenses.

Financial aid awards are made on the basis of demonstrated financial need. For the purpose of establishing financial need, students should submit the Student Aid Application for California (SAAC). Application materials and detailed instruction booklets will be available at California high school counseling offices and/or College of the Sequoias Financial Aid Office after December 1 of each year. For further information, please contact College of the Sequoias Special Student Services Office in Room 103.

Scholarship Program

College of the Sequoias offers numerous Scholarship Awards each year to eligible student applicants. Awards sponsored by the College, COS Foundation and many community donors, range from \$50 to \$3,000 and are offered to incoming freshman, continuing sophomores, and graduating/transferring students.

Eligibility information, applications, and a Scholarship Directory may be obtained from the Scholarship Office located in Room 105. The deadline for submitting scholarship applications is March 1.

Student Services

Campus Parking

Parking facilities on campus are extremely limited. Students are encouraged to ride COS buses (Student Body Card required) or public transportation rather than drive their own vehicles because of the added safety, financial savings, and parking congestion.

Those who do bring vehicles on the main campus or college farm are required to purchase a permit and to obey PARKING regulations. Citations will be issued by the Department of Public Safety to anyone who is in violation of the college parking policy or California Vehicle Code. A brochure containing the parking policies is available at registration or at the Public Safety Office.

Students wishing to park on campus must pay a fee for a semester parking sticker. The cost is \$20 for full-time students and \$10 for part-time students. Students not wishing to purchase semester parking stickers may purchase one-day parking passes for 50 cents from the dispensers located in Parking Lots 1, 3, 4 and at the College Farm.

Parking refunds will be available to students withdrawing from school prior to the end of the second week of instruction. Students withdrawing from school after the second week will not receive refunds.

- ◆ Apply for parking refunds at the Public Safety Office in Lot 1.
- ◆ A \$2 service fee will be deducted from all refunds.
- ◆ Parking permits or remnants must be returned to the Public Safety Office before refunds will be processed.
- ◆ A refund check will be mailed in 4-6 weeks.
- ◆ Full-time students dropping units to part-time status may, during the third week only, file for a partial refund.
- ◆ Permits must be picked up as soon as purchased as a limited number will be issued.

Purchase of a parking permit does not guarantee a space will be available. The College District is not responsible for losses due to theft or damage. All parking lot users are urged to lock their vehicles and not leave valuables within view.

Library

The COS Library, planned to meet the academic and recreational reading interests of the student body and faculty, is organized into four major areas. The main reading room houses a 75,000 volume general collection on open shelves both downstairs and on the mezzanine. This general collection is supplemented by a changing recreational reading collection of recent fiction and non-fiction. A special feature of this area is The Microbook Library of American Civilization, which contains microfiche reproductions of the several thousand classic volumes on the U.S. through the end of the 19th century. Current issues of over 400 popular magazines and scholarly journals plus a number of local, state and national newspapers, are at hand for browsing or research. The main reading area also offers a typing room and a copy machine. A quiet study room is in this area also.

Recently added to the main reading room has been an on-line public catalog for improved access to the book collection. All new books can be accessed only through these computers, but older titles can also still be found in the card catalog, which will remain on the floor a couple of years until all books can be converted into the computer database.

The Reference Room, on the second floor, houses an extensive reference collection of 12,000 volumes, including an outstanding section of legal materials. The reserved book collection is located in the Reference Room behind the circulation desk. A copy machine is nearby.

The periodicals wing houses back issues of the magazine collection and of newspapers, including a complete file of the New York Times since 1971, as well as the various indexes which make journal articles accessible to the reader. Six conference rooms and a microfilm reader-copier room are open off the Periodicals Room.

The fourth major area of the library is the Audio-Visual Department. A wide range of materials for use by students in the audiovisual laboratory include audio tapes, 35 mm slides, filmstrips, pamphlets, phonograph records and video tapes.

Coordinating and overseeing these areas, a staff of three and a half professional librarians, eight paraprofessionals, and a number of college student assistants work toward offering the best in library service to COS students and faculty.

Student Services

Veteran's Educational Benefits

College of the Sequoias is approved for training of veterans under the provisions of State and Federal law. Students planning to attend the college and request certification for Veteran Benefits should contact the Veteran's Office to receive information regarding required forms and procedures.

College policy regarding Academic Probation applies to all students including veterans. When a veteran student receiving educational benefits is placed on Academic Probation for failure to maintain a 2.0 or "C" grade point average, he or she has one semester to improve their grades. If, after one semester of probation the GPA has not improved, then the college is required to notify the Veterans Administration that the veteran student is not making satisfactory progress. Should educational benefits be discontinued, reinstatement may occur only by the Veterans Administration. An informational brochure is available from the Special Student Services Office, Room 103.

Veteran Dependent's Educational Assistance Program

Dependent's Educational Assistance, formerly known as War Orphans' Educational Assistance, is for the purpose of providing opportunities for education to children, spouses, survivors of veterans whose deaths or permanent total disabilities were service-connected and for spouses and children of service persons missing in action or prisoners of war. Eligibility is established on a case-by-case basis. Contact the Veterans Affairs Specialist for information and assistance in establishing your claims.

Handicapped Students' Services

Services are provided to enhance accessibility to and success in all classes and activities offered at College of the Sequoias.

Services are individualized, with personal, physical, academic, and vocational needs considered. Services may include, but are not limited to academic, personal and vocational counseling; specially designated parking; mobility assistance; interpreting for the deaf; notetakers; resources for the visually impaired; specialized equipment; instruction for learning impaired students; adapted physical education and transportation. Further information may be obtained by contacting the Enabler

Office, 915 S. Mooney Boulevard, Visalia, CA, 93277, or telephone (209) 730-3805. (TDD 730-3913).

Services for the Deaf and Hearing Impaired

COS employs a lead interpreter to coordinate academic support services for the hearing impaired population.

Services depend on individual need and may include any of the following: educational assessment; individual educational planning; in-class interpreters (oral, manual and total communication interpreters); specialized tutoring; vocational, academic and personal counseling; notetakers; specialized telephone equipment (TDD); and a personal FM system.

For additional information, contact the Enabler Office, 915 S. Mooney Boulevard, Visalia, CA, 93277, or telephone (209) 730-3805, (TDD 730-3913).

Student Health Center

The Health Center is located in Room 3 of the administration building. Services offered have evolved from student need and will expand gradually. Current services include blood pressure screening, T.B. skin testing, vision and hearing screening, immunizations and nursing assessments. The health center staff will assist with counseling referrals for drug and alcohol abuse, mental health, eating disorders, pregnancy, family planning and illness. Alcoholics Anonymous and Co-Dependence Support groups meet in the Health Center on a weekly basis. A rest area and some over-the-counter medications are available for students.

Health education information and materials are available in the health center on topics such as physical fitness, wellness, sexually transmitted diseases, AIDS, diet and nutrition. Arrangements for classroom presentations on health related topics may be scheduled through the health center.

A \$7.50 health fee is charged to all COS students enrolled in classes for units or the Community Service Option.

If you have any questions, contact the Health Services Coordinator at 730-3880 or 730-3881.

Student Services

The Associated Students

The Associated Students of College of the Sequoias is the official student body organization. Upon payment of the student activity fee at registration, students become official members of the Associated Student Body and represented by the Student Executive Board. Upon payment of the activity fee, students are issued a student body card which entitles them to participate in activities of the organization as long as they remain in good standing. Most activities which concern the student-body as a whole are sponsored by the Associated Students.

The business of the Associated Students is carried out by the Student Executive Board. Members comprising the Student Executive Board are: Associated Student-Body President, Vice-President, Parliamentarian, Commissioners of Activities, Clubs, Records, Finance Publicity, three Freshmen Representatives, three Sophomore Representatives, and a California Student Association of Community Colleges Representative (CalSACC).

All clubs on campus are officially chartered by the Associated Student Executive Board.

Career Center

A complete career counseling program is offered to students, as well as other interested parties. The main emphasis of this program is to assist individuals in finding careers, occupations, and college majors that will contribute to a meaningful life experience. The center offers career testing, computerized career search programs, and bibliographical resources.

Re-entry Services

Mature students entering or returning to college after a considerable absence from school, will receive special support services at COS. For these students, we have set up a Re-entry Room to offer information about services on campus and in the community.

The room is staffed by volunteer faculty and re-entry students. Homemakers, housewives, divorcees, military retirees, persons making mid-life career changes and other returning students are encouraged to use this service.

The Re-Entry Room is located in Room 307, Ext. 233. Smoking is not allowed in the Re-Entry Room.

Tutorial Center

The Tutorial Center provides student tutors free of charge for students who need help with any class that is taught at COS. The center strives to teach students to be independent learners by training them in study skills such as how to take notes, improve memory and take tests. The center also has audio tapes and computer programs to teach study skills and class subjects.

The Tutorial Center is located in the northeast corner of the Instructional Media Center (IMC) and is open from 8 a.m. to 4 p.m.

Department of Public Safety

The COS Department of Public Safety functions on a 24-hour basis for the protection of school facilities, students and staff. It also sells parking permits for students wishing to park on campus who don't buy permits during registration.

Other services provided by the Department of Public Safety include:

1. Auto lockout assistance
2. Assistance with battery jumps (cables)
3. Traffic accident reports for insurance purposes
4. Escort service from building to parking areas
5. Patrol of buildings and parking areas to aid in crime prevention
6. Campus lost and found
7. Investigations of theft and other crimes
8. Security functions at COS-sponsored special events
9. Emergency medical aid services

Students should remember to always lock their car. Do your part to prevent crime on campus by reporting all suspicious activity to the Department of Public Safety 24 hours a day.

The Department of Public Safety is located in Parking Lot 1 off Meadow Lane next to the bus transportation building. Call 730-3726.

Student Services

Clubs and Organizations

Students are encouraged to become active in one or more of the various clubs at COS to enrich and round-out their college experience. A list of clubs, their advisors and meeting times is listed on various bulletin boards on campus. Further information is available in the Student Activities Office on the north side of the gym.

Any group which wants to be organized at COS must be chartered through the Associated Student Body. Forms are obtained in the Student Activities Office.

"An Open activity hour" is scheduled every Tuesday and Thursday at 12 noon for activities. It is set up so groups can plan meetings, social activities, and assemblies when everyone is free to attend. Only a few classes are schedule for these hours.

Student Services Center

The Student Services Center provides a wide variety of services to all students and acts as a general information center. The counseling staff is located in this building.

Child Care

COS Children's Learning Center provides child care for children ages two through five during the school year. Children are enrolled on a first come, first serve basis with students' children given first priority.

Each Class has a licensed teacher who is aided by college students enrolled in COS' Early Childhood Education classes. Fees are depending on the amount of classes the children's parent is taking.

The Children's Learning Center is located at 3101 S. Linwood Avenue, near the COS farm. Call the Learning Center for fee schedule and referral to other child care services.

Bus Transportation

College of the Sequoias offers free bus transportation to outlying areas in the district. Student drivers bring the buses in each morning and reverse the route home each night. The two routes served by buses are 1) Corcoran-Hanford and 2) Exeter-Farmersville-Tulare.

To ride a bus, students must have a student body card or bus I.D. card.

Bookstore

The bookstore carries all textbooks required in COS classes, as well as other books, stationery and art supplies, gifts and other items.

Textbooks are grouped by division, course name and instructor. Students may purchase their books as soon as they register, but may want to wait until after their first class session if they are not sure they will keep the class or if they do not know whether the instructor requires all the books on his list.

Full refunds will be given during the first three weeks of the semester if the books are unmarked. Be sure to keep your receipt. **NO REFUNDS WILL BE GIVEN WITHOUT A DROP SLIP OR CASH REGISTER RECEIPT.**

The Bookstore will buy back used books during the last three days of finals week if the books are being used the following semester and are needed.

Bookstore hours are 7:45 a.m. to 4 p.m., Monday through Friday, and 6 p.m. to 7 p.m., Monday through Thursday. (For the first three weeks of each semester, the Bookstore is open 6 p.m. to 8 p.m.)

Student Activities

COS recognizes its responsibility for students' emotional and social growth. The college, therefore, offers a variety of co-curricular programs, including student government, clubs, assembly programs, community service projects and social activities. If there is interest in joining a club or organization or starting a club or organization, see the Associate Student Body Advisor.

Student Services

Audio Visual

Audio visual services for students are available in the Audio Visual Department located on the ground floor of the Instructional Media Center (IMC) behind the library.

Students may check out and use audio visual material in the audio visual laboratory and preview rooms. A wide range of materials are available, including audio tapes, 35mm slides, filmstrips, pamphlets, phonograph records and video tapes. Computer terminals are also located in the A.V. lab for students use.

The department is open Monday through Friday, 7:45 a.m. to 4:15 p.m.

Extended Opportunity Programs and Services (EOPS)

Extended Opportunity Programs and Services is a state funded program that provides grants, tutorial services, supportive social services, student advisors, and recruitment to those students who are identified as being financially or educationally disadvantaged. A special summer college program is offered to entering freshmen. Students who feel uncomfortable starting college or are having problems trying to make it through college should visit the EOP&S Office for information and assistance. The office is located in Room 103.

Social Services/Housing

The Social Services and Housing Program is a component of the Extended Opportunity Programs and Services (EOPS). Student advising and free typing services are available to EOPS eligible students through this office.

The Social Services Program provides information and referrals on: Social Security, Legal Aid, Food Stamps, Medical Card, Voter Registration, Family Planning, Tulare County Health Department Services, Emergency food and clothing, and additional sustenance programs. Current lists of doctors and dentists accepting new patients, child care centers in Tulare County, licensed child care homes in the Visalia area, and private attorneys are also available for student use. A Textbook Loan Program is available to needy students who meet program criteria.

The Housing Program provides students with assistance in locating apartments, rooms, houses, and roommates. A daily list of available housing is posted for student use.

The Social Services and Housing Program is located in Room 109. There are no dormitories on campus.

Student Insurance Coverage

All students are covered by an accident insurance policy that provides coverage for accidents occurring during school-sponsored, supervised curricular and co-curricular activities. The policy coordinates with students' personal insurance so duplicate benefits are not paid. "STUDENTS INVOLVED IN AN ACCIDENT MUST FILL OUT AN ACCIDENT FORM AND CLAIM IN THE STUDENT ACTIVITIES OFFICE."

Students may also buy voluntary health insurance through COS during registration. Coverage may be extended to include spouse and children. Although the plan is a voluntary one, the college recommends that every student be covered by this policy or an equivalent one. Extreme financial hardship can result when a major illness or accident occurs and there is no insurance protection. More information is available in the Activities Office.

Food Services--Student Union

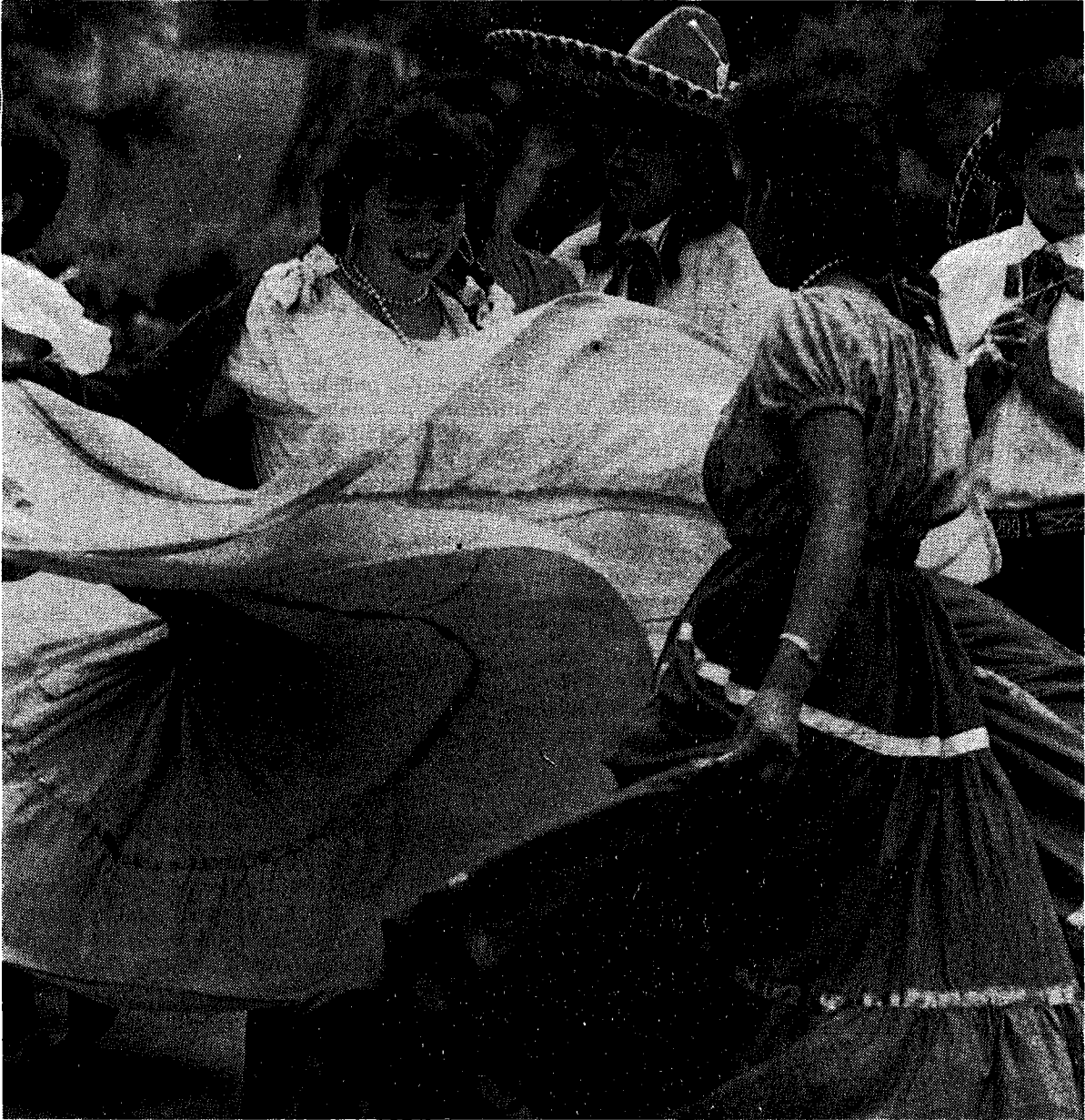
The Student Union welcomes all new and returning students and offers a variety of food services. The Student Union is open morning, noon and evening for the convenience of students.

Service includes breakfast from 7 to 10 a.m. and lunch from 10 a.m. to 9 p.m. The grill closes at 2 p.m. but other items may be purchased until 9 p.m.

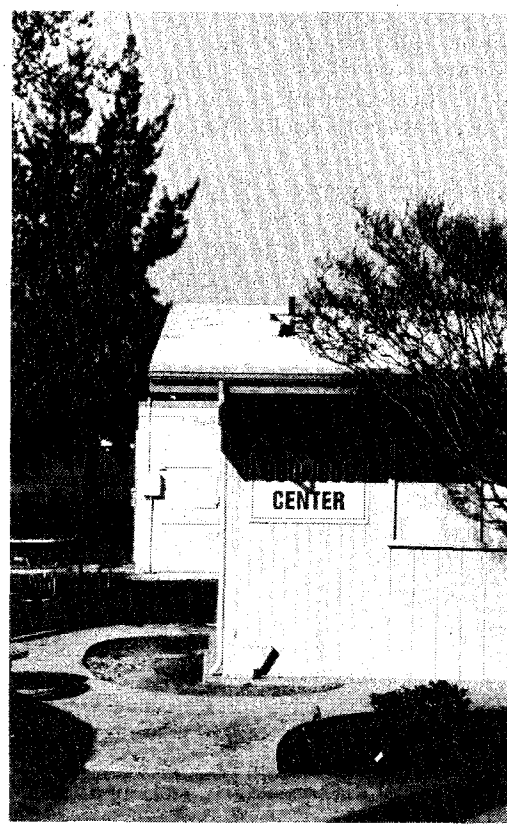
Also a snack cart is available by the "300" building from 7:15 a.m. to 9 p.m., Monday through Thursday, and 8 a.m. to 3 p.m. on Fridays.

Features include a salad bar, assorted sandwiches, hot and cold drinks, desserts and homemade bakery items. Soup is offered all the time. For variety there are also daily specials. The Student Union features video games and is a convenient gathering spot on campus.

Student Services



Graduation and Transfer



Graduation and Transfer

General Education Philosophy for the Associate Degree

General education breadth requirements emphasize democratic concepts based on the value and dignity of each individual, thus helping students prepare to undertake the responsibilities of citizenship and to participate knowledgeably in the varied experiences of life.

We believe in the vital importance of major requirements to educate students in the area of specialization and in breadth requirements to help them develop the capacity for independent judgment.

We also believe that the general education breadth requirements are of vital importance in the personal, social, and vocational/professional life of each student.

① In **personal development**, breadth requirements help students develop self-awareness, thus increasing understanding of personal potentialities and limitations.

② In **social relationships and in the life of society**, breadth requirements help the students communicate more effectively, promote better understanding of the communications of others and help develop awareness of societal relationships.

③ In **professional development** the breadth requirements help the student become a more effective person in the workplace through more effective communication with fellow workers and through a better understanding of the relationship between the job at hand and the larger world into which it fits.

General education breath requirements will help the student by:

- Exposing them to the major disciplines of accumulated knowledge,
- stimulating curiosity about our surroundings,
- evaluating alternatives so that personal values can be formed,
- developing effective communication skills,
- gaining a sense of self worth,
- learning to make rational decisions based on the utilization of problem-solving techniques,
- questioning simple solutions of complex problems; if appropriate, seeking alternatives.

Requirements for Graduation

The Associate of Arts or Associate of Science degree will be awarded to all students upon the satisfactory completion of the following requirements:

- A minimum of 60 units of college work, at least 15 of which must be taken in residence at the College of the Sequoias, with a "C" (2.0) average. To achieve a grade point average of "C," a student must earn twice as many grade points as units attempted.
- Satisfactory completion of two units of Physical Education general activities courses. Students 21 years of age and over, or students who turn 21 during matriculation, are exempt from this requirement.
- Two units of Personal and Community Hygiene. This requirement is satisfied by completion of Hygiene 1* or Hygiene 7*.
- English 251, Business 184, and English 1 with a grade of "C" or higher. Courses taken to satisfy this requirement may be counted in satisfaction of the general education requirement.
- Eighteen units of general education including at least three (3) units from each of the following areas:

Area A - Natural Sciences

Agriculture 3
Ornamental Horticulture 101
Nutrition 18
Or any science class numbered 1-299

Area B - Social and Behavioral Science

History 17 or 18
Political Science 5 or
Social Science 276

**Registered Nursing students are exempt from this requirement.*

Graduation and Transfer

Area C - Humanities

**English 253 or
One course of at least three (3)
units in**

- art
- theatre arts
- foreign language
- literature
- music
- philosophy or

Sign Language numbered 1-299

Area D1 - English Composition

**Business 184
English 251 or
English 1, with a grade of "C" or
higher**

Area D2 - Critical Thinking

**Journalism 7/Political Science 7,
English 2,
Speech 1,
Speech 4,
Philosophy 25,
Agriculture 201,
Business 119,
Business 20,
Computer 5,
Computer 6,
Computer 7, or
Any Math course numbered 1-299**

Area E - Understanding and Self Development

**Business 182,
Business 188,
Interior Design 121,
Consumer/Family Studies 186,
Consumer/Family Studies 80,
Child Development 39
Psychology 39,
Psychology 250, or
Any course numbered 1-299 listed
in Areas A,B, C, D1, or D2.**

- The **Associate of Arts degree** requires a major consisting of at least **20 units of satisfactory work**, only four of which can be work experience, in specific subject areas or approved related fields.

- The **Associate of Science degree** requires a major consisting of **at least 30 units of satisfactory work**, only four of which can be work experience, in specific subject areas or approved related fields. Registered nursing students must earn a grade of at least "C" in all nursing and concomitant nursing courses.

Competency Certification

State law requires that the candidate for the Associate of Arts or Associate of Science degree be certified as competent in the areas of writing, reading, and computation. College of the Sequoias students may establish competency by one of the following:

Writing

- Eligibility for English 1 based on the COS Placement Test.
- English 1, 251, or Business 184 with a grade of "C" or higher
- Pass approved alternate competency test after one semester of English 1 or 251 (without receiving a "C" or better), or
- Transfer to COS with a grade of "C" or higher in a course equivalent to English 1, English 251, or Business 184

Reading

- Score of 25 or higher on COS Reading Placement Test
- Score at equivalent level or higher on test given by Reading Department
- Pass English 1 with a "C" or higher
- Pass English 265a or 265b with a grade of "C" or higher

Computation

- High school algebra 1 and geometry (one each) with a grade of "C" or higher
- Math 210 and 215; and Math 220 at COS with a grade of "C" or higher
- Math 230 or higher math with a grade of "C" or better
- Pass Math competency exam with a successful score (at least 70 percent)

Graduation and Transfer

A.A./A.S. Degree Guidelines

Catalog Rights

As long as a student maintains "continuous attendance," he or she may elect to fulfill graduation requirements of the catalog in effect at the time attendance begins at COS or of the catalog in effect during the semester of graduation.

"Continuous attendance" is defined as being officially enrolled at least one semester during a calendar year on a continuing basis without a break of more than one semester--excluding the summer semester. A student is considered to have been in attendance even if he or she registered and totally withdrew from school during that semester as long as the official transcript so indicates.

The following exceptions may apply:

1. If a student has a break in attendance of more than one semester but has completed 15 or more units at COS, he/she may fulfill the graduation requirements in effect during semester of first attendance.
2. If a student has completed 15 or more units at another institution and enrolls immediately at COS without a break in attendance, he/she may graduate under requirement in effect during semester of first attendance at the previous institution.

Graduation Application

An Application to Graduate must be filed by each student who wishes to receive an Associate Degree. Applications are available in the Admissions and Counseling Offices.

The completed application must be returned to the Admissions Office prior to the deadlines published in the college calendar which can be found in the Schedule of Classes, College Catalog, and Student Bulletin.

Multiple Degrees

A student may obtain:

1. Any and all degrees for which requirements have been met.
2. An A.A. degree in a given major and then, at a later date (one or more semesters), earn an A.S. degree within that same major.
3. An A.A. degree and an A.S. degree during the same semester in different majors provided all requirements for each major and the degree have been met.
 - a. Only one diploma will be provided by COS at no cost to the student. A student may purchase additional (2nd or more if earned) diplomas at a cost to be determined by COS. Notations of all degrees and majors will automatically appear on transcripts. A receipt from the cashier for an additional diploma must accompany the Application for Graduation.

Starting with the 1991-92 catalog year, courses numbered 300 and above will not be associate degree applicable regardless of your establishing catalog rights prior to the 1991-92 catalog year.

Graduation and Transfer

Catalog Rights

All California State University bound transfer students must fulfill degree requirements from one catalog, not the most favorable requirements from two or more catalogs. As long as a student maintains continuous attendance, *he or she may elect, for purposes of fulfilling graduation requirements, one of the following:

- 1) The catalog in effect at the time a student begins attending a California community college such as College of the Sequoias.
- 2) The catalog in effect at the time a student begins attending the transfer campus.
- 3) The catalog in effect at the time a student graduates from the transfer campus.

All students planning to transfer to the University of California or a private university must fulfill degree requirements from one catalog, not the most favorable requirements from two or more catalogs. These transfer students typically use the catalog in effect at the time they begin continuous attendance.*

*Continuous attendance is defined as being officially enrolled in at least one semester or two quarters during a calendar year regardless of the number of units completed. Also, a student is considered to have been in attendance even if he or she registered and totally withdrew from school during that semester/quarter as long as the official transcript so indicates.

Transfer planning

Students planning to transfer have a wide variety of options. The California State University with 20 campuses; the University of California with 9 campuses; and over 60 private, independent colleges in California provide a wide range of academic programs, physical and academic environments, and social climates. College of the Sequoias offers the equivalent of the first two years of these four year college and university programs. Students wishing to pursue any of these educational alternatives should meet with a counselor as early as possible to discuss their educational study plan. Careful planning will help you avoid mistakes which could prolong your academic pursuits.

Successful transfer planning requires the following steps:

- Selecting a career goal
- Selecting an appropriate major to meet your goal
- Selecting an appropriate college or university
- Planning and completing an appropriate transfer program
- Completing the application process

All colleges and universities have specific admissions requirements and may have special course and unit requirements, as well as minimum grade averages that must be met prior to transfer. Once students identify their major and the college or university to which they wish to transfer they should consult the respective catalog of the college or university for specific requirements. Catalogs for the California State University campuses, the University of California campuses, and selected private, independent colleges are available for use in the Transfer Center and the Career Center. Students are encouraged to purchase their own catalog by writing directly to the college or university.

Four year colleges and universities require students to complete specific general education requirements as well as major requirements for the baccalaureate degree. Students should work toward completing both general education and lower division major requirements prior to transfer. The Counseling Office and the Transfer Center maintain articulation agreements with course equivalencies and curriculum major sheets for selected majors and colleges. COS counselors will assist with interpreting the curriculum major sheets, articulation agreements and catalog statements and requirements.

In accordance with Executive Order No. 167 from the Chancellor's Office of the California State Universities and Colleges, College of the Sequoias has developed a list of courses which are baccalaureate level. Courses that are numbered 1-199 are accepted by the California State Universities and most private, independent colleges. Courses numbered 1-99 are accepted by the University of California; however, students should consult pages 52-57 for specific limitations. COS courses transfer to four year colleges and universities in terms of specific or elective credit depending upon the school and major selected.

Graduation and Transfer

All students must assume the responsibility for complying with regulations and instructions set forth in catalogs for selecting the courses which will permit them to meet their educational objectives, and for satisfying prerequisites for any programs or courses which they plan to take. College requirements and articulation agreements are continually changing; the following pages represent an attempt to provide some current and pertinent information for transfer students.

THE CALIFORNIA STATE UNIVERSITY

Initial Application filing period

Summer Quarter: February 1-28
Fall: November 1-30
Wintr Quarter: June 1-30
Spring: August 1-31

All applicants are encouraged to file within the initial application filing period. Applications to impacted majors must be filed within the first month of the filing period. Each campus accepts applications until capacities are reached. If applying after the initial filing period, consult the COS Transfer Center for current information. Applications for admissions are available in the Counseling Office and the Transfer Center.

Eligibility for Transfer

You will meet minimum qualifications for admissions as a transfer student if you have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended and meet any of the following standards:

1. You will meet the freshman* admission requirements in effect for the term to which you are applying.
2. You were eligible as a freshman* at the time of high school graduation and have been in continuous attendance in an accredited college since high school** graduation.
3. You were eligible as a freshman at the time of high school graduation except for the subject requirements, have made up the missing subject, and have been in continuous attendance in an accredited college since high school graduation.
4. You have completed at least 56 transferable semester (84 quarter) units and have made up any missing subject requirements (see "Making Up Missing College Preparatory Subjects" section). Nonresidents must have a 2.4 grade point average or better.

* **Refer to the CSU application for the freshman eligibility index and subject requirements.**

** **Continuous attendance is defined by CSU as attendance in at least one course for at least one semester or two quarters in any calendar year.**

Graduation and Transfer

Making Up Missing College Preparatory Subject Requirements

If you did not complete the subject requirements in high school, you may make up missing subjects by any of the following ways. One college course of at least three semester or four quarter units will be considered equivalent to one year of high school study.

1. Complete appropriate courses with a "C" or better in adult school or high school summer sessions.
2. Complete appropriate college courses with a "C" or better.
3. Earn acceptable scores on specified examinations.
4. If you have 56 or more semester (84 quarter) units you may complete one of the following alternatives:

1987 or earlier high school graduates: complete the CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units), with a "C" or better in each course;

1988 and later high school graduates: complete a minimum of 30 semester (45 quarter) units, with a "C" or better in each course, to be chosen from courses in English, arts and humanities, social science, science, and mathematics of at least equivalent level to courses that meet general education or transfer curriculum requirements. You must complete all CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units) as part of the 30 unit requirement.

For this section, transferable courses are those numbered 1-199. A maximum of 70 units of these designated transferable courses may be transferred to the CSU system.

General Education Requirements for California State University

All campuses of the CSU system require a minimum of 48 units of general education. Thirty-nine of these units may be taken at community colleges. Beginning with Fall 1991, students may fulfill the lower division general education requirements prior to transfer by completing one of the following three options:

1. The **California State University General Education Certification** which will fulfill the lower division breadth/general education requirements for all CSU campuses.
2. The **Intersegmental General Education Transfer Curriculum** which will fulfill the lower division breadth/general education requirements for all CSU and UC campuses.
3. The specific lower division breadth/general education requirements of the campus to which they intend to transfer.

The California State University General Education Certification and Intersegmental General Education Transfer Curriculum patterns are listed below. Students should consult a COS Counselor to determine which option is best suited for their educational objective.

Graduation and Transfer

California State University

General Education Certification

For Transfer to CSU

Students may complete the following pattern of courses within the stated rules to be eligible to receive General Education Certification prior to transfer. This certification requires all CSU campuses to consider all lower division breadth/general education requirements fulfilled.

Area A: Oral and written communication and critical thinking. Choose one course from each section (9 units minimum).

A1	Oral Communication.....	Speech 1, 4
A2	Written Communication.....	English 1, 1H
A3	Critical Thinking.....	English 2, Philosophy 25

All courses in Area A must be completed with a grade of "C" or better.

Area B: Natural Sciences and Mathematics (9 units minimum). Choose one course from each group. One laboratory science is required. (Labs Underlined)

GROUP 1 PHYSICAL SCIENCE

Astronomy 10, Geography 1
Chemistry 1, 2, 20, 21
Geology 1, 12, Meteorology 1
Physical Science 12, 12H
Physics 5, 6, 7, 20, 21

GROUP 2 LIFE SCIENCES

Biology 1, 2, 20, 20H, 21, 22,
Biology 25, 31, 40

GROUP 3 MATHEMATICS

Math 21, 45, 61, 62, 70, 75, 76, 77,
Math 80, 81, 154, Business 20, 119

Course in GROUP 3 must be completed with a grade of "C" or better.

Graduation and Transfer

California State University

General Education Certification

For Transfer to CSU

Area C: Arts, Literature, Philosophy and Foreign Language (9 units minimum). Courses must be chosen from at least three of the eight groups. One course from GROUP 6 is required.

GROUP 1: Art 1, 2, 3, #4, #5, 5H, #6, #7, 8, 9

GROUP 2: Cinema Arts 31, 32

GROUP 3: Theatre Arts 1, 2, 3

GROUP 4: Music 1, 10, 34a-d, 36a-d, 52a-d, 74a-d, 172a-d

GROUP 5: Humanities 1H

GROUP 6: English 4, 10, 15, 16, 18, 19, 30, 31, 32, 44, 45, 46, Spanish 12

GROUP 7: Philosophy 10, 11

GROUP 8: Spanish 1, 2, 3, 4, 22, 23, French 1, 2, 3, 4, SLS 101, 102

Art 4 & 5 are the same as Anthropology 4 & 5 and Art 6 & 7 are the same as Child & Family Studies 6 & 7.

Area D: Historical, Political, and Economic Institutions (9 units minimum). The nine units must include 3 units each from groups 1, 2, and 3.

GROUP 1 American Institutions: Political Science 5, 5H

GROUP 2 American institutions: History 17, 18, 18H

GROUP 3: Ag Management 1, History 4, 5, 19, 20, 23, 31, Economics 1, 2, Anthropology 2, Geography 2, 3

AREA E: Understanding & Self-Development (3 units minimum).

Psychology 1, 10, 133, Sociology 1, #126, Nutr/Food 18, Child & Family Studies 80, #126, English 114a, 114b

Sociology 126 is the same as Child & Family Studies 126.

Graduation and Transfer

American Institutions Requirement

All CSU graduates must complete coursework in U.S. History, Constitution, and American Ideals as required by Section 40404 of Title 5 of the Administrative Code. This requirement may be fulfilled at COS for 19 of the 20 CSU campuses by completing Political Science 5 or 5H and either History 17, 18 or 18H as part of the General Education Certification. California State University, Chico is the only campus that will not allow these courses to meet both the general education requirement and the American Institutions requirement. See a COS counselor for details.

Graduation and Transfer

Intersegmental General Education Transfer Curriculum

For Transfer to CSU and UC

Students may complete the following pattern of courses within the stated rules to be eligible to receive the Intersegmental General Education Transfer Curriculum (IGETC) Certification. This certification requires all CSU and UC campuses to consider all lower division breadth/general education requirements fulfilled. All courses must be completed with a grade of "C" or better.

NOTE: *Final approval of courses included in the IGETC pattern was pending at time of publication. Check with Counseling Office for current status.*

AREA 1. ENGLISH COMMUNICATION

CSU - 3 courses required, one from each group below
UC - 2 courses required, one each from group A and B

Group A: English Composition
1 course, 3 semester units

English 1, 1H

Group B: Critical Thinking - English Composition
1 course, 3 semester units

English 2, Philosophy 25**

Group C: Oral Communication - (CSU REQUIREMENT ONLY)
1 course, 3 semester units

Speech 1, 4

AREA 2. MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

1 course, minimum 3 semester units

Math 21*, 61*, 62*, 70*, 75*, 76*, 77, 80, 81

Graduation and Transfer

Intersegmental General Education Transfer Curriculum

For Transfer to CSU and UC

AREA 3. ARTS AND HUMANITIES

Minimum 3 courses, 9 semester units. Select at least one course each from Groups A and B below.

Group A: Art

Art 1, 2, 3, #4, #5, Music 4*, 5*, 6, 7, 10, Thtr. Art 1

#Art 4 & 5 are the same as Anthropology 4 & 5

Group B: Humanities

English 4, 10, 15, 16, 18, 19, 30, 31, 32, 44, 45, 46

History 4, 5, 17+, 18+*, 18H+*, 19, 20, 21, 23, 31

Humanities 1H

Philosophy 10, 11, 12, 13, 14, 25**

Spanish 1, 2++*, 3++*, 4++, 12

French 1, 2++, 3++, 4++

AREA 4. SOCIAL AND BEHAVIORAL SCIENCES

Select at least three courses from at least two disciplines. Minimum 9 semester units.

Anthropology 10, Economics 1, 2, Geography 2,

Political Science 5+, 7#, Sociology 1, 2,

Psychology 1, 5, 10, 34, 39#

Political Science 7 is the same as Journal 7

Psychology 39 is the same as Child Development 39

Graduation and Transfer

AREA 5. PHYSICAL AND BIOLOGICAL SCIENCES

Minimum 2 courses, 7-9 semester units. Select at least one course each from Groups A and B, at least one course must include a laboratory. (Labs Underlined)

Group A: Physical Sciences:

Chemistry 1*, 2*, 5, 12*, 13, 20*, 21*
Physics 5*, 6*, 7*, 20*, 21*
Astronomy 10, Geography 1, Geology 1,
Meteorology 1, Physical Science 12*

Group B: Biological Sciences:

Biology 1, 2, 20*, 20H*, 21*, 22*, 25, 30, 31, 40

Language Other Than English (UC Requirement Only)

This requirement may be fulfilled by the completion of two years of a foreign language in high school with a grade of "C" or better, or equivalent proficiency demonstrated by performance on tests, such as earning a minimum score of 550 on an appropriate College Board Achievement Test in a foreign language. If you are not able to demonstrate proficiency as indicated above, you can fulfill this requirement by completing one of the following courses:

Spanish 2++*, 3++*, 4++
French 2++, 3++, 4++

CSU Graduation Requirement in U.S. History, Constitution, and American Ideals

This is not part of the IGETC; however, this requirement may be completed prior to transfer. Select one course each from Groups 1 and 2.

Group 1. Political Science 5+, 5H

Group 2. History 17+, 18+, 18H+

- * Indicates that number of transfer units may be limited by UC. Please consult the "University of California Transfer Course List", located on page 60 for transfer unit limitations.
- + If course is used to meet the CSU Graduation Requirement in U.S. History, Constitution, and American Ideals it can NOT also be used to meet IGETC Requirements.
- ++ If course is used to meet the UC Language Other Than English Requirement it can NOT also be used to meet IGETC Requirements.
- ** Indicates that the course is listed in more than one area, but shall not be certified in more than one area.

Graduation and Transfer

University of California

Priority Application filing period

Fall Quarter: November 1-30
Winter Quarter: July 1-31
Spring Quarter: October 1-31

UC Berkeley:
Fall Semester: November 1-30
Spring Semester: July 1-31

All applicants are encouraged to file within the priority application filing period. If applying after the priority filing period, consult the COS Transfer Center for current information. Applications for admissions are available in the Counseling Office and the Transfer Center.

Eligibility For Transfer

1. If you were eligible for admission to the University when you graduated from high school--meaning you satisfied the Subject, Scholarship, and Examination Requirements--you are eligible to transfer if you have a "C" (2.0) average in your transferable college coursework.
2. If you met the Scholarship Requirement, but did not satisfy the Subject Requirement, you must take college courses in the subjects you are missing to be eligible to transfer. You will need to earn a grade of "C" or better in each of these required courses and an overall "C" (2.0) average in all transferable college coursework. If you completed less than 12 quarter or semester units of transferable college coursework, you must also satisfy the Examination Requirement.
3. If you were not eligible for admission to the University when you graduated from high school because you did not meet the Scholarship Requirement, or you did not meet the Scholarship Requirement and did not complete all the required "a-f" subjects, you must:
 - a. Complete 84 quarter units or 56 semester units of transferable college credit with a grade point average of at least 2.4, and satisfy either (b) or (c) as follows.
 - b. Take college courses on the subject you are lacking and earn a grade of "C" or better in each one. (The University will waive up to two units of the required high school course-work except in mathematics and English.)
 - c. Complete one college course in mathematics, one in English, and one selected from either U.S. history, laboratory science, or foreign language. You must earn a grade of "C" or better in each course. All courses, with the exception of the required mathematics course, must be transferable. The course in mathematics must assume a proficiency level equivalent to three years of high school mathematics (i.e., elementary algebra, advanced algebra, and geometry). The course may be trigonometry or a more advanced course in mathematics or statistics for which advanced algebra is a prerequisite.

If the number of applicants exceeds the spaces available for a particular campus or major--as is often the case--the campus uses criteria that exceed the minimum requirements to select students. Therefore, meeting the minimum requirements is not enough to gain admission to many UC campuses and programs.

Graduation and Transfer

Clearing High-School Subjects with College Courses

UC SUBJECT REQUIREMENT ("A" THROUGH "F")	HIGH SCHOOL REQUIREMENT	HOW TO CLEAR A-F DEFICIENCY OR OMISSION (All courses must be completed with a grade of "C" or better.)
(a) History	One Year	A one-year deficiency may be cleared with a transferable college course of three-quarter (or two-semester) units in U.S. History, Civics, Government OR acceptable courses or exams designated by colleges as meeting the State Requirement of American History and Institutions.
(b) English	Four Years	To clear each year of deficiency in the first, second or third year of high-school English, one four-quarter (three -semester) unit college course in composition, literature or speech. These courses need not be transferable. To clear a deficiency in the fourth year of high-school English, one transferable four-quarter (three semester) unit college course in composition, literature or speech. The literature and speech courses must have substantial composition.
(c) Mathematics	Three years required, four recommended.**	To clear each year of deficiency, one course in elementary or intermediate algebra, plane or solid geometry. To clear entire deficiency, complete a three-quarter (two semester) unit course in trigonometry or an advanced mathematics course for which trigonometry is prerequisite.
(d) Laboratory Science	One year	A one-year deficiency may be cleared with one course in a natural (Physical or biological) science with at least 30 hours of laboratory (not demonstration or activity).
(e) Foreign Language	Two years	To clear entire deficiency, any course or courses held by the college or university to be equivalent to two years of high-school language (excluding conversation).
(f) College Preparatory Electives.**	Four years	Any one course beyond those listed above as clearing requirements (a), (b), (c), (d), or (e) – or a course having as a prerequisite courses equivalent to (c), (d), and (e) or the equivalent of two high school years in a second language. In addition, any transferable course of four or more quarter units in history, social science or visual and performing arts.

Graduation and Transfer

General Education Requirements for University of California

Each school and college at every UC campus has its own breadth/ general education requirements. Beginning with Fall 1991, students may fulfill the lower division breadth/general education requirements at any UC campus by completing one of the following two options:

1. The **Intersegmental General Education Transfer Curriculum** which will fulfill the lower division breadth/general education requirements for all UC and CSU campuses.
2. The specific lower division breadth/general education requirements of the campus they intend to transfer.

The Intersegmental General Education Transfer Curriculum is listed on page 55. Students should consult a COS Counselor to determine which option is best suited for their educational objective.

University of California Transfer Course List

College of the Sequoias courses that are acceptable by the University of California including all unit limitations are as follows:

ACCOUNTING

1, 2

ADMINISTRATION OF JUSTICE

11*, 12*, 13, 14

*11 and 12 combined: maximum credit allowed, one course.

AGRICULTURE

3, 4

AGRICULTURE MANAGEMENT

1

ANIMAL SCIENCE

1, 2a-b*, 22

*2a and 2b combined: maximum credit allowed, one course

ANTHROPOLOGY

4, 5, 10, 11

ARCHITECTURE

10, 11, 20, 21, 40*

*Limit 40 with Engineering courses (maximum 16 units)

ART

1, 2, 3, 4, 5**, 5H**, 6+, 7+, 8*, 9*, 10a-d*, 11a-d+, 12a-b*, 13a-d*, 15+, 16+, 17a-b+, 18a-b+

*Any or all of these courses combined: maximum credit allowed, 16 units

+Any or all of these courses combined: maximum credit allowed, 12 units

**5 and 5H combined: maximum credit allowed, one course

Note: Art 4 & 5 same as Anthro 4 & 5; Art 6 & 7 same as CFS 6 & 7

ASTRONOMY

10

BIOLOGY

1, 2, 20+, 20H+, 21*, 22*, 25, 30, 31 40

+No credit for Bio 20/20H if taken after Bio 1; Bio 20 and Bio 20H combined: maximum credit allowed, one course

*No credit for Bio 21 if taken after Bio 2; no credit for Bio 22 if taken after Bio 1

Graduation and Transfer

University of California Transfer Course List

BUSINESS

18, 20*

* Bus 20 and Math 21 combined: maximum credit allowed, one course

CHEMISTRY

1*, 2*, 5, 12, 13, 20*, 21+

*Chem 1, 2, & 20 combined: maximum credit allowed, 2 courses

+No credit for Chem 21 if taken after 12

CHILD DEVELOPMENT

39*, 42

See Child & Family Studies () for limitation
Note: Child Development 39 same as Psychology 39

CHILD & FAMILY STUDIES

6+, 7+, 36*, 80*

Note: Child & Family Studies 6 & 7 same as Art 6 & 7

+See Art 6 & 7 for limitation

*CFS/Psych/Nursing 36, CFS 80 & Child Dev/
Psych 39 combined: maximum credit allowed, 2 courses

CINEMA ARTS

31, 32

COMPUTER

5, 6, 7

DANCE

8a-d, 10a-d, 12a-d, 40a-d*

See Physical Education () for limitation

ECONOMICS

1, 2

ENGINEERING

1*, 2*, 3*, 4*, 7*

*Any or all of these courses combined with
Architecture 40, maximum credit allowed, 16 units

ENGLISH

1*, 1H*, 2, 4, 10, 15, 16, 18, 19, 30, 31, 32, 44, 45, 46

*1 and 1H combined: maximum credit allowed, one course

FASHION

76

FRENCH

1, 2, 3, 4

GEOGRAPHY

1, 2, 3

GEOLOGY

1, 12

HISTORY

4, 5, 17, 18*, 18H*, 19, 20, 21, 23, 31

*18 and 18H combined: maximum credit allowed, one course

HUMANITIES

1H

HYGIENE

1*, 3, 7*

*1 and 7 combined with Sports Medicine 60:
maximum credit allowed, one course

INDEPENDENT STUDY

(See COS Counselor)

INTER-COLLEGIATE ATHLETICS

1a thru 16d*

* See Physical Education (*) for limitation

JOURNALISM

1, 7

MATHEMATICS

15, 17, 21*, 45, 61+, 62+, 70#, 75+, 76+, 77, 80, 81

*21 and Bus 20 combined: maximum credit allowed, one course

+61, 62, 75, 76 combined: maximum credit allowed, 2 courses

#70 maximum credit allowed, 4 units

Graduation and Transfer

University of California Transfer Course List

METEOROLOGY

1

MUSIC

1++, 4++, 5++, 6, 7, 8a-b*, 10, 20*, 21*, 22a-d*, 23a-d*, 30a-b*, 32a-d*, 34a-d*, 36a-d*, 40a-d*, 50a-d*, 52a-d*, 54a-d*, 60a-d*, 61a-d*, 62a-d*, 74a-d*, 75a-d+, 76a-d+, 90a-d*, 91a-d*, 92a-d*, 94a-d*, 97a-d#

*Any or all courses combined: maximum credit allowed, 12 units
+Limit with (*) P.E. courses: maximum credit allowed, 4 units
#Limit with (+) Th. Art courses: maximum credit allowed, 12 units
++1, 4 & 5 combined: no credit for 1 if taken after 4 & 5

NURSING

36*

Note: Nursing 36 same as CFS/Psych 36
*See Child & Family Studies (CFS) 36 for limitation

NUTRITION

18

ORNAMENTAL HORTICULTURE

2*, 3*, 7

*2 and 3 combined: maximum credit allowed, one course

PHILOSOPHY

10, 11, 12, 13, 14, 25

PHOTOGRAPHY

1, 2a-c

PHYSICAL EDUCATION

1a thru 14d*, 15a-d, 18a thru 35b*, 36, 41a thru 95d*

*Any or all of these courses combined with Music 75a-d or 76a-d: maximum credit allowed, 4 units

PHYSICAL SCIENCE

12*, 12H*

*12 and 12H combined: maximum credit allowed, one course
No credit for 12 or 12H if taken after a college course in Astronomy, Geology or Physics

PHYSICS

5*, 6*, 7*, 20*, 21*

20* and 5 combined: deduct 2 units from 20
20 and 6 combined: deduct 1 unit from 20
21 and 7 combined: deduct 2 units from 21
21 and 5 combined: deduct 1 unit from 21

PLANT SCIENCE

1, 12

POLITICAL SCIENCE

5*, 5H*, 7

*5 and 5H combined: maximum credit allowed, one course
Note: Political Science 7 same as Journal 7

PSYCHOLOGY

1, 5, 10, 34, 36*, 39*

* See Child & Family Studies (*) for limitations
Note: Psych 36 same as CFS 36 and Nursing 36

SOCIOLOGY

1, 2

SPANISH

1, 2, 3, 4, 22*, 23*

*22 is equivalent to 2: maximum credit allowed, one course; 23 is equivalent to 3: maximum credit allowed, one course

SPEECH ARTS

1, 3, 4

Graduation and Transfer

University of California Transfer Course List
--

SPORTS MEDICINE

40*, 60+, 70*, 71*, 72*, 73*

*40, 70, 71, 72, 73 combined: maximum credit allowed, one course

+60 and Hygiene 1 & 7 combined: max. credit allowed, one course

THEATRE ARTS

1, 2, 3, 4, 5, 11a-d+, 13a-b+, 14a-b+, 15a-b+, 16a-b+, 18a-b+, 19a-d+, 20a-d+, 21a-d+

+Any or all of these courses combined: maximum credit allowed, 12 units

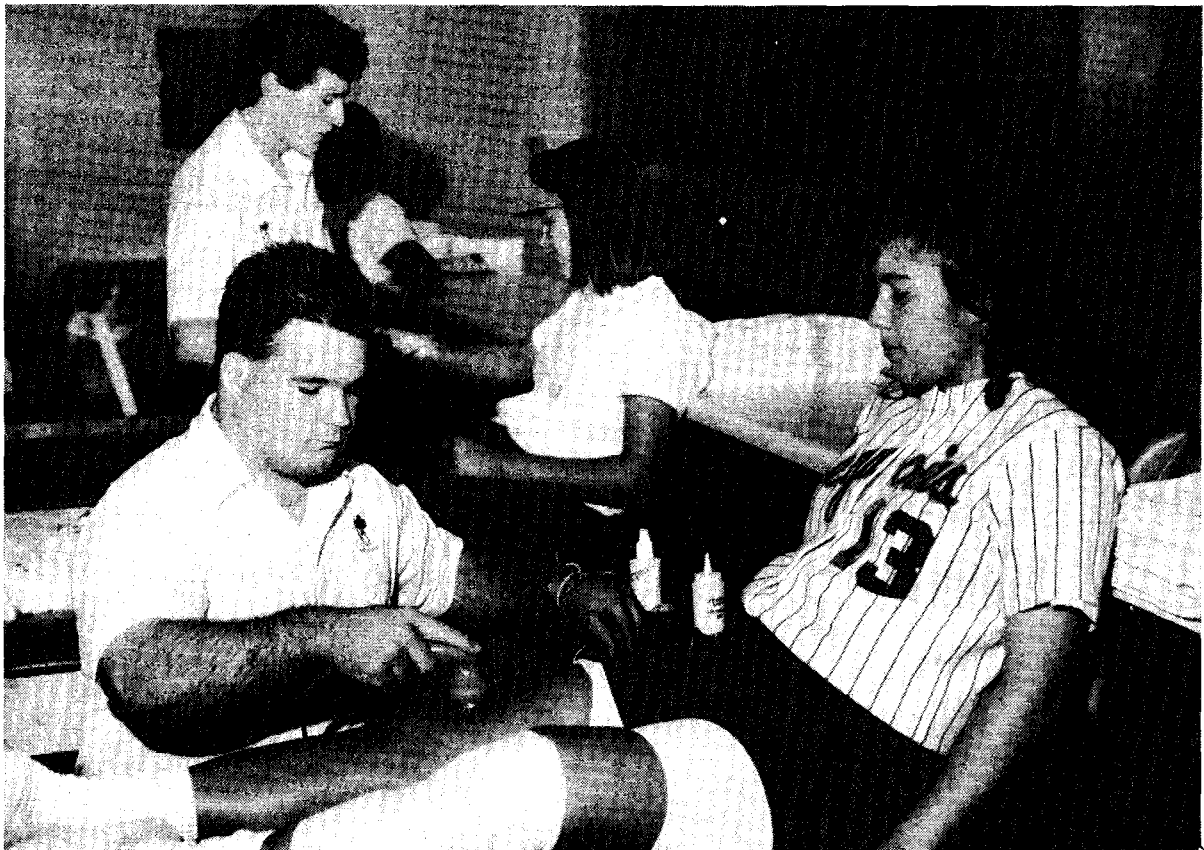
Private Independent Colleges

College of the Sequoias is accredited by the Western Association of Schools and Colleges. Therefore, COS courses numbered 1-199 will usually be accepted as transfer credit at universities and colleges throughout the country. Students who plan to transfer to a private or out-of-state college should consult the specific catalog with the assistance of a COS counselor to determine lower division requirements necessary for transfer.

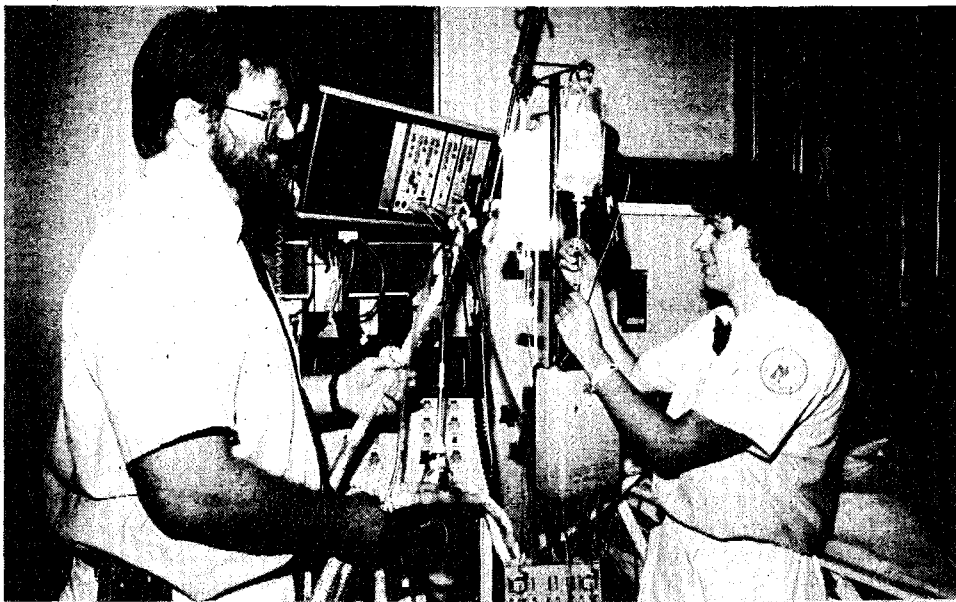
California Articulation Number System

The California Articulation Number (CAN) System identifies some of the transferable, lower division preparatory courses commonly required by four year colleges and universities. Lists of courses for campuses participating in the CAN system are available in the Counseling Office and the Transfer Center. The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus. Example: CAN CHEM 2 at College of the Sequoias will be accepted for CAN CHEM 2 at any other participating campus. California Articulation Numbers are listed parenthetically after each course description in this catalog. See a counselor for assistance.

Graduation and Transfer



Certificate Program



Certificate Program

Certificate Policy

The College of the Sequoias will issue Certificates to those students who satisfactorily complete the requirements and who demonstrate proficiency and competency in a prescribed vocational training program. The certificate is widely recognized and accepted by employers as verification of job preparedness and skill achievement.

Students receiving certificates from College of the Sequoias have the confidence and pride in knowing their certificate represents the highest standards in occupational proficiency and educational excellence

College of the Sequoias issues the following certificates

Certificate of Completion

1. Certificates of completion are issued to those students completing a prescribed vocational study program consisting of from 12 to 42 semester units with a "C" or better grade in each of the required certificate classes.
2. Students must complete at least 50% of the units required for the certificate in classes offered through COS.
3. The requirements for each certificate are on the following pages in the Certificate Brochure. Substitutions or waiver of required courses based upon work or other experience should be approved by the Program Coordinator and/or the Vocational Dean.

Certificate of Participation

1. Certificates of Participation are issued to those students completing a class or series of classes requiring less than 12 semester units of instruction with a "C" or better grade in each certificate class.
2. Students must complete at least 50% of the required units for the certificate in classes offered through COS.
3. The requirements for each certificate are on the following pages and the Certificate Brochure. Substitutions or waiver of required courses based upon work or other experience should be approved by the Program Coordinator and/or the Vocational Dean.

Most certificate courses can be applied toward an AA or AS degree. Students wishing to obtain a certificate and a degree should see their counselor for general education or other requirements beyond those required for their certificate.

Certificate Program

Accounting

Business Division

Without accounting, no economic decision could be made, no business planning or decision making could take place, no companies could operate. Accountants gather, record, report and interpret financial information. The Accounting program is designed to prepare students to become bookkeepers or junior accountants.

Career opportunities are available in government, civil service, business and industry, private accounting firms and self employment. There are also accounting specialties such as tax accounting, cost accounting budget accounting and data processing.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Business 201	General Vocational Accounting	5
Business 202	General Vocational Accounting	5
Business 282	Individual Income Tax	5
Business 184	Business Communications	3
Business 295	Business Arithmetic	3
Or Business 268	Electronic Calculating	2
Business 174	Marketing	3
Or Business 182	Introduction to Business	3
Or Business 188	Human Relations in Business	3
Computer 5	Computer Information Systems	3
Or Computer 130	Introduction to Computers	4
Computer 131	Beginning DOS	3
Total Units Needed for Certificate		27-31

Elective Courses

None

Certificate Program

Ag Management

Agriculture Division

Courses in agriculture management prepare students for a variety of occupations in the agriculture industry. Ag economics, sales and management classes give students valuable skills necessary to manage the whole spectrum of a diverse agriculture industry. Courses in agriculture computers and related fields in Dairy Science, Horticulture and the Animal-Crop Sciences areas supplement the production side of management and give students a broad foundation of agriculture skills and competencies.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Ag Mgt 1	Introduction to Ag Economics	3
Ag Mgt 102	Agriculture Sales	3
Ag Mgt 103	Introduction to Ag Management	3
Ag Mgt 104	Farm Accounting	3
Ag Mgt 105	Computers in Agriculture	3
Ag 193	Work Experience	3
Ag 201	Agriculture Mathematics	3
Required Electives (see below)		<u>9</u>
Total Units Needed for Certificate		30

Elective Courses (Choose nine (9) units)

Ag 4	Soils	3
Dairy 103	Commercial Dairy Management	3
OH 101	Introduction to Horticulture	3
Dairy 101	Dairy Elements	3
Ag 299	Agriculture Topics	1
Ag Mech 101	Introduction to Ag Mechanics	2
Plnt Sci 1	Introduction to Plant Sciences	3
An Sci 1	Introduction to Animal Sciences	3

Certificate Program

Ag Mechanics

Agriculture Division

Agriculture is highly mechanized today. No farming industry can exist without machinery. Mechanized Agriculture students develop skills and knowledge using tools and equipment on the modern COS Farm. Farm buildings are constructed and repaired using both wood and metal fabrication techniques. Students also study irrigation principles, land surveying and laser leveling equipment.

Farming industries are in need of mechanized agriculture experts. Jobs are available on farms, in sales and service of farm equipment, equipment manufacture, ag mechanics and welding.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Ag Mech 102 a-d	Farm Equipment Construction	3
Ag Mech 103	Farm Machinery	3
Ag Mech 107	Farm Surveying	3
Ag Mech 109	Small Engines	2
Ag Mech 101	Basic Shop	2
Ag Mech 103	Farm Power	3
Ag Mech 105a-b	Farm Structures	3
Ag Mech 106a-b	Farm Welding	2
Ag 193-196	Ag Coop/Work Experience	1-4
Required Electives (see below)		6
Total Units Needed for Certificate		30-31

Elective Courses (Choose six (6) units)

Plnt Sci 102	Row Crops	3
Plnt Sci 103	Cereal & Oil Crops	3
Ag 201	Ag Mathematics	3
An Sci 1	Introduction to Animal Science	3
OH 101	Basic OH Skills	3
OH 108	Landscape Construction	3
Ag Mgt 1	Introduction to Ag Econ	3
Ag Mgt 105 a-b	Computers in Agriculture	3
Ag 4	Soils	3
Dairy 101	Elements of Dairy	3
Ag Mech 108	Irrigation	3

Certificate Program

Agricultural Science

Agriculture Division

A Certificate in Agriculture is designed to give a student the opportunity to develop a variety of skills in Animal Science, Horse Production, Horticulture, Ag Business, Mechanics, Agriculture Education and Crop Science. The general Ag certificate can be used for those individuals who are undecided about which area of agriculture to pursue and wish to get a broad base of education for a career in the agriculture industry.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Ag Mgt 105 a-b	Computers in Ag	3
Ag 193	Work Experience	3
An Sci 1	Introduction to Animal Science	3
Dairy 1	Dairy Elements	3
OH 101	Ornamental Horticulture	3
Plnt Sci 1	Introduction to Plant Science	3
Ag Mech 101	Introduction to Ag Mechanics	2
Required Electives (see below)		10
Total Units Needed for Certificate		30

Elective Courses (choose ten (10) units)

Dairy 102	Milk Production	3
Plnt Sci 102	Row Crops	3
Ag Mgt 102	Ag Sales	3
An Sci 103	Animal Nutrition	3
OH 105	Plant Propagation	3
Ag Mech 104	Farm Machinery	3
Ag 4	Soils	3
Ag 3	Agricultural Entomology	3

Certificate Program

Animal Science and Industry

Agriculture Division

The Animal Science program is designed for students whose major interest is in working with beef cattle, sheep or swine species. Students work on the college's 160-acre Farm and with the various animal units, combining practical experience with technical knowledge in the various livestock enterprises.

Most COS Animal Science majors return to livestock operations in the area for employment or go to work for one of the agriculture businesses supporting the livestock industry such as feedlots, meat packing and processing plants, animal nutrition, lending institutions and agriculture education.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Ag Sci 1	Introduction to Animal Science	3
An Sci 103	Animal Nutrition	3
An Sci 104	Diseases and Sanitation	3
An Sci 107	Introduction to Meat Science	3
An Sci 110	Swine Production and Management	3
An Sci 111	Beef Production and Management	3
An Sci 112	Sheep Production and Management	3
Ag 193-196	Work Experience	1-4
Required Electives (choose from below)		6
Total Units Needed for Certificate		28-31

Elective Courses (choose six (6) units)

Ag 201	Agricultural Mathematics	3
Ag Mgt 105a-b	Agricultural Computers	3
Ag Mgt 104	Farm Records	3
An Sci 105a-c	Preparing Livestock for Shows and Sales	2
An Sci 2a-b	Livestock Selection and Sales Evaluation	2
An Sci 108a-d	Meat Selection and Evaluation	3
Plant Sci 1	Introduction to Plant Science	3
Ag Mech 104	Farm Machinery	3

Certificate Program

Architecture and Architectural Drafting

Industry and Technology Division

The certificate program is designed to provide the student with the skills necessary for employment in architectural or building design firms or related construction drafting firms.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Arch 10	Architectural Environment Design	3
Arch 11	Environmental Design Fundamentals	3
Arch 20	Introduction to Graphics & Perspective	3
Arch 21	Basic Graphics	3
Arch 120	Freehand Drawing	3
Arch 131	Light Wood Frame Construction	3
Arch 150	Computer Analysis Building Energy Use	2
Arch 160	Materials of Construction	2
Required Electives (See Below)		<u>8</u>
Total Units Needed for Certificate		30

Recommended Electives (choose eight (8) units)

Arch 40	Strength of Materials	3
Arch 121a-c	Perspective Alternatives	3-9
Arch 141	Stress Analysis	3
Arch 190a-d	Supervised Practice	1-3
Arch 291, 292, 293	Independent Study	1-1-1
Drafting 110	Introduction to Computer Assisted Drafting	4
Drafting 111	Computer Assisted Drafting	4
Bldg Trades 104	Carpentry	3
Bldg Trades 105	Carpentry	3
Bldg Trades 114	Basic Residential Construction	4
Bldg Trades 115	Basic Residential Construction	4
Math 75	Calculus with Analytic Geometry	5
Math 76	Calculus with Analytic Geometry	5
Physics 5	Physics for Scientists	4
Physics 6	Physics for Scientists	4

Certificate Program

Automotive Technology

Industry and Technology Division

This program offers pre-employment vocational training for the student desiring full-time work in automotive service and repair. The two-year course of study includes lecture, demonstration, laboratory instruction, all emphasizing fundamental mechanical principles. Instructors fully qualified both by shop experience as master mechanics and by training as teachers conduct all technical classes in both lecture-demonstration and laboratory sections. An advisory committee composed of employers and working mechanics assist the college in maintaining a program geared to current needs of the trade.

A student may complete a certificate in one year by following a prescribed course of study. Thirty units completed with a grade "C" or better is the minimum requirement to earn this certificate. Units earned in extended day classes can be applied along with day time classes to achieve this goal.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Auto 100	Bench Work and Safety	1
Auto 101	Automotive Electricity	4
Auto 102	Fuel and Cooling Systems	3
Auto 103	Automotive Engines	4
Auto 104	Auto Power Train Analysis	3
Auto 105	Brakes and Alignment	3
Auto 106	Automatic Transmissions	4
Auto 107	Advanced Auto Transmissions	3
Auto 108	Automotive Engine Tune Up	5
Auto 109	Air Conditioning/Accessories	3
Auto 113	Computerized Engine Control	3
Total Units Needed for Certificate		36

Recommended Electives

Auto 190a-c	Supervised Practice	1-3
Welding 161	Oxy-Acetylene Welding	4
Acct 287	Accounting for Service Businesses	3
I&T 351	Industry and Technology Math	2

These electives may be substituted for required courses. Permission to substitute must be obtained from the program coordinator.

Certificate Program

Building Trades, Construction Option

Building Trades, Construction Option

Industry and Technology Division

An educational program has been established for the Building Trades as an integral part of a regular two year community college curricula. An option system is used to meet the needs of individual students. The basic emphasis of the Building Trades, Construction Option is carpentry.

Technical classroom, as well as manipulative (hands on) instruction is given on nomenclature, wood and composite building materials, fasteners, building layout, roof framing, stair construction, rough carpentry and finish carpentry. In addition, instruction is given in the areas of plumbing, wiring, insulation, roofing, dry-wall, painting and drawing for the construction trades.

Manipulative instruction is taught by building a complete residence and appropriate small projects. Safety glasses and approved clothing are used during manipulative classes.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Unit</u>
Bld Tr 200	Drawing for Building Construction	2
Bld Tr 201	Drawing for Building Construction	2
Bld Tr 104	Carpentry (Residential Construction)	3
Bld Tr 105	Carpentry (Residential Construction)	3
Bld Tr 108	Advanced Carpentry/Roof Framing	3
Bld Tr 109	Advanced Carpentry	3
Bld Tr 114	Carpentry/Project House Construction	4
Bld Tr 115	Carpentry/Project House Construction	4
Bld Tr 118	Carpentry/Project House Construction	4
Bld Tr 119	Carpentry/Project House Construction	4
Total Units Needed for Certificate		32

Elective Courses

Bld Tr 130	Blueprint Reading/Residential Construction	3
Bld Tr 134	Residential Construction Estimating	3
Bld Tr 138	Contractors License Law	3
Bld Tr 150	Elementary Cabinetmaking	4
Bld Tr 160	Cabinet Making/Mill Work Lab	3
I&T 270	Residential Wiring	3
Bld Tr 190a-d	Supervised Practice	1-3

These electives may be substituted for required courses. Permission to substitute must be obtained from the program coordinator.

Certificate Program

Building Trades, Mill Cabinet Option

Industry and Technology Division

An educational program has been established for the Building Trades as an integral part of a regular two year community college curricula. An option system is used to meet the needs of individual students. The basic emphasis of the Building Trades, Mill Cabinet Program is residential cabinetry and finish millwork.

Technical classroom as well as manipulative (hands on) instruction is given on the safety, maintenance and use of hand tools, power tools and machinery; woodworking joinery and milling procedures; woods, plywoods and hardboard; cabinet hardware, and cabinet design, layout, construction, and installation.

In addition, instruction is given in fundamental and advanced drafting techniques, estimating and contracting procedures.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Bld Tr 200	Drawing for Building Construction	2
Bld Tr 201	Drawing for Building Construction	2
Bld Tr 104	Carpentry (Residential Construction)	3
Bld Tr 105	Carpentry (Residential Construction)	3
Bld Tr 114	Carpentry/Project House Construction	4
Bld Tr 115	Carpentry/Project House Construction	4
Bld Tr 150	Elementary Cabinetmaking	4
Bld Tr 151	Cabinet Making and Millwork	4
Bld Tr 160	Cabinet Making/Millwork Lab	3
Bld Tr 161	Cabinet Making/Millwork Lab	3
Drafting 130	Introduction to Computer Assisted Cabinet	4
Total Units Needed for Certificate		36

Elective Courses

Bld Tr 138	Contractors License Law	3
Bld Tr 162	Cabinet Making/Lec/Lab Summer	3
Bld Tr 130	Blueprint Reading/Residential Construction	3
Bld Tr 190a-d	Supervised Practice	1-3
I&T 270	Residential Wiring	3

These electives may be substituted for required courses. Permission to substitute must be obtained from the program coordinator.

Certificate Program

Child Development

Consumer/Family Studies Division

Increased attention is being focused on the educational needs and potential of the young child. Students trained in child development will have a direct impact on those children. As more mothers return to work and need day care, there is a growing need for trained men and women who have a sound understanding of the social, emotional, physical, cognitive and creative needs of the young child.

Employment opportunities include jobs in day care, homecare, co-op schools and aides in public schools. The child development program provides the 12 units required by the state of California for private day care centers and the 24 units required by the state for a children's center permit, as well as degree, transfer and certificate classes.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Chld Dev 134	Child Abuse	2
Chld Dev 39	Child Development	3
Chld Dev 140	Principles in ECE	3
Chld Dev 141	Practice in ECE	3
Chld Dev 42	Child/Family/Society	3
Chld Dev 148	Child Health & Safety	3
Required Electives (choose from below)		7
Total Units Needed for Certificate		24

Elective Courses (choose seven (7) units)

Nutr/Food 112	Child Nutrition	3
Chld Dev 151	School Age Child Care	3
Chld Dev 135	Music Experience in ECE	1
Chld Dev 136	Children's Literature	1
Chld Dev 137	Science Experiences in ECE	1
Chld Dev 149	Creative Activities	2
Chld Dev 150	Creative Activities	2
Chld Dev 143	Administration in ECE	3
Chld Dev 144	Administration in ECE	3
Chld Dev 145	Parenting	3
Chld Dev 146	Exceptional Child	3
Chld Dev 147	Infant/Toddler	3
Chld Dev 190a-c	Supervised Practice	1-3
Chld Dev 156	Family Day Care	1
Chld Dev 157	Family Day Care	1
Chld Dev 199a-d	Topics in Child Development	1/1/1/1

Certificate Program

Child Development, Special Education Option

Consumer/Family Studies Division

The number of children with special needs in preschools and elementary school is increasing, some in special education programs and some mainstreamed into regular educational and child care programs. Adults working with these children as aides and assistants need training and experience in child development and specific courses related to the special needs child. Employment opportunities include public elementary schools, Headstart and state preschools, private centers and homes.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Chld Dev 39	Child Development	3
Chld Dev 140	Principles in ECE	3
Chld Dev 141	Practice in ECE	3
Chld Dev 42	Child/Family/Society	3
Chld Dev 146	Exceptional Child	3
Hygiene 3	First Aid/C.P.R.	2
Chld Dev 194	Cooperative Work Experience	2
Required Electives (choose from below)		3
Total Units Needed for Certificate		22

Elective Courses (choose three (3) units)

Chld Dev 145	Parenting	3
Chld Dev 148	Health & Safety	3

Child Development, Special Education Option

Certificate Program

Color Image

Consumer/Family Studies Division

Colors can affect mood, appearance...a person's very image of him or herself. The color/image program has been developed to provide background in color/image selection for planning, evaluating and coordinating wardrobes. Color analysis is an exciting new field and consultants are in great demand.

However, in addition to people interested in a color/image consulting career, there are many whose employment and personal lives will be enhanced by color/image knowledge, such as fashion buyers, hair dressers, cosmetic consultants, interior designers, retail clerks, personal shoppers, home economics educators, 4-H advisors and scout leaders.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Fash 167	Applied Color Theory	2
Fash 168	Advanced Color Theory	2
Fash 175	Fashion Image	3
Fash 174a-b	Fashion Illustration	2
Fash 179	Fashion Analysis	2
Fash 260	Career Dressing	1
Speech 1	Fundamentals of Public Speaking	3
Required Electives (choose from below)		6
Total Units Needed for Certificate		21

Elective Courses (choose six (6) units)

Fash 76	Textiles	3
Fash 117a-b	Makeup	3
Fash 178	Visual Merchandising	3

Certificate Program

Computers

Business Division

The computer has become the constant feature found in almost any business or classroom today. Computers are becoming integrated into all aspects of the work environment as the tool of choice. For example, computers are today used in business, sports, math, drafting, statistics, journalism, communications, and psychology. Computers do three basic jobs commonly found in the office — word processing, database management, and spreadsheets. The Computer Certificate will give the individual a foundation in computer languages as well as the various software applications. The certificate holder will be prepared to use the microcomputer effectively in a business environment.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Computer 5	Computer Information Systems	3
Or Computer 130	Introduction to Computers	4
Computer 6	BASIC Programming	3
Computer 7	COBOL Programming	4
Or Computer 133	DataBase Processing	4
Computer 131	Beginning DOS	3
Computer 132	Advanced DOS	2
Business 182	Introduction to Business	3
Or Business 188	Human Relations in Business	3
Business 184	Business Communications	3
Computer 134	Telecommunications	2
Computer 135	Desktop Publishing for Business	4
Or Computer 136	WP with WordPerfect	3
Or Computer 137	WP with WordStar	3
Business 201	General Vocational Accounting	5
Or Business 202	General Vocational Accounting	5
Or Business 1	Principles of Accounting	4
Total Units Needed for Certificate		30-33

Elective Courses

None

Certificate Program

Consumer/Family Studies

Consumer/Family Studies Division

This program gives a general overview of the various Consumer/Family Studies areas. It enables men and women to develop skills that improve the quality of life and helps them prepare to function effectively in changing family, community and work environments. Designed to give a practical training in every day living, the program is also a starting point for those who want to become home economists. Students who continue studies at a four-year college can become home economists, a wide-ranging field with career opportunities in teaching, dietetics, fashion merchandising and design, consumer affairs, family counseling, adult and child services.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Int Des 121		
Or 122	Interior design	3
Nutr/Food 101	Foods	3
Nutr/Food 18	Nutrition	3
Fash 175	Fashion Image	3
Fashion 161a-b		
Or 162a-b	Clothing Construction	3
CFS 186	Personal Management	3
Required Electives (choose from below)		3
Total Units Needed for Certificate		21

Elective Courses (choose three (3) units)

CFS 80	Lifespan Development	3
Child Dev 39	Child Development	3

Cosmetology

See Vocational Certificate Booklet or the Office of Vocational Education for details.

Certificate Program

Dairy Science

Agriculture Division

The San Joaquin Valley is the leading area in the state for the production and processing of milk and dairy products. A large number of career opportunities are available for students who attend COS and major in Dairy Science. The school operates the only community college dairy in the state and has an outstanding dairy curriculum. The program also offers the only Dairy Manufacturing curriculum on the community college level and works very closely with local facilities to train students in dairy manufacturing.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Dairy 101	Dairy Elements	3
Dairy 102	Milk Production	3
Dairy 103	Commercial Dairy Herd Mgmt	3
Dairy 104	Breeding and Selection	3
Ag Mech 103	Farm Power	3
Dairy 5a-d	Dairy Cattle Judging & Showing	1
Ag 193-194	Work Experience	1-4
Ag 201	Agriculture Mathematics	3
Required Electives (see below)		11
Total Units Needed for Certificate		31-34

Elective Courses (choose eleven (11) units)

Dairy 106	Intro to Dairy Mfg	3
Dairy 107	Dairy Skills	1
Dairy 108	Dairy Nutrition	3
Ag Mgt 105a-b	Computers in Ag	3
Ag Mech 101	Intro to Ag Mechanics	2

Certificate Program

Drafting Technology

Industry and Technology Division

There are several degree and certificate programs available in Drafting Technology. Each certificate program is designed to prepare students to enter into specific fields of drafting or a variety of other related fields. The degree programs are designed for students wishing to obtain an Associate of Arts degree as well as prepare for certain drafting or related jobs.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Unit</u>
Drafting 100	Applied Drawing	3
Drafting 101	Machine Drawing	4
Drafting 102	Descriptive Geometry	3
Drafting 110	Introduction to Computer Assist Draft	4
Drafting 111	Computer Assisted Drafting	4
Drafting 120	Introduction to Computer Assisted Illustration	3
Drafting 121	Computer Assist Illustration	3
Drafting 130	Introduction Computer Assisted Cabinet	3
Drafting 160	Graphic Design	3
Drafting 161	Graphic Design	3
Drafting 190a-d	Supervised Practice	1-3
Drafting 200	Beginning Mechanical Drawing	2
Drafting 201	Civil Engineering Drafting	3
Drafting 202	Civil Engineering Design	3
Drafting 291	Independent Study	1
Drafting 292	Independent Study	1
Drafting 293	Independent Study	1
Total Units Needed for Certificate		45-47

Elective Courses

None

Certificate Program

Electronics Technology

Industry and Technology Division

This program offers pre-employment vocational training for students desiring employment in the electronics industry. The two-year course of study combining lecture and laboratory instruction includes theory and analysis of basic electronics, electronic circuits. Use of test equipment and trouble-shooting techniques are emphasized in ALL classes.

In accordance with previous preparation, personal objectives and ability, the student may prepare either for more advanced study at a four-year college or for immediate employment in communications, consumer products servicing, microcomputers, and manufacturing.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Elect 101	D. C. Circuits	5
Elect 102	A. C. Circuits	5
Elect 103	Active Devices	4
Elect 104	Communication Circuits	5
Elect 110	Digital	3
Elect 111	Microprocessors	3
Elect 112	Microprocessor Applications	4
Total Units Needed for Certificate		29

Elective Courses

Elect 105	OP-AMPS	3
Elect 106	Design and Fabrication	3
Elect 113	PC Troubleshooting	4
I&T 270	Residential Wiring	3
I&T 272	Electrical Wiring, Industrial	3
I&T 273	Electronic Motor Control	3
I&T 351	Industry and Technology Math	2
Computer 6	Basic Programming	3
Elect 190a-d	Supervised Practice	1

These electives may be substituted for required courses. Permission to substitute must be obtained from the program coordinator.

Certificate Program

Environmental Control Technology (HVAC)

Environmental Control Technology (HVAC)

Industry and Technology Division

This training program is planned to prepare a person who possesses appropriate aptitudes for entry into employment in the several areas of air conditioning. It is expected that the student will develop job entry knowledge and skills necessary for the maintenance and repair of air conditioning - refrigeration - cooling - heating equipment. From this base, a person should also be able to do well in related occupations. Students should have a broad understanding of the principles of science and mathematics.

A student may complete a certificate in one year by following a prescribed course of study. Thirty units completed with a grade "C" or better is the minimum requirement to earn this certificate. Units earned in extended day classes can be applied along with day time classes to achieve this goal. This certificate does not require a student to take course work outside the Environmental Control Technology department.

Required Courses

<u>Course Number</u>	<u>Course Description</u>	<u>Units</u>
ECT 181	Basic Air Conditioning	8
ECT 182	Adv Air Cond/Refrig Coml/Dom	12
ECT 279	Basic Refrig/Heating Theory	4
I&T 142	Air Conditioning Sheet Metal	3
I&T 143	Adv Air Cond Sheet Metal	3
Total Units Needed for Certificate		30

Elective Courses

ECT 190a-d	Supervised Practice	1-3
ECT 260	Basic Refrigeration	2
ECT 261	Adv Air Cond & Refrigeration	2
ECT 262	Heating Systems & Controls	2
ECT 263	Commercial Refrigeration	2
ECT 300	Intro Indust Ammonia Refrig	3
Drafting 200	Beginning Mechanical Drawing	2
Auto 109	Air Conditioning/Accessories	3
Business 287	Accounting for Small Business	3
Business 297	Personal Finance	3
Welding 161	Oxy-Acetylene	4

These electives may be substituted for required courses. Permission to substitute must be obtained from the program coordinator.

Certificate Program

Fashion Design

Consumer/Family Studies Division

The glamour world of fashion design is a growing industry. California is #2 in the nation when it comes to the clothing industry. Millions of people are involved in fashion production through designing, manufacturing, advertising or marketing. The fashion design option will teach you how to design and create for this growing industry or in your own business. Career opportunities include fashion designer, fashion illustrator, pattern drafter, pattern grader, samplemaker, production manager, shipping manager, manufacturer's sales representative, dressmaker and alterationist.

Required Courses

<u>Course Number</u>	<u>Course Description</u>	<u>Units</u>
Fash 76	Textiles	3
Fash 175	Fashion Image	3
Fash 162	Pattern Design	3
Fash 163	Advanced Pattern Design	3
Fash 174a-b	Fashion Illustration	2-2
Fash 177	Introduction to Fashion Merchandising	3
Speech 1	Fundamentals of Public Speaking	3
Fash 160a-b	Clothing Construction	3
Required Electives (see below)		3
Total Units Needed for Certificate		28

Elective Courses (choose three (3) units)

Fash 161a-b	Tailoring	3
Fash 112a-b	Costuming	3

Certificate Program

Fashion Merchandising

Consumer/Family Studies Division

Fashion is big business! Millions of people are involved in fashion production either through direct manufacture or through advertising, marketing or design. Americans spend more than \$82 billion on clothing each year. Over 30,000 new jobs have been created in the California apparel industry in a ten year period, and this trend is expected to continue.

Career opportunities are unlimited: retail sales, buyer or manager; fashion coordinator, fashion consultant, display specialist or public relations; teacher; plus related careers such as fashion journalism, advertising and manufacturer's sales representative.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Fash 76	Textiles	3
Fash 167	Applied Color Theory	2
Fash 175	Fashion Image	3
Fash 174a-b	Fashion Illustration	2
Fash 177	Introduction to Fashion Merchandising	3
Fash 178	Visual Merchandising and Promotion	3
Fash 179	Fashion Analysis	2
Fash 260	Career Dressing	1
Computer 130	Introduction to Personal Computers	4
CFS 194, 195 or 196	Work Experience	2-4
Total Units Needed for Certificate		25-27

Elective Courses

None

Certificate Program

Fire Technician

Special Programs Division

The Fire Technician program is usually taken by persons already working in a fire agency who want to advance in their position. Students learn fire fighting skills, fundamentals of how and why fires start, fire chemistry and physics, practical skills and leadership, command and control techniques at the scene of an emergency, fire protection laws, etc.

The program prepares students to work in fire agencies in fire fighting as well as management positions.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
FS 70	Basic Firefighter 1 - Academy	9
Required Electives (see below)		12
Total Units Needed for Certificate		21

Elective Courses (Choose twelve (12) units from this list)

Fire Tec 240	S.F.M. Non-Ambulance EMT-1 FS	4
Fire Tec 153	Fire Investigation	3
Fire Tec 154	Fund of Fire Service Operations	3
Fire Tec 156	Fire Service Hydraulic	3
Fire Tec 163	Fire Protection Equip/System	3
Fire Tec 171	Tech of Fire Serv Instr	1
Fire Tec 172	Tech of Fire Serv Instr	2

Certificate Program

Floral Technology

Agriculture Division

The sale of cut flowers, house plants and dried and silk flowers has increased rapidly in recent years. This is because of increases in the population and family income, but also because of an increased interest in the use of flowers. This certificate is designed for those seeking occupations in the floral industry as a florist.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
OH 111	Floral Design	3
OH 112	Sympathy Floral Designs	3
OH 113	Wedding Floral Designs	3
OH 119	Interiorscape	3
OH 101	Basic OH Skills	3
AG 201	Ag Math	3
Ag 105	Introduction to Ag Computers	3
Ag 193-196	Work Experience	1-4
Required Electives (see below)		9
Total Units Needed for Certificate		31-34

Elective Courses (choose nine (9) units)

OH 104	Nursery Practice	3
OH 105	Plant Propagation	3
OH 7	Landscape Design	3
OH 108	Landscape Construction	3
Art 1	Art Appreciation	3
Bus 170	Retail Store Salesmanship	3
Bus 171	Applied Professional Selling	3

Certificate Program

Food Service

Consumer/Family Studies Division

The food service industry is the #1 retail employer in the United States. Statewide, the restaurant business alone is a billion dollar industry, one of California's largest, with a projected annual growth rate of at least 7% over the next 10 years. Students majoring in this field will find a wide variety of contemporary employment opportunities such as chef, cook, caterer, menu planner, sales representative and food service manager in the restaurant industry; in schools, hospitals, day-care centers for the young and elderly, and other commercial food facilities; and in residential and health facilities.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Nutr/Food 107	Sanitation and Safety	2
Nutr/Food 105	Commercial Food I	3
Nutr/Food 106	Commercial Food II	3
Nutr/Food 18	Nutrition	3
CFS 195	Work Experience	3
Bus 188	Human Relations in Business	3
Required Electives (see below)		3
Total Units Needed for Certificate		20

Elective Courses (choose three (3) units)

Computer 130	Introduction to Personal Computers	4
Bus 287	Accounting for Service Businesses	3
Bus 395	Review of Arithmetic for Business	3
Bus 295	Business Math	3

Certificate Program

General Business/Clerical

General Business/Clerical

Business Division

Figures show that 65% of all new jobs are in the secretarial/clerical field. With the service sector of our economy growing so rapidly, it is very important that a majority of the population be trained in general business/clerical occupations. This program teaches a wide variety of skills such as compiling reports, posting data, preparing statements, operating typewriters, calculators and duplicators. Students should be able to find entry-level employment in all phases of business, including jobs as clerk typists, receptionists and word processing operators.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Business 160	Beginning Keyboarding	3
Or Business 161	Intermediate Keyboarding	3
Or Business 162	Advanced Keyboarding	3
Business 201	General Vocational Accounting	5
Or Business 287	Accounting for Service Businesses	3
Business 182	Introduction to Business	3
Or Business 188	Human Relations in Business	3
Or Business 174	Marketing	3
Or Business 170	Retail Store Salesmanship	3
Business 18	Business Law	4
Computer 130	Introduction to Computers	4
Computer 131	Beginning DOS	3
Business 184	Business Communications	3
Business 259	Records Management	2
Business 268	Electronic Calculating	2
Business 295	Business Arithmetic	3
Total Units Needed for Certificate		30-32

Elective Courses

None

Certificate Program

Horse Production

Agriculture Division

The Horse Management and Training Certificate Program includes classes that will expose students to many phases of the horse industry. Students will have the opportunity to train their own horses, along with the college owned stock. Students will study and learn about career and employment opportunities in the equine industry.

Required Courses

<u>Course Number</u>	<u>Course Description</u>	<u>Units</u>
An Sci 120a-d	Equitation (Requires 2 semesters)	2/2
An Sci 124a-d	Colt Breaking	2
An Sci 122	Horse Husbandry	3
Ag Mgt 105a-b	Introduction to Ag Computers (1st semester)	3
Ag 193-194-195-196	Work Experience	1-4
An Sci 1	Intro to Animal Science	3
An Sci 103	Animal Nutrition	3
An Sci 123	Horse Production	3
An Sci 104	Diseases and Sanitation	3
Required Electives (See below)		6
Total Units Needed for Certificate		31-35

Elective Courses (Choose six (6) units from this list)

Ag Mgt 104	Farm Records	3
Ag Mgt 105a-b	Introduction to Ag Computers (2nd semester)	3
Ag Mech 103	Farm Power	3
Ag Mech 102 a-d	Farm Construction	2
Ag 4	Soils	3
Ag Mgt 102	Ag Sales and Marketing	3
Ag 201	Ag Math	3

Certificate Program

Horticulture Technology

Agriculture Division

Horticultural Technology continues to be one of California's fastest growing industries. Students learn to grow and arrange plants and flowers, training in such areas as nursery production and operations, landscape drafting, design and construction, plant care and maintenance.

COS has many of its students now employed in ornamental horticulture and related agricultural fields such as floral designer, cut flower grower, plant propagator, retail florist, production foreman, plant inspector, pest control operator and garden writer.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
OH 101	Basic OH	3
OH 2 or 3	Plant ID	3
OH 104	Nursery Practice	3
OH 105	Plant Propagation	3
OH 106	Landscape Drafting	3
OH 109	Landscape Maintenance	3
OH 108	Landscape Construction	3
OH 110	Turfgrass Management	3
OH 107	Landscape Design	3
Ag 193-196	Work Experience	1-4
Required Electives (see below)		3
Total Units Needed for Certificate		31-34

Elective Courses (choose three (3) units)

Ag 3	Economic Entomology	3
Ag 4	Soils	3
Ag 5	Fertilizers	3
OH 118	Xeriscape	3
OH 111	Floral Design	3
OH 117	Sprinkler Irrigation	3

Certificate Program

Human Service (Social Work)

Social Science Division

Community needs of today require the needs of a variety of social service agencies to provide a variety of social service agencies to provide for the economic and emotional needs of those in difficulty. There is a need for trained individuals to provide service in these agencies on a variety of levels. Some of these programs have positions available for those with two years of college instruction. This is a two year program to prepare students to work in a community setting at a beginning or paraprofessional level, to train as aides in welfare eligibility work, mental health and family service aide, and other social service agency positions. Students will be required to spend several hours weekly as community service interns during the two-year program.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Hum Serv 120	Intro to Social Welfare	3
Hum Serv 21	Interviewing	4
Hum Serv 122	Intro of Human Services	3
Hum Serv 193	Work Exp/Internship	2
Hum Serv 194	Work Exp/Internship	2
Hum Serv 195	Work Exp/Internship	2
Hum Serv 228	Alcohol Interv Treat & Recov	2
Hum Serv 29	Drug Addiction	2
Psych 1	General Psychology	3
Psych 10	Human Sexuality	3
Sociology 126	Marriage & Family Life	3
CFS 186	Personal Management	3
Or Business 297	Personal Finance	3
Computer 5	Computer Info Systems	3
Total Units Needed for Certificate		35

Elective Courses

Hum Serv 196	Work Exp/Internship	1-4
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Certificate Program

Information Services/Wordprocessing

Business Division

If the world of whirring disks, chattering printers and blinking lights sounds interesting, consider enrolling in the Information/Word Processing option. This program teaches concepts, procedures and terminology, as well as the skills and applications necessary to operate computers. Information/Word Processing specialists find jobs in the automated office utilizing personal computers and various software packages such as word processing, database management and electronic spreadsheets.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Computer 130	Introduction to Computers	4
Or Computer 5	Computer Information Systems	3
Computer 131	Beginning DOS	3
Computer 134	Telecommunications	2
Computer 135	Desktop Publishing for Business	4
Computer 136	Wordprocessing with WordPerfect	3
Computer 137	Wordprocessing with WordStar	3
Business 161	Intermediate Keyboarding	3
Or Business 162	Advanced Keyboarding	3
Business 184	Business Communications	3
Or Business 293	Business English	3
Business 258	Office Procedures	3
Business 166	Professional Employment Preparation	3
Business 269	Machine Transcription	2
Total Units Needed for Certificate		32-33

Elective Courses

(alternate classes if typing requirement is met)

Business 132	Advanced DOS	2
Business 182	Introduction to Business	3
Business 188	Human Relations in Business	3
Business 260	Career Dressing	1
Business 268	Electronic Calculating	2

Enrollment in Business 160 or Business 360 is recommended if the keyboarding skill requirement is not met.

Certificate Program

Interior Design

Consumer/Family Studies Division

Interior designers develop an eye for line, form, color and texture to create pleasing spatial arrangements. There is an emphasis on art and drawing as well as knowledge of fashion and marketing. Interior design is a broad field. Careers include commercial/residential interior designer; color/materials consultant for model condominiums and in-house corporations such as hotel and restaurant chains; retail showroom salesperson in drapery, wallcovering, floor covering, upholstering and furniture stores; window display and visual promotion; and wholesale manufacturer's representative.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Int Des 121	Material/ID	3
Int Des 122	Housing/ID	3
Fash 76	Textiles	3
Fash 178	Visual Merchandising and Promotion	3
Bld Tr 200	Drawing for Building Construction	2
Bld Tr 201	Drawing for Building Construction	2
Draft 110	Introduction to Computer Drafting	3
Arch 10	Introduction to Design	3
Arch 11	Design Fundamentals	3
Arch 120	Freehand Drawing	3
Arch 121	Perspective	3
CFS 193, 194 or 195	Work Experience	1-3
Total Units Needed for Certificate		32-34

Elective Courses

None

Certificate Program

Landscape Technology

Agriculture Division

Landscapers are creative designers and installers of residential and commercial gardens and landscapes. They take a plot of land and turn it into an aesthetically appearing setting. Students learn drafting, designing, estimating, contracting, installation and maintenance and then create their own 10x10 foot patio scenes on the college farm. This program prepares students for work as a landscape contractor, designer, or draftsman, turf manager or grounds maintenance manager.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
OH 2	Plant Identification	3
OH 3	Plant Identification	3
OH 106	Landscape Drafting	3
OH 7	Landscape Design	3
OH 108	Landscape Construction	3
OH 109	Landscape Maintenance	3
OH 110	Turfgrass Management	3
Ag Mech 109	Small Engines	3
Ag 193	Work Experience	1-4
Required Electives (see below)		6
Total Units Needed for Certificate		31-34

Elective Courses (choose six (6) below)

OH 101	Basic Ornamental Horticulture	3
Ag 4	Soils	3
Ag 105	Fertilizers	3
Ag 201	Agricultural Mathematics	3
OH 105	Plant Propagation	3
OH 117	Sprinkler Irrigation	3
OH 118	Xeriscape	3
OH 119	Interiorscape	3

Certificate Program

Law Enforcement

Special Programs Division

Educational requirements have made entry into the law enforcement field highly competitive. An increasing number of prospective employers now require interested persons to have completed basic training requirements before applying for full-time or reserve positions. The Law Enforcement Training program equips students with the skills and knowledge to enter this highly rewarding field. The Law Enforcement Training program also provides inservice training for employed peace officers, correctional personnel and security guards. Each of the courses listed below offers a certificate of completion as well as unit credit.

Required Courses

Course Number	Course Title	Units
AJ 200	Basic Police Academy (Prerequisites: High School graduate no felony convictions/passing score on P.O.S.T. reading and writing test)	12
AJ 201a-e	Advanced Officer Training (Prerequisite: AJ 200)	1.5
AJ 203	Traffic Collision Investigation (Prerequisite: AJ 200)	2
AJ 204	Supervisory Techniques (Prerequisite: AJ 200)	5
AJ 208	PC 832, Laws of Arrest/Non-Firearms (Prerequisite: None)	2
AJ 209	Agency Firearms (PC 832) (Prerequisite: None)	1.5
AJ 210	Level III Reserve Peace Officer (Prerequisite: None)	3
AJ 211	Level II Reserve Peace Officer (Prerequisite: AJ 210)	5
AJ 212	Level I Reserve Peace Officer (Prerequisites: AJ 210/AJ 211)	3
AJ 220a-d	Basic Security Firearms (Prerequisite: None)	1
AJ 221	Security Side Handle Baton (Prerequisite: None)	1
AJ 299	Topics in Administration of Justice (Prerequisite: AJ 200)	0-12

Certificate Program

Maintenance Technician - Level 1

Maintenance Technician - Level 1

Industry and Technology Division

Level 1 Maintenance Technician is a one year (two semesters) 30 hour per week training program to provide students with job entry skills. The two non-degree 12 unit classes will provide students with over 1,050 hours of skill training in the areas of electricity, electronics, welding, machining, refrigeration, hydraulics, pneumatics, and other maintenance areas.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
(1st semester) I&T 300a-b	Maintenance Technician, Level 1	12
(2nd semester) I&T 300a-b	Maintenance Technician, Level 1	12
Total Units Needed for Certificate		24

Elective Courses

None

Certificate Program

Maintenance Technician - Level 2

Industry and Technology Division

Level 2 Maintenance Technician is a program made up of mechanical, electrical, and welding courses which should prepare a student with mechanical aptitude and interest to enter employment as a more advanced general maintenance main in a shop, packing plant or factory. General education courses may be chosen from the list of options listed under requirements for graduation for those who wish to earn an associate degree.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
I&T 110	Basic Machining	3
I&T 111	Machining/Manufacture Process	3
I&T 140	General Metalworking	3
I&T 142	Air Conditioning Sheet Metal	3
I&T 143	Adv Air Conditioning Duct Sheet Metal	3
I&T 190a-d	Supervised Practice	1-3
I&T 220	Water Treatment Fundamentals	3
I&T 221	Waste Water Management	3
I&T 270	Residential Wiring	3
I&T 272	Electrical Wiring Industrial	3
I&T 273	Electric Motor Controls	3
I&T 274	Electric Motor Cntrl/Prog Contr	3
I&T 275	Solid State Fundamentals for Electricians	3
I&T 303	Home Maintenance	1.5
I&T 351	Industry & Tech Math	2
Total Units Needed for Certificate		40.5-42.5

Certificate Program

Marketing

Business Division

Marketing is a wide-ranging concept. It is much more than advertising and promoting a product. It involves everything from researching whether a new product is needed to labeling, packaging, transportation, warehousing, merchandising and personal selling. Every organization's ability to survive is directly affected by marketing, and the Marketing option is a varied one. Approximately one out of three jobs is directly or closely related to marketing. Entry level jobs exist in manufacturing, service firms, wholesalers, retailers, advertising agencies, consulting firms and private and public non-profit organizations such as hospitals.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Business 170	Retail Store Salesmanship	3
Business 174	Marketing	3
Business 171	Applied Professional selling	3
Or Business 182	Introduction to Business	3
Or Business 188	Human Relations in Business	3
Business 287	Accounting for Service Businesses	3
Or Business 201	General Vocational Accounting	5
Business 18	Business Law	4
Computer 130	Introduction to Computers	4
Computer 131	Beginning DOS	3
Business 184	Business Communications	3
Business 268	Electronic Calculating	2
Total Units Needed for Certificate		28-30

Elective Courses

None

Certificate Program

Modeling

Consumer/Family Studies Division

The modeling option prepares the student for the professional and personal responsibilities of careers in fashion modeling and advertising, television and broadcasting, theater and stage presentation and public speaking. In addition to people interested in a modeling career, there are many whose employment and personal lives will be enhanced by the knowledge of modeling. This includes broadcast spokespersons, fashion coordinators and consultants, and individuals interested in boosting their self-confidence in dealing with the public.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Fash 117a-b	Makeup	3
Fash 170	Modeling	3
Fash 175	Fashion Image	3
Fash 177	Introduction to Fashion	3
Fash 167	Applied Color Theory	2
Fash 260	Career Dressing	1
Speech 1	Fundamentals of Public Speaking	3
Required Electives (see below)		3-4
Total Units Needed for Certificate		21-22

Elective Courses (choose three to four (3-4) units)

Nutr/Foods 18	Nutrition	3
Or Nutr/Foods 119	Nutrition for Fitness	2
AND one of the following:		
PE 1a-d		1
Dance 8a-d		1
Dance 10a-d		1

Certificate Program

Nursery Technology

Agriculture Division

Nursery Technology is an ideal field for people with a "green-thumb." Students work in the two-acre nursery area of the COS Farm propagating plants in the two large green houses, growing and maintaining house and garden plants, and learning to package them attractively for sale to retail and wholesale industries. Job opportunities in this field include nursery manager, owner and salesperson, grower, production foreman, turf specialist, landscape nurseryman and estimator.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
OH 101	Basic Horticulture Skills	3
OH 2	Plant Identification I	3
OH 3	Plant Identification II	3
OH 104	Nursery Practices	3
OH 105	Plant Propagation	3
OH 7	Landscape Design	3
OH 109	Landscape Maintenance	3
OH 110	Turfgrass Management	3
OH 106	Landscape Drafting	3
Required Electives (see below)		6
Total Units Needed for Certificate		33

Elective Courses (choose three (6) units)

Ag 3	Economic Entomology	3
Ag 4	Soils	3
Ag 5	Fertilizers	3
OH 111	Floral Design	3
OH 117	Sprinkler Irrigation	3
OH 119	Xeriscape	3
Ag 193	Work Experience	1-4

Certificate Program

Nutrition Aide

Consumer/Family Studies Division

The importance of proper nutrition is becoming more apparent as the American public becomes more health conscious. The Nutrition Aide program is designed for students working in clinical nutrition facilities or considering the field of dietetics. Completion of this program qualifies the student, under the guidance of a clinical dietitian or dietetic assistant, to work in a nutritional care department of a hospital, rest home or other facility that needs a person with foods and nutritional training.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Nutr/Food 101	Foods	3
Nutr/Food 107	Sanitation and Safety	2
Nutr/Food 18	Nutrition	3
CFS 194, 195 or 196	Work Experience	2-4
Required Electives (see below)		2-3
Total Units Needed for Certificate		12-15

Elective Courses (choose two to four (2-3) units)

Nutr/Food 112	Children's Nutrition	3
Nutr/Food 119	Sports Nutrition	2

Certificate Program

Plant Science and Industry

Agriculture Division

One of the greatest challenges of mankind is to produce enough food for future generations. To meet this challenge, students in the Plant Science and Industry program are trained in all aspects of crop production that will maximize yields as well as profits. Working on the COS Farm, they receive practical as well as technical experience in soils, irrigation, weed control, plant diseases and pests, fertilizers, cultivating and crop production. Good job opportunities exist in farming, irrigation and crop production as well as related industries such as equipment sales, fertilizers, crop protection and consulting.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Plnt Sci 1	Introduction to Plant Science	3
Plnt Sci 102	Row Crops	3/3
Plnt Sci 103	Cereal & Oil Crops	3
Plnt Sci 111	Citrus Fruits	3
Ag 3	Agricultural Entomology	3
Ag 4	Soils	3
Ag Mech 104	Farm Machinery	3
Ag Mgt 104	Farm Records	3
Ag 193-196	Work Experience	1-4
Required Electives (see below)		6
Total Units Needed for Certificate		31-34

Elective Courses (choose six (6) units)

An Sci 1	Introduction to Animal Science	3
Ag Mgt 5 a-b	Agricultural Computers	3
Ag 201	Agricultural Mathematics	3
Plnt Sci 104	Forage Crops	3
Plnt Sci 105	Weeds and Weed Control	3
Plnt Sci 12	Fruit and Nut Tree Production	3
Plnt Sci 113	Grape and Vine Production	3
Ag 105	Fertilizers	3
Ag Mech 108	Irrigation	3

Certificate Program

P.O.S.T. Basic Police Academy

Special Programs Division

The basic Police Academy is designed for anyone who desires a career as a law enforcement officer. Police officers must be certified, and the COS Academy is certified by the State of California Commission on Peace Officer Standards and Training (P.O.S.T.). This intensive course prepares a person to enter full-time police work with all the basic skills necessary, including training in fire arms, driver's training, CPR, intoxilizer, officer survival, community relations, and criminal law.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
AJ 200	Basic Police Academy	12

All applicants must be in good physical health, and certified by a medical doctor to participate in a strenuous physical activity program, over 18 years of age and no felony criminal record. A materials fee is charged in addition to normal college fees. Interested persons should contact the law enforcement training department prior to registering for the course for details of the application process.

Prerequisites:

Passing score on the entry level reading and writing test. This is a standardized examination administered at the College for non charge by the State of California Commission on Peace Officer Standards and Training.

P.O.S.T. Basic Police Academy

Certificate Program

Police Reserve (PC 832)

Police Reserve (PC 832)

Special Programs Division

The Police Reserve program is designed for students wanting to work part-time as a police officer. The program includes training at three levels as required by the State of California Commission on Police Officer Standards and Training (P.O.S.T.). All classes are in the evening.

Level III training qualifies the student to work in police work under close supervision. Level II qualifies the student to ride with a regular police officer. Level I qualifies the student to ride alone as a part-time officer.

All students must be in good physical health, over 18 years of age and have no felony record.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
<u>LEVEL III</u>		
AJ 210	Laws of arrest and Firearms	3
<u>LEVEL II</u>		
AJ 211	CPR, First Aid and Role of the Backup Officer, Weaponless Defense, shotgun	2
<u>LEVEL I</u>		
AJ 212	Completion of a total 136 hours of training	7.5

Elective Courses

None

Certificate Program

Real Estate

Business Division

Real estate is an exciting and energetic business with large amounts of money at stake. Real estate salespeople bring together buyers and owners of property to work transactions. Working under the supervision of a real estate broker, they sell, exchange and rent real estate for clients. Tasks include obtaining "listings" (agreements to sell property), locating potential customers, making appraisals, showing property, negotiating agreements, renting and managing property and developing new building projects.

Real estate salespeople must be licensed by the state. The COS program gives introductory training helpful in studying for the license and provides continuing education for people seeking license renewal.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Business 140	Real Estate Principles	3
Business 141	Real Estate Finance	3
Business 142	Legal Aspects of Real Estate	3
Business 143	Real Estate Economics	3
Business 145	Real Estate Appraisal	3
Computer 130	Introduction to Computers	4
Required Electives (see below)		9
Total Units Needed for Certificate		28

Elective Courses (choose nine (9) units)

Business 18	Business Law	4
Computer 131	Beginning DOS	3
Business 201	General Vocational Accounting	5
Business 202	General Vocational Accounting	5
Or Business 1	Principles of Accounting	4
Speech 1	Fund of Public Speaking	3

Certificate Program

Secretarial

Business Division

The strength of any well-run office is directly related to its secretary. A person trained in secretarial skills must be interested in all aspects of office operations. Therefore, this program incorporates the clerical skills of filing and typing with the more advanced skills of shorthand, word processing and administrative responsibilities. The secretarial position is usually a higher paying position and often acts as a springboard for advancement within the company. Related fields include legal secretary, medical secretary and office manager.

Required Courses

<u>Course Number</u>	<u>Course Description</u>	<u>Units</u>
Business 150	Elementary Shorthand	5
Business 151	Advanced Shorthand	5
Business 160	Beginning Keyboarding	3
Or Business 161	Intermediate Keyboarding	3
Or Business 162	Advanced Keyboarding	3
Computer 136	Wordprocessing with WordPerfect	3
Or Computer 137	Wordprocessing with WordStar	3
Business 182	Introduction to Business	3
Or Business 188	Human Relations in Business	3
Computer 130	Introduction to Computers	4
Computer 131	Beginning DOS	3
Business 184	Business Communications	3
Business 258	Office Procedures	3
Business 293	Business English	3
Total Units Needed for Certificate		35

Elective Courses

(alternate classes if typing and/or shorthand requirement is met)

Computer 132	Advanced DOS	2
Computer 135	Desktop Publishing for Business	4
Business 166	Professional Employment Preparation	3
Business 260	Career Dressing	1

Certificate Program

Security Guard Training

Special Programs Division

The Security Guard training program offers courses meeting state requirements for the certification of private security officers in such areas as fire arms, police baton and tear gas, as well as other courses improving skills of those already working in the field of security. These courses are offered on Saturdays several times every semester. Private security is a growing field with a variety of job opportunities in manufacturing firms, retail and wholesale businesses, hospitals, public institutions and in security systems.

Required Courses

<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
AJ 220	Basic Firearms 16 hours	1
AJ 221	Police Training 12 hours	1

Prerequisites:

Must be over 18 years of age with no felony record. The student must show U. S. citizenship to qualify for the Bureau of Consumer Affairs Security Firearms certificate. Other students, not wishing this certificate, may take the course for general interest.

Citizens'/security tear gas is offered as a community service course.

Certificate Program

Welding

Industry and Technology Division

The Welding Technology Certificate of Completion requires a grade of "C" or better in the five (5) following classes:

Required Courses

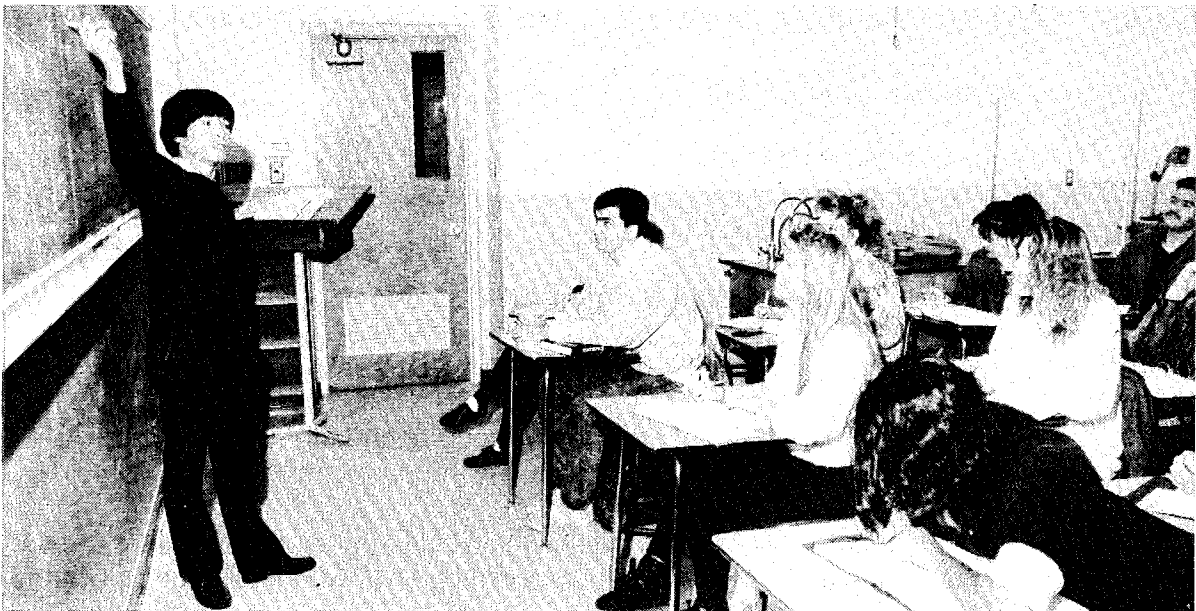
<u>Course Number</u>	<u>Course Title</u>	<u>Units</u>
Welding 161	Oxy-Acetylene Welding	4
Welding 162	Shielded Metal Arc Welding	4
Welding 171	Advanced Welding I	4
Welding 172	Advanced Welding II	4
Welding 181	Blueprint Reading and Ferrous Metallurgy	3
Required Electives (see below)		3-4
Total Units Needed for Certificate		22-23

The Welding Operator Qualification involves manipulative tests that conform to the A.W.S. D1.1 or D1.2 Structural Code, A.S.M.E. Pressure vessel codes, U.S.D.A. Sanitary Food Processing codes, and others.

Elective Courses (choose three to four (3-4) units)

Drafting 100	Applied Drawing	3
Drafting 110	Int to Computer Assist Draft	4
Chemistry 353	Survey of Intro Chemistry	3

COURSE DESCRIPTIONS



COURSE DESCRIPTIONS

Look.....

We have a NEW Course Numbering System

We have changed our course numbering system to enable our students to easily identify those courses needed in their plan of study at College of the Sequoias. We apologize for the inconvenience to those students who have memorized the old numbers; but we are sure they will benefit from this change in future planning of their studies at College of the Sequoias. Below is the new course numbering system.

Explanation of Numbering System

All courses numbered 299 or lower are associate degree credit courses. They can be applied toward the 60 unit AA/AS graduation requirement and for vocational certificates.

- 1-99** Courses accepted by the University of California system. For specific course to course articulation (equivalency), consult the Counseling Office or the Transfer Center.
- 1-199** Courses accepted by the California State University system and most other four-year colleges and universities. For specific course to course articulation (equivalency), consult the Counseling Office or the Transfer Center.
- 200-299** Associate degree applicable. Although not intended for university transfer, these courses may be accepted by some colleges in certain majors, especially if provided for in an articulation agreement.
- 300-399** College credit, Non-degree applicable, and basic skill courses.
- 400-499** Non-credit, general courses.
- 500-599** Not assigned at this time
- 600-699** Non-credit Handicapped courses.
- 700-799** Contract Educational Courses (non-ADA Courses)
- 800-999** Community Services Activities (non-ADA Courses)
- 1000-1099** Professional Development courses for faculty and staff. (0 unit, non-ADA courses)

Note: Courses identified on the following pages with an "*" by the course number are courses which were in the process of being approved by the College Curriculum Committee at the time of this catalog publication.

COURSE DESCRIPTIONS

A

ACCOUNTING

ACCT 1 PRINCIPLES OF ACCOUNTING 4 UNITS

Hours: 5 Lecture/Discussion

A course that introduces students to fundamental business organization; recording of business financial activities; accounting statements preparation and interrelationships; and the analysis of financial activities for sole proprietorships, partnerships and corporations. Formerly BUS 1A.

Recommended Prerequisite: Sophomore standing (at least 30 college units completed).

ACCT 2 PRINCIPLES OF ACCOUNTING 4 UNITS

Hours: 5 Lecture/Discussion

This is a second transfer-level Principles of Accounting course, which expands the discussion of corporate financing and ownership; continues financial statement analysis and interpretation; studies managerial control, information systems, cost accumulation and capital budgeting techniques; and other measuring and reporting methods. Formerly BUS 1B.

Recommended Prerequisites: Satisfactory completion of BUS 1.

ACCT 201 GENERAL VOCATIONAL ACCOUNTING 5 UNITS

Hours: 5 Lecture/Discussion

Accounting 201 is a vocational course in accounting principles and practice covering the effect of transactions, adjustments, closing and reversing entries on the asset, liability and owner's equity elements of professional, service and merchandising businesses. The above are recorded in general and various special journals and posted to general and subsidiary ledgers. Eight or ten column work sheets (working papers) are used for the purpose of organizing the financial data for the financial reports. Formerly BUS 80A.

ACCT 202 GENERAL VOCATIONAL ACCOUNTING UNITS 5

Hours: 5 Lecture/Discussion

This course continues to apply the fundamental accounting equation to additional topics, including: Computations for and recording of interest bearing and discounted notes payable, interest bearing notes receivable, discounting notes receivable and the end-of-period adjustments. Direct write-off and reserve methods for the treatment of uncollectible accounts. Methods of assigning values to ending inventories. In-depth study of various methods of depreciation and assigning costs to plant and equipment. The voucher system of accounting. Partnerships: characteristics of, division of net income or loss, realization and dissolution. Corporations: various classes of capital stock and related transactions, recording of and paying taxes, retained earnings and appropriations, cash and stock dividends. Issuance of bonds, bond sinking funds and bond redemptions. Analyzing and interpreting financial statements: vertical, horizontal and other. Manufacturing accounting: recording the various elements of, inventory values and the statement of the cost of goods manufactured. Formerly BUS 80B.

Recommended Prerequisites: Business 201 or Bus 1 or the completion of high school bookkeeping (accounting) with a grade of "A" or "B" in each of the four semesters, or the equivalent.

ACCOUNTING

ACCT 287 ACCOUNTING FOR SERVICE BUSINESSES 3 UNITS

Hours: 3 Lecture/Discussion

A vocational course in accounting principles and practice covering the effect of transaction, adjustment, and closing entries on the asset, liability and owner's equity elements of professional and/or service businesses. The concepts of cash, modified cash and accrual basis of accounting are studied. Other topics studied are bank statement reconciliations, petty cash funds, change funds, cash short or over, completing payroll registers, computing the employers payroll taxes and journalizing the data. This course is most suitable for those persons desiring a practical knowledge of accounting but do not intend to earn a bachelor degree and plan to work only for or have their own nonmerchandising form of business. Formerly BUS 87.

ADMINISTRATION OF JUSTICE

AJ 11 INTRO TO CRIMINAL JUSTICE 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to Criminal Justice offers an overview of the entire criminal justice system. This course refers to the structure, functions and decision making processes of the criminal justice system that work with the management and control of crime and criminal offenders—the police, courts, and corrections. Formerly CJ 1. (CAN-AJ 2)

AJ 12 PRINCIPLES & PROCEDURES FOR THE CRIMINAL JUSTICE SYSTEM 3 UNITS

Hours: 3 Lecture/Discussion

An in-depth study of the role and responsibilities of various segments of the criminal justice system including law enforcement, judicial, and corrections. A past, present, and future exposure to each subsystem procedures from initial entry to final disposition, and the relationship each segment maintains with the rest of the system. Formerly CJ 10.

AJ 13 COMMUNITY RELATIONS 3 UNITS

Hours: 3 Lecture/Discussion

An in-depth exploration of the roles of the criminal justice practitioners and their systems. Through interaction and study, the student will become aware of the interrelationships and role expectations among the criminal justice system and the community. Formerly CJ 18.

AJ 14 INTRODUCTION TO CRIMINAL LAW I 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to Criminal Law I is a historical development and philosophy of law and constitutional provisions, definitions, classification of crime, and their application to the criminal justice system; legal research; study of case law, methodology, and concepts of law as a social force. Formerly CJ 20. (CAN-AJ 4)

COURSE DESCRIPTIONS

ADMINISTRATION OF JUSTICE

AJ 110 POLICE PATROL PROCEDURES 3 UNITS
Hours: 3 Lecture/Discussion
 A practical and thorough study of the procedures, philosophies, and concepts of the police patrol system. Covers the important areas of patrol preparation, field observation, field interviews, patrol systems, arrest powers, basic investigative techniques, public service responsibilities, and their relationship to the criminal justice system. Formerly CJ 5.

AJ 111 WRITING FOR CRIMINAL JUSTICE 3 UNITS
Hours: 3 Lecture/Discussion
 Techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner in the various types of criminal justice system reports; letters, memoranda, directives, and administrative reports; emphasis on criminal justice terminology, use of English and organization of information; practical experience in note taking and report writing; presentation of testimony in court. Formerly CJ 15.

AJ 112 CRIMINAL EVIDENCE 3 UNITS
Hours: 3 Lecture/Discussion
 This course involves the origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; and kinds and degrees of evidence and rules governing admissibility. Judicial decisions interpreting individual rights and case studies are also studied. Formerly CJ 22. (CAN - AJ 6)

AJ 113 JUVENILE LAWS AND PROCEDURES 3 UNITS
Hours: 3 Lecture/Discussion
 This is a course of study in the organization, functions and jurisdiction of juvenile justice agencies in California and the various state juvenile justice agencies across the United States. The processing and detention of juveniles, juvenile case disposition, juvenile status, state and federal court procedures are examined. Formerly CJ 30.

AJ 114 JUVENILE DELINQUENCY 3 UNITS
Hours: 3 Lecture/Discussion
 This is an introductory course designed to explore the concept of juvenile delinquency. Emphasis is focused on defining delinquency and identifying who are the delinquents and theories of causation, (biological, psychological and sociological). A general review of societies' institution for delinquent, including formal agency dealing with delinquent behavior and community based programs designed for the prevention of delinquency. Formerly CJ 31.

AJ 115 CRIMINAL LAW II 3 UNITS
Hours: 3 Lecture/Discussion
6 Activity
 Historical development, philosophy of law and constitutional provisions; definitions, classifications of crime and their

ADMINISTRATION OF JUSTICE

application to the system of administration of justice; legal research, review of case law, methodology and concepts of law as a social force. Explores substantive crimes against persons, property and the state, as a social, religious and historical ideology. Formerly CJ 21.
Recommended Prerequisites: Adm Jus 11, 12, and 14.

AJ 116 PROBATION AND PAROLE 3 UNITS
Hours: 3 Lecture/Discussion
 Course contains a historical and theoretical perspective on the organization and functions of probation/parole. An emphasis on probation/parole as community based correctional services; principles and practices at the federal, state, and local levels. A review of the resocialization/reorganization processes pertaining to the criminal/juvenile offender. Formerly CJ 33.
Recommended Prerequisite: Adm Jus 32 Introduction to Corrections.

AJ 117 CORRECTIONS, INTERVIEWING AND COUNSELING 3 UNITS
Hours: 3 Lecture/Discussion
 An introduction to the philosophy and techniques of interviewing and counseling used in probation, parole, and corrections. Formerly CJ 34.
Prerequisite: Eligible for English 1, Adm Jus 11.

AJ 118 CRIMINAL INVESTIGATION 3 UNITS
Hours: 3 Lecture/Discussion
 This course is an in-depth study of the fundamentals of criminal investigation. Topics covered are techniques of crime scene search and recording, collection and preservation of physical evidence, modus operandi processes, sources of information, interview and interrogation, and follow-up investigation. Formerly CJ 43. (CAN-AJ 8)

AJ 119 CRIMINAL IDENTIFICATION 3 UNITS
Hours: 3 Lecture/Discussion
 Theory and practice in the study of fingerprints, description of persons, history of criminal identification and modus operandi in its application to individual characteristics. Study of new techniques used in suspect and victim criminal identification. Formerly CJ 44.

AJ 120 WOMEN IN THE CRIMINAL JUSTICE FIELD 3 UNITS
Hours: 3 Lecture/Discussion
 An in-depth study of the professional responsibilities and special functions of women in the administration of criminal justice/ corrections and related fields. The course will examine the historical and current employment of women in the criminal justice profession. Formerly CJ 46.

COURSE DESCRIPTIONS

ADMINISTRATION OF JUSTICE

AJ 121 INTRODUCTION - CORRECTIONS 3 UNITS

Hours: 3 Lecture/Discussion

This is an introductory course designed to review concepts of criminal and juvenile corrections. Emphasis is focused on exploring the history, principles and practices in the field of corrections, including local, state and federal correctional institutions. Formerly CJ 32.

Recommended Prerequisite: Criminal Justice 1.

AJ 200 BASIC POLICE ACADEMY 12 UNITS

Hours: 26 Lecture/Discussion
22 Activity

Materials Fee: \$75.00

A state certified basic training course for peace officers. Covers introduction to law enforcement, criminal law, evidence, administration of justice, criminal investigation, community-police relations, patrol procedures, traffic control, juvenile procedures, defensive tactics, firearms, and first aid. This course complies with the State Commission on Peace Officers Standards and Training Regulations. Formerly CJ 82.

Prerequisite: Passing score on the P.O.S.T. entry level reading and writing test, high school diploma or G.E.D., no felony criminal record, and a valid California Driver's License.

AJ 203 TRAFFIC COLLISION INVESTIGATION 2 UNITS

Hours: 36 Lecture/Discussion
4 Lab

This 40-hour course is intended to upgrade officer's skills in conducting preliminary investigations of traffic collisions. Formerly CJ 60I.

Recommended Prerequisite: AJ 200 or its equivalent.

AJ 204 SUPERVISORY TECHNIQUES 5 UNITS

Hours: 40 Lecture/Discussion
Variable Lab hours

The course satisfies a state mandate for the training of law enforcement first line supervisors. Topics include: values, ethics, professional principles, leadership styles, civil liability, performance appraisal and corrective counseling. This is a lecture-intensive course. However, role playing is utilized. Formerly CJ 83.

Prerequisite: Completion of Administrative Justice 200 or its equivalent.

AJ 208 P.C. 832 (NON-FIREARMS) 2 UNITS

Hours: 32 Lecture/Discussion
8 Lab (40 hour course)

Designed to satisfy the curriculum standards of the Commission on Peace Officers' Standards and Training (POST) as required by Penal Section 832. Topics include: Professional Orientation, California Criminal Law, Rules of Evidence, Laws of Arrest, Use of Force and Community Relations. This course is mandated by state law for persons in diverse peace officer classifications not requiring the carrying of firearms.

ADMINISTRATION OF JUSTICE

AJ 209 PC 832/FIREARMS 1.5 UNITS

Hours: 16 Lecture/Discussion
8 Lab

Designed to satisfy the curriculum requirements of the California Commission on Peace Officers' Standards as required by Penal Code Section 832. This course is required for probation officers, correctional officers and diverse other peace officer classifications whose jobs require the carrying of a side arm.

Recommended Prerequisite: AJ 208 or equivalent.

AJ 210 LEVEL 3, RESERVE POLICE OFFICER TRAINING 3 UNITS

Hours: 6 Lecture/Discussion
2 Lab

Materials Fee: \$28.00

Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training as required by Penal Code Section 832 in regards to Level III Reserve Peace Officers. Includes: professional orientation, law, laws of evidence, community relations, communications, report writing, arrest and control, firearms safety, care and cleaning, handgun shooting principles, and combat survival tactics. This course is mandated by state law for anyone who will work as a Level III Reserve Peace Officer. Formerly CJ 86A, CJ 86B.

AJ 211 LEVEL 2, RESERVE PEACE OFFICER TRAINING 3 UNITS

Hours: 8 Lecture/Discussion
16 Lab

Designed to satisfy the curriculum standards of the Commission of Peace Officers Standards and Training as required by Penal Code section 832 in regards to Level II Reserve Peace Officers. Includes: professional orientation, law, communications, driver awareness, force and weaponry, patrol procedures, traffic, custody, physical fitness and defensive techniques. The course is mandated for anyone who will work as a Level II (Ride-Along) Reserve Peace Officer. Formerly CJ 86C.

Recommended Prerequisites: Completion of Adm Jus 210.

AJ 212 LEVEL 1, RESERVE PEACE OFFICER TRAINING 3 UNITS

Hours: 8 Lecture/Discussion
Lab Hours variable

Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training as required by Penal Code section 832 in regards to Level I Reserve Peace officers. Includes: professional orientation, police community relations, law, evidence, patrol procedures, traffic, and criminal investigations. Upon completion of this course, the student will qualify a Level 1 (work alone) reserve peace officer. Formerly CJ 86D.

Recommended Prerequisites: Completion of AJ 210 and 211.

COURSE DESCRIPTIONS

ADMINISTRATION OF JUSTICE

AJ 220a-d BASIC FIREARMS 1 UNIT
Hours: 12 Lecture/Discussion
 4 Lab

Specialized training for private and industrial security as well as for persons seeking skills with personal firearms. This course is designed to meet specific requirements of the 16 hour California Bureau of Consumer Affairs and Commission on Peace Officer Standards and Training. Topics include: Legal and moral aspects of firearms use, sidearm familiarization and safety, and shooting fundamentals. Formerly CJ 71a-d.

AJ 221 POLICE TRAINING 1 UNIT
Hours: 8 Lecture/Discussion
 4 Lab

Specialized training for security guards, peace officers and other interested persons. This course is designed to meet specific requirements of the California Bureau of Consumer Affairs and the Commission on Peace Officer Standards and Training (P.O.S.T.). Formerly CJ 72a-d.

AJ 299 a-d ADVANCED PEACE OFFICER TRAINING 0-12 UNITS
Hours: Variable

An in-service training course for peace officers below management level. This course complies with regulations prescribed by the California Commission on Peace Officer Standards and Training (P.O.S.T.). The subject content is designed to meet current training needs in the area and will change with time. Formerly CJ 85a-d.

Recommended Prerequisites: Completion of AJ 200 (Basic Training Academy) or equivalent.

AGRICULTURE

AG 3 ECONOMIC ENTOMOLOGY 3 UNITS
Hours: 3 Lecture/Discussion

A general study of western insects, their life cycles, classification, and identification, methods of control, and economic importance in California.

AG 4 SOILS 3 UNITS
Hours: 2 Lecture/Discussion
 2 Lab

Materials Fee: \$20.00

This course covers the biological, chemical, physical and genetic soil properties, interpretation of soils information for agricultural management and production. It also includes proper land use and conservation, as well as, soil and water management. **Recommended Prerequisite:** Chemistry 1 or 20.

AGRICULTURE

AG 105 FERTILIZERS 3 UNITS
Hours: 2 Lecture/Discussion
 2 Lab

A broad study of fertilizers and soil amendments is done regarding their chemical and physical properties, methods of application, value in plant nutrition, interaction with soils and plants and visual recognition of typical plant nutrient deficiencies. Formerly AG 5.

Recommended Prerequisites: General Chemistry (1 or 20) or AG 4, Soils.

AG 125 PRINCIPLES OF PESTICIDE USE 3 UNITS
Hours: 3 Lecture/Discussion

A study of the fundamentals, basic concepts and principles of pesticide use, handling and application with emphasis on plant pests, pesticide mode of action and pest control methods, pesticide label interpretation, and worker safety. This course is designed for those preparing for agricultural pest control licensing or who require continuing education. Formerly AG 80a-c.

AG 201 AGRICULTURAL MATHEMATICS 3 UNITS
Hours: 3 Lecture/Discussion
 1 Lab

Practical problem-solving in soils, crops, dairy, horticulture, livestock, poultry, and feeds; discounts and interest percentages, linear measurements, area, volume, metric measures, and their application in today's agriculture. Formerly AG 1.

AG 299a-d SPECIAL TOPICS IN AGRICULTURE 1 UNIT
Hours: 36 Activity

The course is designed for a student to do individualized research in an agriculture topic area. A student must spend a minimum of thirty-six hours doing in-depth study of a topic with prior approval of the instructor. A hypothesis will be established, an outline discussed with the instructor and term paper will be completed after the research has been conducted. The course is designed to give students an opportunity to investigate preconceived ideas about agriculture subjects and then do research to prove or disprove their theories. Formerly AG 100a-d.

AG 300 INTRODUCTION TO THE AGRICULTURAL INDUSTRY 3 UNITS
Hours: 3 Lecture/Discussion
 1 Lab/Demonstration

This course will survey the agriculture industry with a special emphasis on careers, economics, animal, and crop sciences. This is one of a series of courses designed to help student develop competence and confidence necessary for successful college study in both academic and vocational courses. **Recommended Prerequisites:** Must be enrolled in the SUCCESS Program.

COURSE DESCRIPTIONS

AGRICULTURE

AG 301 a-d VECTOR CONTROL I 1 UNIT

Hours: 16 Lecture/Discussion
4 Activity

A course of regional training for public agency Vector Control personnel to meet biennial State certification requirements. Formerly AG 900a-d.

Prerequisites: Prospective or certified local public health Vector Control personnel, or by permission of division faculty.

AG 363 SPANISH FOR FARMERS 2 UNITS

Hours: 2 Lecture/Discussion
1 Lab

This course is designed to give students an understanding of the Spanish language as used by the farmworker. Students will practice translating short sentences useful to them in their work. They will also develop their reading of the Spanish language, and will have to practice speaking in Spanish. Formerly AG 63.

AGRICULTURE MANAGEMENT

AG MGT 1 INTRODUCTION TO AGRICULTURE ECONOMICS 3 UNITS

Hours: 3 Lecture/Discussion
1 Lab

The first course in the Agriculture Management Certificate Program at COS. The course gives a student a basic introduction to economics concerning the decision making process in determining what to produce, how much to produce and the law of supply and demand.

AG MGT 102 AGRICULTURE SALES AND MARKETING 3 UNITS

Hours: 3 Lecture/Discussion
1 Lab

This course covers the selling technique as it relates to the agriculture industry. Agriculture selling strategies and approaches are emphasized. Market research, prioritizing potential customers and defining the dominant buying urge are covered. Techniques used in pre-call planning, group and individual sales presentations are used to give students a basic understanding of the selling process. Improving self-image and oral communications skills are stressed for each student. Formerly AG MGT 2.

AG MGT 103 INTRODUCTION TO AGRICULTURE MANAGEMENT 3 UNITS

Hours: 3 Lecture/Discussion

Materials Fee: \$5.00

An introduction to the basic concepts of management as they relate to agriculture. Emphasis will be placed on the agribusiness organization and how basic management concepts are used in the management of agriculture businesses. The management environment, strategic planning and managerial decision-making will be discussed. The basic steps involved in organizational design will be covered with emphasis on the agribusiness organization and management process. Formerly AG MGT 3.

AGRICULTURE MANAGEMENT

AG MGT 104 FARM ACCOUNTING 3 UNITS

Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

An introduction to the basic concepts of accounting as they relate to agriculture. The course is designed to give students a basic understanding of accounting principles using a journal and ledger system, income statements, balance sheets and various other types of accounting procedures used in agriculture businesses. Students will be using computer applications for general accounting, payroll, depreciation, enterprise accounting and inventory control in the C.O.S. Agriculture Lab. Formerly AG MGT 4.

AG MGT 105a-b INTRODUCTION TO AGRICULTURE COMPUTERS 3 UNITS

Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$10.00

An introduction to the basic concepts of computers as they relate to agriculture. The course is designed to give students a basic understanding of computer principles using software programs such as SuperCalc 5, Wordstar 4.0 and DataBase Management III Plus. The course deals with the use of these software programs as they can be applied to agriculture. Formerly AG MGT 5a-b.

AGRICULTURAL MECHANICS

AG MECH* 101 BASIC FARM MECHANICS 3 UNITS

Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$7.00

An introductory course in the Ag Engineering discipline designed to give students a basic understanding of the theory and practical operation of farm shops. Formerly AG MECH 1.

AG MECH 102a-d FARM EQUIPMENT CONSTRUCTION 2 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$15.00

Farm Equipment Construction is an introductory course designed to give students a basic understanding of the mechanics and technology of building and the repair of agricultural implements. This class will study the characteristics, types, and costs of construction materials for their use in farm equipment and buildings. This is a practical course in building metal and wooden projects having to do with agriculture. Formerly AG MECH 2a-d.

COURSE DESCRIPTIONS

AGRICULTURAL MECHANICS

AG MECH FARM POWER 3 UNITS 103

Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

A study in the basic principles of the modern farm tractor including operation, service, repairs, and maintenance. Lectures, demonstrations and lab work will include theory and practical operation of all systems of diesel and gasoline powered tractors. Formerly AG MECH 3.

AG MECH FARM MACHINERY 3 UNITS 104

Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

A study in the basic principles of the modern farm equipment including the operation, service, repairs, and maintenance. Lectures, demonstrations, and lab work will include theory and practical operation of many different pieces of farm equipment. The following types of farm equipment will be studied: spray rigs, discs, plows, planters, cultivators, swathers, balers, and many others. Formerly AG MECH 4.

AG MECH FARM STRUCTURE 3 UNITS 105a-b

Hours: 3 Lecture/Discussion
1 lab

Materials Fee: \$5.00

Farm Structures is an integral part of the Agriculture Engineering curriculum designed to give the student a basic understanding of farm structures. The course will stress farmstead layout, cost of construction, foundation, types and sizes, column sizes and strength, live and static loads, and determining beam sizes and strengths. The repeatable b, c, and d courses that follow involve a higher level of skill development based upon the essential knowledge learned in "a." Each of these courses requires that the student successfully master the level below it in the hierarchy. Formerly ANIMAL SCIENCE 5a-b.

AG MECH FARM WELDING 2 UNITS 106a-b

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$9.00

A study of the fundamental principles and practices of arc and oxygen-acetylene welding as used in agriculture construction and repair of farm buildings, fences, and equipment. Lectures, demonstrations, and lab work will include theory and practical operations with many different electrodes and metal types. All positions, joint types, hard surfacing, cutting, brazing, and mig welding will be studied. Formerly AG MECH 6a-b.

AGRICULTURAL MECHANICS

AG MECH FARM SURVEYING 3 UNITS 107

Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

This course is designed to prepare the student to be able to compute cuts, fills, and cubic yards of soil to be moved for a land leveling job. The computer will be used to develop cut and fill maps for land leveling jobs. The student will be able to use levels, transits, rods, and chains to measure and survey. Laser scraper and tractors will be used to complete a land leveling job. Formerly AG MECH 7.

AG MECH IRRIGATION 3 UNITS 108

Hours: 3 Lecture/Discussion
1 Lab

A fundamental course designed to give students an understanding of basic soil and water relationships. The Blaney-Griddle formula is the foundation for irrigation design of when to irrigate and how much water to apply. Pumps, measurement, and transport of water and salt problems will be an important part of the study. Formerly AG MECH 8.

AG MECH SMALL ENGINES 2 UNITS 109 AND EQUIPMENT

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$5.00

A study in the basic principles of modern small engines, lawn and garden equipment including operation, service, repairs, safety, and maintenance. Lectures, lab work and demonstrations will include theory and practical operations of many different engines and equipment. The following types of equipment will be studied: spray rigs, lawn mowers, trenchers, thatchers, edgers, chain saws, sod cutters, and many others. Formerly AG MECH 9.

AG MECH AGRICULTURE PROJECT 2 UNITS 110a-d CONSTRUCTION

Hours: 2 Lecture/Discussion
2 Lab

Material Fee: \$15.00

Ag Project Construction is an introductory course designed to give students a basic understanding of the mechanics and technology of building and repairing agriculture implements. This class will study the characteristics, types, and costs of construction materials for their use in farm equipment and buildings. This is a practical course in building metal and wooden projects having to do with agriculture. Formerly AG MECH 10a-d.

COURSE DESCRIPTIONS

ANIMAL SCIENCE

AN SCI 1 INTRODUCTION TO ANIMAL SCIENCE 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

A survey course of the world's hunger problems and supply of animal products. The origin, characteristics, and adaptation of the more important breed of livestock are discussed, along with job opportunities in animal agriculture. It is a required course that can be applied toward the Animal Science Certificate.

AN SCI LIVESTOCK SELECTION AND EVALUATION 2 UNITS

**2 a-b
Hours: 2 Lecture/Discussion
2 Lab**

A study of the animal form in relation to its various functions. Beef, sheep, and swine species are evaluated using performance data and live observation. This course is designed to train students for intercollegiate livestock judging events.

AN SCI 22 HORSE HUSBANDRY 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

An introductory course to the current status of the horse industry, evaluation of the horse, breeds of horses, and their uses. Anatomy, diseases, unsoundness, vices, gaits, selection, and management of the equine.

AN SCI ANIMAL NUTRITION 3 UNITS

**103
Hours: 3 Lecture/Discussion
1 Lab**

A study of the constituents of feeds; the digestion and utilization of feedstuffs, and identification of feeds for each class of livestock. An introduction to feeding standards and computation of simple rations. The economics in feeding and purchasing feeds by nutritive values. Formerly AN SCI 3.

Prerequisites: Animal Science 1, Ag 201 or Math 230.

AN SCI ANIMAL DISEASES AND SANITATION 3 UNITS

**104
Hours: 3 Lecture/Discussion
1 Lab**

Animal Science 104 is a study of the common diseases and parasites of livestock. Topics of interest include, cause, symptoms, prevention and treatment of common diseases and parasites found in livestock, which are all taught in this course. Formerly AN SCI 4.

ANIMAL SCIENCE

AN SCI PREPARING LIVESTOCK FOR SHOWS AND SALES 2 UNITS

**105a-c
Hours: 2 Lecture/Discussion
2 Lab
56 Semester hrs. Activity**

Materials Fee: \$10.00

A general study of handling beef, sheep, and swine species, selecting high quality livestock, and grooming them to their best advantage for shows and sales. Students enrolled in this course will have the opportunity to participate at a senior division livestock show. Formerly AN SCI 5.

Recommended Prerequisite: Must be an agriculture major.

AN SCI INTRODUCTION TO MEAT SCIENCE 3 UNITS

**107
Hours: 3 Lecture/Discussion
1 Lab**

A study of the meat processing industry, USDA Grading Service, and marketing and nutritional aspects of meat products. Basic skills include the processing, handling, inspection, and storing of livestock and poultry species. Formerly AN SCI 6.

AN SCI MEAT GRADING AND SELECTION 2 UNITS

**108a-b
Hours: 4 Lecture/discussion
56 Lab hours/semester**

Materials Fee: \$5.00

An advanced course designed to train students in determining USDA Quality and Yield Grades of beef, lamb, and pork carcasses, along with the selection of wholesale cuts. Students may compete in intercollegiate judging events locally and out-of-state. Formerly AN SCI 9a-b.

Prerequisites: Animal Science 107 recommended.

AN SCI SWINE PRODUCTION AND MANAGEMENT 3 UNITS

**110
Hours: 3 Lecture/Discussion
1 Lab**

A study of swine production and herd management in California. Basic skills include pre- and post-natal care, nutrition, and breed selection. Formerly AN SCI 10.

AN SCI BEEF PRODUCTION AND MANAGEMENT 3 UNITS

**111
Hours: 3 Lecture/Discussion
1 Lab**

A study of beef production and herd management in California. Basic skills focus primarily on purebred and commercial cow-calf operations. Formerly AN SCI 11.

Prerequisites: Animal Science 1 is recommended.

COURSE DESCRIPTIONS

ANIMAL SCIENCE

AN SCI 112 SHEEP PRODUCTION AND MANAGEMENT 3 UNITS
Hours: 3 Lecture/Discussion 1 Lab

A study of sheep production in California with a special emphasis on basic management practices. Formerly AN SCI 12.

AN SCI 120a-d BASIC EQUITATION 2 UNITS
Hours: 2 Lecture/Discussion 2 Lab

Material Fee: \$50.00

The student will learn the proper way to catch, groom, saddle, bridle, and mount the horse. A great deal of time is spent on the proper use of their natural aids. Riding both bareback and under saddle, this class is designed to teach not only the students with little or no experience, but also the advanced riders wanting to develop their riding skills further.

AN SCI 123 HORSE PRODUCTION 3 UNITS
Hours: 3 Lecture/Discussion 1 Lab

Animal Science 123 involves the intense care of a breeding herd. The students have a hands-on approach to the care, feeding, and breeding of the horses at the COS Farm. This includes the care of the brood mares before, during, and after foaling, basic health concerns for a herd of horses, and experiences working with horses of all ages. Formerly AN SCI 23.

AN SCI 124a-b COLT BREAKING 2 UNITS
Hours: 2 Lecture/Discussion 2 Lab

Material Fee: \$5.00

The student will learn the proper way to catch, groom, saddle, bridle, mount the horse for the first time. A great deal of time is spent on ground work. The student will learn the proper method of loughing, driving the young horse from the ground. This class is designed to teach not only the students with little or no experience, but also the advanced riders wanting to develop their colt-breaking skills further.

AN SCI 225 EQUINE INDUSTRIES 1 UNIT
Hours: 12 Lecture/Discussion 12 Lab (Field Trip Class)

This required field trip will include visitations to several facilities that produce, raise, and sell horses on a commercial basis. Students will also visit the nation's largest independent breed association offices that handles the advertising and marketing for thousands of breeders. Formerly AN SCI 25.

ANTHROPOLOGY

ANTHRO 4 PRE-COLUMBIAN ART AND CULTURE OF THE AMERICAS: MESOAMERICA 3 UNITS

Hours: 3 Lecture/Discussion

CROSS REF: Art 4

A survey of the major cultures of Mesoamerica from the Early Hunters stage until the European conquest. The course uses art as a vehicle for understanding these peoples' philosophy, religion, politics, history, and economics. Included are the Olmec, Zapotec, Taino, Mixtec, Maya and Aztec.

Anthropology 4 is **NOT** open to students who have completed or are enrolled in Art 4. Formerly ANTHRO 6A. (CAN-ANTH 4)

Recommended Prerequisite: English 1

ANTHRO 5 PRE-COLUMBIAN ART AND CULTURE OF THE AMERICAS: CENTRAL AND SOUTH AMERICA 3 UNITS

Hours: 3 Lecture/Discussion

CROSS REF: Art 5

A survey of the major cultures of Central and South America from the Early Hunters Stage until the European conquest. The course uses art as a vehicle for understanding these peoples' philosophy, religion, politics, history, and economics. Anthropology 5 is **NOT** open to students who have completed or are enrolled in Art 5. Formerly ANTHRO 6B. (CAN-ANTH 2)

Recommended Prerequisites: English 1.

ANTHRO 10 CULTURAL ANTHROPOLOGY 3 UNITS

Hours: 3 Lecture/Discussion

Cultural Anthropology is a multi-disciplinary subject encompassing the studies of extinct and extant cultures (archaeology and ethnology) around the world. Emphasis is placed on the equality of man, his economic systems, religions, politics, kinships, personalities, social structures, linguistics, and cultural changes. Formerly ANTHRO 2.

Recommended Prerequisite: Eligibility for English 1.

ANTHRO 11: PHYSICAL ANTHROPOLOGY 3 UNITS

Hours: 3 Lecture/Discussion

The course discusses the behavioral characteristics of the living primates, the emergence of man and the evidence presented by human fossils. Human genetics and the probable reasons for human variation are considered, as is the physical adaptation of the human species to its environment. Formerly ANTHRO 4.

Recommended Prerequisite: Eligibility for English 1.

COURSE DESCRIPTIONS

ARCHITECTURE

ARCH 10 INTRODUCTION TO ARCHITECTURAL AND ENVIRONMENTAL DESIGN 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Introduction to creative problem solving within the professional fields of environmental design, specifically: Architecture, engineering, landscape architecture, interior design, construction, and city, urban and regional planning. The elements and principles of design and design processes are introduced as a basis for architectural analysis. Formerly ARCH 1A.

ARCH 11 ENVIRONMENTAL DESIGN FUNDAMENTALS 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

This course is the study of environmental and visual perception and the articulation of three-dimensional design elements including space, form, scale, texture, and light. Creative problem solving is integrated into development of communication and presentation skills. Formerly ARCH 1B.
Recommended Prerequisite: Architecture 10.

ARCH 20 INTRODUCTION TO GRAPHICS & PERSPECTIVE 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

The course is an introduction to the basic of techniques of graphical analysis, problem solving and presentation. The theories and principles of orthographic and isometric projection, descriptive geometry, vector geometry, and mechanical perspective are applied in the solution of problems in architectural design graphics. The laws of light, shade and shadow are also utilized in the preparation of architectural presentations. Formerly ARCH 2A.

ARCH 21 BASIC GRAPHICS 3 UNITS

Hours: 2 Lecture/Discussion
3 Lab

Architecture 21 continues the development of the techniques of graphic analysis and communication necessary for architects, engineers, planners and landscape architects. Various media and presentation techniques will be explored including perspective drawings and colored media.

Recommended Prerequisites: Architecture 20. Formerly ARCH 2B.

ARCH 40 STRENGTH OF MATERIALS 3 UNITS

Hours: 3 Lecture/Discussion

Architecture 40 introduces the basic principles of structural systems, structural design, and the structural properties of the materials used in the construction of buildings. Topics include loads on buildings, force systems, equilibrium, trusses, shear, moments and arch and cable structures.

Recommended Prerequisites: Physics 5 and Math 75. Formerly ARCH 6B.

ARCHITECTURE

ARCH 120 FREEHAND DRAWING 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

This is the initial course in freehand drawing. It is an intensive application of the media and techniques for developing interpretative and conceptual drawings within an environmental design context. The architectural entourage is the subject matter for graphical problem solving and communicative skill development. This class is required for all students majoring in architecture and is recommended for students interested in any design profession. Formerly ARCH 40.

ARCH 121a-c PERSPECTIVE ALTERNATIVES 3 UNITS

Hours: 3 Lecture/Discussion
3 Lab

A study of the fundamental concepts, principles, and applications of accelerated architectural perspective and rendering techniques. By utilizing charts, entourage, underlayment sheets, and photographs students will generate finished architectural renderings. This course is an invaluable career asset for people interested in architecture, illustration, building trades, and interior design. Formerly ARCH 44a-c.

ARCH 131 LIGHT WOOD FRAME CONSTRUCTION 3 UNITS

Hours: 3 Lecture/Discussion
3 Lab

An introduction to residential and light commercial building construction and construction documents including typical materials and systems, methods, codes, and cost estimating. Working drawings and specifications will be prepared for a residence or small commercial structure.

Recommended Prerequisites: Architecture 20 and 160. Formerly ARCH 31.

ARCH 141 STRESS ANALYSIS 3 UNITS

Hours: 3 Lecture/Discussion

An introduction to the basic principles of stress analysis of structures. Students will analyze and design beams, columns, indeterminate structures, and connections. The effects of soil and hydrostatic pressures on structural systems will be explored.

Recommended Prerequisites: Completion of Arch 40. Formerly ARCH 6C.

ARCH 150 COMPUTER ANALYSIS OF BUILDING ENERGY USE 2 UNITS

Hours: 2 Lecture/Discussion
2 Lab

A basic course in the application of computer programs approved by the California Energy Commission to demonstrate compliance with California Energy Commission to demonstrate compliance with California Building Efficiency Standards (Title 24) of new and remodeled residential and nonresidential buildings. Computer analysis of building heating and cooling requirements, and design applications for building energy efficiency.

Recommended Prerequisites: Some previous experience using computers. Formerly ARCH 20.

COURSE DESCRIPTIONS

ARCHITECTURE

ARCH 160 MATERIALS OF CONSTRUCTION 2 UNITS

Hours: 2 Lecture/Discussion

An Introduction to the materials and systems of materials used in building construction. The course combines the theories of materials and structures with practical applications of these theories. Field trips will be made to the construction sites of various types of structures under construction. Formerly ARCH 6A.

ART

ART 1 ART APPRECIATION 3 UNITS

Hours: 3 Lecture/Discussion

Art 1 introduces the student to a wide range of approaches to the visual arts, from a study of the personal, social, and physical functions of the arts to an understanding of the elements and principles of design and their utilization in visual analysis. The course culminates in an abbreviated survey of the major periods and artists of art history. Formerly ART 19.

ART 2 ART HISTORY 3 UNITS

Hours: 3 Lecture/Discussion

Art 2 traces the development of art from the Paleolithic era through the Middle Ages. The interrelationships between art and religion, politics, historical events, and philosophy are major foci of study. Formerly ART 1A. (CAN-Art 2)

ART 3 ART HISTORY 3 UNITS

Hours: 3 Lecture/Discussion

A survey of the history of art of the Western world and its socio-cultural milieu from the Proto-Renaissance to the present. Illustrated lectures. Formerly ART 1B. (CAN-Art 4)

Prerequisites: Art 2 is NOT a prerequisite to Art 3.

ART 4 PRE-COLUMBIAN ART AND 3 UNITS

CULTURE OF THE AMERICAS:
MESOAMERICA

Hours: 3 Lecture/Discussion

CROSS REF: Anthro 4

A survey of the major cultures of Mesoamerica from the Early Hunters stage until the European conquest. The course uses art as a vehicle for understanding these peoples' philosophy, religion, politics, history, and economics. Included are the Olmec, Zapotec, Tajin, Mixtec, Maya and Aztec.

Art 4 is **NOT** open to students who have completed or are enrolled in Anthropology 4. Formerly ART 2A.

Prerequisites: English 1 recommended.

ART

ART 5 PRE-COLUMBIAN ART AND 3 UNITS

CULTURE OF THE AMERICAS:
CENTRAL AND SOUTH AMERICA

Hours: 3 Lecture/Discussion

CROSS REF: Anthro 5

A survey of the major cultures of Central and South America from the Early Hunters Stage until the European conquest. The course uses art as a vehicle for understanding these peoples' philosophy, religion, politics, history, and economics. Art 5 is **NOT** open to students who have completed or are enrolled in Anthropology 5. Formerly ART 2B.

Prerequisite: English 1 recommended.

ART 5H ART AND ARCHAEOLOGY - HONORS 4 UNITS

Hours: 4 Lecture/Discussion

A study of the fundamental ideas and values evolved by Pre-Columbian South Americans as they are reflected in their art, archaeological remains, historical records, and more recent oral traditions and rituals. Formerly Art 2BH. (CAN-Art 4)

Prerequisites: Admission to the Honors Program.

ART 6 COLOR AND DESIGN 3 UNITS

Hours: 2 Lecture/Discussion

2 Lab

CROSS REF: CFS 6

Materials Fee: \$10.00

This is a basic course in art with a primary purpose of familiarizing the students with elements and principles used in design art. It includes fundamental concepts of form, shape, line and color in second dimensions. Formerly ART 6A. (CAN-Art 16; CAN H EC 4 includes ART 6 and 7 or CFS 6 and 7)

ART 7 COLOR AND DESIGN 3 UNITS

Hours: 2 Lecture/Discussion

2 Lab

CROSS REF: CFS 7

Materials Fee: \$10.00

This is an advanced course in the principles of color and design. It includes a further discovery of the basic design elements of form, shape, line, and color. This class takes these previous principles and applies them to the 3-dimensional form. There is an emphasis on personal artistic statements toward assignment in the Art 7 class. Formerly ART 6B. (CAN H EC 4 includes Art 6 and 7 or CFS 6 and 7)

Recommended Prerequisite: Art 6 or CFS 6.

ART 8 DRAWING FUNDAMENTALS 3 UNITS

Hours: 2 Lecture/Discussion

2 Lab

Materials Fee: \$10.00

A basic course designed to introduce the beginning student to the fundamentals of drawing. Lecture and studio practice emphasize such fundamentals as perspective and shading, use of a pencil, markers, ink, and charcoal. This course is strongly recommended for beginning art major and persons wishing to develop a non-verbal skill of communication. Formerly ART 7A. (CAN-ART 8)

COURSE DESCRIPTIONS

ART

ART 9 DRAWING COMPOSITION 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

Materials Fee: \$10.00

A second semester drawing course exploring the expressive and compositional aspects of drawing. Art 8, Drawing Fundamentals, is a recommended prerequisite. Formerly ART 7B.

ART 10a-d FIGURE DRAWING 2 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$10.00

Art 10a-d is basically a drawing course designed to provide the learner with a variety of approaches in representing the human figure. Formerly ART 8a-d.

Recommended Prerequisite: Art 8.

ART 11a-d SCULPTURE 2 UNITS

Hours: 1 Lecture/Discussion
3 Lab

Materials Fee: \$20.00

The manipulation of 3-dimensional materials and basic studio practices using clay, plaster, wood, fibers, and synthetic materials. Techniques of sculpturing and the finishing processes for preservation. Formerly Art 10a-d.

Recommended Prerequisites/Co-requisites: Art 6 or 8.

ART 12a-b WATERCOLOR PAINTING 2 UNITS

Hours: 2 Lab
2 Activity

The theory and techniques of watercolor painting. Studio practice in still life landscape and other subject matter using watercolor media.

Recommended Prerequisites: Art 6, Art 8.

ART 13a-d STUDIO PAINTING 2 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Lecture and studio practice in the theory, techniques, and styles of easel painting. Emphasis on oil and acrylic mediums. Can be repeated for up to 8 units credit.

Recommended Prerequisites: Art 6 and 8. Formerly Art 15a-d.

ART 15 PRINTMAKING 2 UNITS

Hours: 1 Lecture/Discussion
3 Lab

Materials Fee: \$20.00

A basic course in the use of the following printmaking areas: silkscreen, metal etching, and collagraphs.

Recommended Prerequisite: Art 6. Formerly ART 20A.

ART

ART 16 ADVANCED PRINTMAKING 2 UNITS

Hours: 1 Lecture/Discussion
3 Lab

Materials Fee: \$20.00

An advanced course in the use of printmaking. This course will develop a student's personal artistic ideas using the printmaking process.

Recommended Prerequisite: Art 6 and Art 15. Formerly Art 20B.

ART 17a-b BASIC CERAMICS 2 UNITS

Hours: 1 Lecture/Discussion
3 Lab

Materials Fee: \$20.00

A basic course in making object in clay using coil, pinch and slab construction techniques. Both additive and subtractive approached will be explored and student will be provided with a beginning level exposure to throwing clay on a wheel. Formerly ART 53a-b.

ART 18a-b DECORATIVE CERAMICS 2 UNITS

Hours: 1 Lecture/Discussion
3 Lab

Materials Fee: \$20.00

This class is an overview of various materials and methods employed by production potters, with emphasis on use of the potters wheel, mold making and slip casting. Major emphasis on problem-solving and involvement with the "art-making" process. Formerly ART 54a-b.

ART 101 INTRODUCTORY CRAFTS 2 UNITS

Hours: 2 Lecture/Discussion
3 Lab

Materials Fee: \$20.00

Selected experiences from various craft areas. Recommended for art majors, elementary education majors, prospective teacher aides, and anyone interested in general crafts. Formerly ART 3.

ART 103 ART ILLUSTRATING 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$20.00

Students will experience the exciting and fast-paced life of an agency artist, taking their commercial illustrations from layout to comp to camera-ready, creating excellent portfolio pieces. As well as creating projects like full-color magazine spreads, T-shirt designs etc., students will experience various agency jobs and learn to bill the customer. Formerly ART 5a-c.

Recommended Prerequisites: Art 6 and/or Art 8 or by permission of the department.

COURSE DESCRIPTIONS

ART

ART 104a-d LETTERING FOR GRAPHICS 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab

Manipulation of graphic tools; examples, pencils, pens, ink, watercolor into the development of precise and interesting letter forms. Formerly ART 11a-d.

ART 110 ART STUDY TOUR 1 UNIT
Hours: 20 Lecture/Discussion

Art 110 is an art tour course for general students, the public, and art majors. Participants are expected to prepare themselves prior to the tour by reading pertinent materials selected by the instructor. These may include art historical, archaeological and historical sources as well as more general orientations to the region/regions being visited. The purpose of the course is to expose students, first hand, to major works of art (including painting, sculpture, and architecture). Evaluation of students' work will be based on participation, an assigned essay and/or examinations. Formerly ART 18.

ART 111a-b EXHIBITION DESIGN, GALLERY 2 UNITS
Hours: 1 Lecture/Discussion
3 Lab

This course covers the theory and technique of the proper presentation of art works; the exhibition of student, local, and national professional artists' works; and the participation in the display of projects other than those of works of art. Formerly ART 25a-b.

ART 114 ART PRODUCTION 3 UNITS
Hours: 2 Lecture/Discussion
4 Lab

This course covers the process and preparation of graphic design for advertising and editorial assignments.

Recommended Prerequisites: Art 6 and/or Art 8, Art 103, or by permission of the department.

ART 174a-b FASHION ILLUSTRATION 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab

CROSS REF: FASH 174a-b

Fundamentals of fashion illustration, including a study of current fashion ideals; drawing fashion proportioned figures and faces, rendering garment details, fabrics and accessories; familiarizing student with fashion publications; preparing illustration including layout, stylizing drawings, and matting drawings for presentation. Formerly ART 13a-b.

ART

ART 212 PAINTING/PHOTOGRAPHIC REALISM 2 UNITS
Hours: 2 Lecture/Discussion
2 Lab

Exploration and practice of the historical and contemporary use of photography as the subject and an aid to painting. Beginning and advanced work in oils and/or acrylics. Formerly ART 60a-d.

Recommended Prerequisites: Art 6 and 8.

ASTRONOMY

ASTRONOMY INTRODUCTION TO ASTRONOMY 3 UNITS
10
Hours: 3 Lecture/Discussion

A survey course covering the basic concepts, theories, history, and laws of astronomy. Emphasis will be given to motions of the moon, sun, and planets; use of astronomical instruments; study of stellar spectra; properties of the stars; planetology and characteristics of the bodies of our solar system. Laboratory and observation sessions acquaint the student with the tools and methods used in acquiring knowledge about the universe.

Recommended Prerequisite: Eligible for enrollment in English 1. Completion of Math 53 with a grade of "C" or better or a score on the COS Math Placement Test taken within three semesters which indicates mastery of intermediate algebra.

AUTOMOTIVE MECHANICS

AUTO 100 BENCH WORK AND SAFETY 1 UNIT
Hours: 1 Lecture/Discussion

The first course in the automotive program and is required for all Auto Mech students. Topics that will be covered are development of shop skills, safe conduct and use of tools, fastener tightening procedures, bolt size selection, use of correct fluids and tire construction and care. Formerly AUTO 70.

AUTO 101 AUTOMOTIVE ELECTRICITY 4 UNITS
Hours: 3 Lecture/Discussion
4 Lab

An introductory course in the automotive electrical system. Instruction covers the inspection, testing and repair of the total electrical system. The lab portion of the course is conducted in a service garage type atmosphere which allows the students to receive as much hands-on experience as possible. Formerly AUTO 71.

Recommended Prerequisite: Automotive Mechanics 100.

COURSE DESCRIPTIONS

AUTOMOTIVE MECHANICS

AUTO 102 FUEL AND COOLING SYSTEMS 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

A core course in automotive fuel and cooling systems. Instruction covers the testing and repair of the complete automotive fuel system; cooling system operation, testing and repair; emission control systems inspection and repair. The student will be working with both trainer models and operational units. Formerly AUTO 72.

Prerequisites: Automotive Mechanics 100 and 101.

AUTO 103 AUTOMOTIVE ENGINES 4 UNITS

Hours: 2 Lecture/Discussion
6 Lab

Instruction in the construction, theory and repair of the automotive engine. The lab work will require that the student perform the necessary steps to rebuild an automotive engine. The student will be required to furnish an engine for their lab work. Formerly AUTO 73.

Prerequisites: Automotive Mechanics 100 and 101.

AUTO 104 AUTOMOTIVE POWER TRAIN ANALYSIS 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

A study of the mechanical transmission of power utilized in the modern automobile and light truck. Study includes clutch operation and repair; three, four, and five speed transmissions operation and repair; drive shaft, differential and drive axle operation and repair; power steering pump and power steering gear operation and repair. Formerly AUTO 74.

Recommended Prerequisites: Automotive Mechanics 100 and 101, or employment as an apprentice mechanic.

AUTO 105 BRAKES AND ALIGNMENT 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab/Demonstration

Instruction in basic hydraulics, repair and reconditioning of several types of standard and power braking systems. Instruction in alignment, steering geometry and suspension systems. Formerly AUTO 75.

Prerequisites: Automotive Mechanics 100 and 101.

AUTO 106 AUTOMATIC TRANSMISSIONS 4 UNITS

Hours: 2 Lecture/Discussion
6 Lab

A study of automatic transmissions and transaxles currently used in domestic and import automobiles and light trucks. Study includes torque converter operation and diagnosis; hydraulic system function and diagnosis; planetary gear theory and application. These theories and principles are then put into practice by overhauling specified two and three speed automatic transmissions. Formerly AUTO 76.

Recommended Prerequisites: Automotive Mechanics 100 and Automotive Mechanics 101, or employment as an apprentice mechanic.

AUTOMOTIVE MECHANICS

AUTO 107 ADVANCED AUTO TRANSMISSIONS 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

An advanced course in automatic transmission service and repair. The student will have already passed the basic course and will be ready to deal with today's more sophisticated transmissions. The course is generally directed toward the Chrysler, Ford, and General Motors automatic overdrive transmissions. Automatic transaxles are also covered in the course of study. Formerly AUTO 77.

Recommended Prerequisites: Automotive Mechanics 100, 101, and 106.

AUTO 108 AUTOMOTIVE ENGINE TUNE-UP 5 UNITS

Hours: 3 Lecture/Discussion
6 Lab

Instruction in advanced electrical theory, related to the entire electrical system, transistor ignition and regulation. Transistor distributor and alternator overhaul. Tune-up and trouble-shooting of the engine and related circuits. Formerly AUTO 78.

Recommended Prerequisites: Automotive Mechanics 100 & 101. Automotive Mechanics 102 may be taken concurrently.

AUTO 109 AIR CONDITION AND ACCESSORIES 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

Instruction in most automotive accessories with emphasis in heating and air conditioning system diagnosis and repair. Formerly AUTO 79.

Recommended Prerequisites: Automotive Mechanics 100 & 101.

AUTO 113 COMPUTERIZED ENGINE CONTROL 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab/Demonstration

Instruction in advanced electrical theory related to computerized engine controls, trouble-shooting and repair of computer control systems on the modern automobile. Formerly AUTO 82.

Recommended Co-requisite: Auto Mechanics 108.

AUTO 160 BASIC AUTOMOTIVE ELECTRICITY 2 UNITS

Hours: 2 Lecture/Discussion
1 Lab

Instruction in the theory of electricity, magnetism and induction. Theory and operation of battery, starting ignition, generating and regulating systems. Overhaul and service of all of the above items. Formerly AUTO 59.

COURSE DESCRIPTIONS

AUTOMOTIVE MECHANICS

AUTO 161 AUTOMOTIVE ENGINE TUNE-UP 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
 Study of compression, electrical and fuel systems as it pertains to automotive tune-up. Formerly AUTO 61.

AUTO 162 AUTOMOTIVE TRANSMISSIONS 2 UNITS
Hours: 1 Lecture/Discussion
2 Lab
2 Activity
 An introductory course in automatic transmission theory, maintenance and repair. Study includes torque converter operation and diagnosis; hydraulic system function and diagnosis; planetary gear theory and application. These theories and principles are then put into practice by overhauling specific three and four speed automatic transmissions. Formerly AUTO 62.

AUTO 164 AUTOMOTIVE AIR CONDITIONING 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
 Instruction in automotive heating and air conditioning systems operation, diagnosis, and repair. Formerly AUTO 64.

AUTO 165 AUTOMOTIVE FUEL SYSTEMS 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
 An in-depth study of automotive fuel systems. Instruction covers testing and repairing carburetors, mechanical and electronic fuel injection. Fuel pumps filters and support components of the automotive fuel system are covered in the course of study. Formerly AUTO 65.
Recommended Prerequisite: Basic engine theory recommended.

AUTO 166 AUTOMOTIVE BRAKES 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
 Instruction in basic hydraulics, repair and reconditioning of several types of drum brakes, disc brakes, and power braking systems. Formerly AUTO 66.

AUTO 167 AUTOMOTIVE WHEEL ALIGNMENT AND SERVICE 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
 Instruction in automotive front wheel alignment, steering geometry, front suspension systems, and wheel balancing. Formerly AUTO 67.

AUTOMOTIVE MECHANICS

AUTO 168 AUTOMOTIVE POWER TRAIN 2 UNITS
Hours: 1 Lecture/Discussion
2 Lab
2 Activity
 Instruction in theory, servicing, maintenance and repair of automotive clutches, manual transmission, transaxles, universal joints, drive lines, drive axles and differentials. This course is primarily designed to allow already employed mechanics to broaden their fields of expertise in automotive repair. Formerly AUTO 68.

AUTO 169a-c COMPUTER/ELECTRONIC CONTROLLED OPTIONS 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
 Provides upgrading and retraining to current employees in the automotive industry. Provides a learning environment for understanding new concepts and skills that are now necessary for automotive technicians due to the integration of computer controlled engine systems. Formerly AUTO 81a-c.
Recommended Prerequisite: It is recommended that the participant have an automotive background. The class will combine students with very little repair experience with journeymen who have had extensive training.

AUTO 300 AUTOMOTIVE FAMILIARIZATION 1.5 UNITS
Hours: 2 Lecture/Discussion
1 Lecture/Demonstration
 A **nine week** survey course in automotive technology. The course of study includes batteries, starters, ignition systems, fuel systems, charging systems, brakes, tires and wheels. The course is for those with minimal mechanical knowledge and ability. The primary thrust is to teach the students how to shop for the correct product or service to meet their individual needs. Such items as which battery to buy, how often the oil should be changed, and other periodic maintenance requirements will be covered. Formerly AUTO 91.
Prerequisite: Must be enrolled into the SUCCESS Program.

AUTO 363a-d CLEAN AIR CAR COURSE 2 UNITS
Hours: 4 Lecture/Discussion
2-4 Lab
 An intense course of study designed to develop technical skills in emission systems maintenance. The course will prepare the student for certification by the Bureau of Automotive Repairs to test, replace or repair automotive emission components. The course of study includes a summary of the causes of automobile emissions, the vehicle components designed to control each of these undesirable gases, and the test procedure required to evaluate each component's condition. Formerly AUTO 63a-d.
Recommended Prerequisites: Auto 100, 101, 102, 108 and 113 or employed by a registered automobile repair facility.

COURSE DESCRIPTIONS

AUTOMOTIVE MECHANICS

AUTO 499 PROFESSIONAL TECHNICIAN UPDATE 0 UNITS

Hours: Lecture/Discussion as arranged by instructor

An introduction to current and advanced automotive technology to keep automotive technicians up to date on changes in the industry. Formerly AUTO 92a-d.

B

BIOLOGY

BIOLOGY GENERAL ZOOLOGY 5 UNITS

1
Hours: 3 Lecture/Discussion
6 Lab

Biology 1 is the first of a two course sequence (with Biology 2) that serves as the introductory year of biology for biology majors (premedicine, predentistry, prepharmacy, marine biology, biology teaching, etc.). The course studies the principles of the comparative anatomy, physiology, and embryology of the major animal phyla. Detailed consideration is given to organismic, cellular and organelle levels of organization. Other topics presented include molecular biology, biochemical and Mendelian genetics, ecology, and evolution. (CAN-BIOL SEQ A Includes Biology 1, 2, and 103)

Recommended Prerequisite: Completion of one semester of college chemistry (Chem 1 or 20). Biology 103 is a co-requisite.

BIOLOGY 2 GENERAL BOTANY 5 UNITS

Hours: 3 Lecture/Discussion
6 Lab

A biology major's course of study of the basic principles of plant cytology, morphology, biochemistry, plant diversity, classification, phylogenetic survey, evolution, speciation, taxonomy, physiology, and ecology. These principles are developed for the plant, monera, fungi, and protist kingdoms. The course is a combination of lecture, laboratory, and field experience. (CAN-BIOL SEQ A includes Biology 1, 2, and 103)

Prerequisite: One semester of college chemistry, Biology 1 and Biology 103.

BIOLOGY 20 FRONTIERS IN BIOLOGY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

A general principles course for transfer students that are not life-science majors. The principles of homeostasis, genetics, energy flow, evolution, reproduction and ecology will be used to explore contemporary topics in biology. Not open to students who have received credit for Biology 1.

Recommended Prerequisite: Eligible for English 1. Formerly BIOLOGY 10.

BIOLOGY

BIOLOGY FRONTIERS IN BIOLOGY - HONORS 4 UNITS
20H

Hours: 3 Lecture/Discussion
2 Lab
1 Honors Colloquium

A general principles course for transfer students that are not life-science majors. The principles of homeostasis, genetics, energy flow, evolution, reproduction and ecology will be used to explore contemporary topics in biology. Not open to students who have received credit for Biology 1. Formerly BIOLOGY 10H.
Co-requisite: Acceptance into the COS Honors Program.

BIOLOGY PLANT BIOLOGY 3 UNITS

21
Hours: 3 Lecture/Discussion
2 Lab

This is a general principles course in plant biology for the nonbiology major. The principal topics included are: general characteristics of plants, plant survey, methods of classification and nomenclature, plant structure and function, growth and development, reproduction and genetics, and ecology. (Not open to students who have received credit in Biology 2.) Formerly BOTANY 10.

Recommended Prerequisite: Eligible to enroll in English 1.

BIOLOGY 22 ANIMAL BIOLOGY 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

This is a general principles course in animal biology designed to help meet a laboratory requirement for transfer students who are not life-science majors. The principles of the scientific method, evolution and adaptation, bioenergetics, homeostasis, genetics, and ecology are emphasized in class and field activities. It is not open to students who have received credit for Biology 1. Formerly ZOOLOGY 10.

Recommended Prerequisites: Eligible for English 1.

BIOLOGY 25 HUMAN ECOLOGY 3 UNITS

Hours: 3 Lecture/Discussion

This survey course covers ecological principles and the historic and modern impact of human societies as agents of ecosystem modification. Formerly ECOLOGY 1.

BIOLOGY 30 HUMAN ANATOMY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

Biology 30 is a general survey course designed to acquaint the beginning student with enough anatomical principles necessary to understand the basic structure of the human body. A systems approach based on the histology of organs is used. Problem solving which utilizes creative thinking, critical thinking, analysis and reasoning as utilized by the International Committee for Anatomical Nomenclature is emphasized. This course will satisfy the needs of health and life science majors requiring a course in human anatomy. Formerly ANATOMY 1. (CAN-BIOL 10).

COURSE DESCRIPTIONS

BIOLOGY

BIOLOGY 31 HUMAN PHYSIOLOGY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

Biology 31 is a general survey course designed to acquaint the beginning student with enough physiological principles necessary to understand the basic functioning of the human body. In lecture, basic principles of homeostasis, cellular functions, myoneural physiology, internal secretions, circulation, immunity, gas exchange, elimination of wastes, fluid and electrolyte balance and acid-base balance are covered. Demonstration, instrumentation and experiments in the lab cover techniques and procedures involved in cellular physiology, the translocation of material, reflexes and sensations, endocrine studies, metabolic rates, muscle-nerve preparations, breathing and various physiological recordings such as EKGs and EMGs. Formerly PHYSIOLOGY 1.

Prerequisites: Biology 30, General Chemistry, Math at least through Algebra.

BIOLOGY 40 GENERAL MICROBIOLOGY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

This is a basic foundation course designed primarily for students entering the health sciences, home economics, and related fields. Depending upon the transfer school, this class also meets the needs of life science majors. This course covers development of the science of microbiology through modern times; anatomy, morphology and physiology of microbes; techniques of cultivation and identification; growth control measures (physical, chemical, chemotherapeutic) plus isolation and disposal techniques for contaminated materials; medical microbiology (disease and infection, host defenses/immunology, epidemiology and public health measures); water microbiology (treatment, testing, and hazards); food and dairy microbiology (emphasis on safety and sanitation); as well as aspects of industrial microbiology. Attention is given to theory as well as to practical application. Formerly MICROBIOLOGY 1.

Recommended Prerequisite: Chemistry 20 and one college level course in life sciences.

BIOLOGY 103 MATTER, ENERGY AND LIFE 1 UNIT

Hours: 18 hr. Lecture course

This course applies chemical and physical principles to cellular anatomy and physiology, emphasizing replication, transcription, translation, and the biochemistry of enzymes. Biology 103 meets one hour each day during the first three and one-half weeks of the semester. Formerly BIOLOGY 15. (CAN-BIOL SEQ A includes Biology 1, 2, and 103)

Prerequisites: One semester of college level chemistry. Biology 103 is to be taken concurrently with Biology 1.

BIOLOGY

BIOLOGY 230 ANATOMY AND PHYSIOLOGY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

A survey of human anatomy and physiology designed to develop an understanding of the correlation of the structure and function of the body. The laboratory will consist of microscope work, dissection, experimentation, and demonstrations. This course does NOT satisfy the requirements for entrance into the registered nursing program and is not accepted as a transfer course by most state universities. Formerly BIOLOGY 14.

BUILDING TRADES

BLD TR 104 CARPENTRY (RESIDENTIAL CONSTRUCTION) 3 UNITS

Hours: 3 Lecture/Discussion

An introductory lecture course in residential construction that covers various phases of house building as they occur on the job. Pre-job planning, nomenclature, fasteners, building layout, insulation and roofing, and proper employee practices are also included. Formerly BLD TR 55A.

Recommended Prerequisite: BLD TR 114 and BLD TR 200 should be taken concurrently.

BLD TR 105 CARPENTRY (RESIDENTIAL CONSTRUCTION) 3 UNITS

Hours: 3 Lecture/Discussion

The second course in residential construction that covers various phases of house building as they occur on the job. Dry-wall, interior finish work, exterior finish work, and proper employee practices are included. Formerly BLD TR 55B.

Recommended Prerequisites: BLD TR 104.

BLD TR 108 ADV CARPENTRY ROOF FRAMING 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

A study of the fundamental concepts, principles and applications of roof framing covering the many phases of: roof design, planning and estimating, safety, use of materials, trade nomenclature, the identification of, proper use of, and maintenance of the hand tools and power tools used in the construction of the cut and stack type of roofs. The student will study the techniques of laying out and cutting the various kinds of roofs. Formerly BLD TR 56A.

Recommended Prerequisites: Bldg. Trades 104, 105, 114, 115, 299 or 201; trade experience; or permission of the department.

COURSE DESCRIPTIONS

BUILDING TRADES

BLD TR 109 ADV CARPENTRY 3 UNITS

STAIR BUILDING, ESTIMATING, LOT DESCRIPTIONS

Hours: 2 Lecture/Discussion
4 Lab

A study of the fundamental concepts, principles, and applications of stair building, estimating, and lot descriptions. The student will study the techniques of layout out and cutting various kinds of stairs, the various methods of estimating, and investigate the ways property is laid out and numbered in the state of California. Formerly BLD TR 56B.

BLD TR 114 CARPENTRY 4 UNITS

(PROJECT HOUSE CONSTRUCTION)

Hours: 2 Lecture/Discussion
6 Lab

The first class in the Building Trades program that provides hands-on learning through the process of constructing a house. The student will participate in the construction of a house including building layout, construction of foundation floor, wall, ceiling and roof systems, roofing, plumbing, insulating and window installation. Formerly BLD TR 75A.

Recommended Prerequisite/Corequisite: Building Trades 104 and 200 should be taken concurrently.

BLD TR 115 CARPENTRY 4 UNITS

(PROJECT HOUSE CONSTRUCTION)

Hours: 2 Lecture/Discussion
6 Lab

The second class in the Building Trades program that provides hands-on learning through the process of constructing a house. The student will participate in the construction of a house including dry-wall installation, taping and texturing, interior finish carpentry, exterior finish carpentry, painting and finish plumbing. Hand and power tools are provided, although the students are required to provide their own nail bags and tape measures. Formerly BLD TR 75B.

Recommended Prerequisites: BLD TR 104, 200, 114, 105 and 201. BLD TR 105 and 201 are normally taken concurrently.

BLD TR 118 CARPENTRY 4 UNITS

(PROJECT HOUSE CONSTRUCTION)

Hours: 3 Lecture/Discussion
3 Lab

The third project house class, this an advanced study of house construction, covering the many phases of, safety, the layout and construction of the foundation, underpinning, floor joists and subfloor, plates and walls, ceiling joist, rafters, and the different kinds of roof covering. Also included in the course of study is the use of materials and trade nomenclature. Formerly BLD TR 76.

Recommended Prerequisites/Corequisite: Building Trades 104, 105, 114, 115, 200, and 201 or by permission of the department.

BUILDING TRADES

BLD TR 119 CARPENTRY 4 UNITS

(PROJECT HOUSE CONSTRUCTION)

Hours: 3 Lecture/Discussion
3 Lab

The fourth project house class, this an advanced study of house construction, covering the many phases of safety, the layout and installation of drywall including taping and texturing. Finish carpentry such as hanging doors, jambs, casing, base boards and windows. Apply the exterior finish and trim. Also included in the course of study is the use of materials and trade nomenclature. Formerly BLD TR 76B.

Recommended Prerequisites/Corequisite: Building Trades 104, 105, 114, 115, 200, and 201 or by permission of the department.

BLD TR 130 BLUEPRINT 3 UNITS

READING, RESIDENTIAL CONSTRUCTION

Hours: 3 Lecture/Discussion

A study of the fundamental concepts, principles and applications of blueprint reading. The student will learn the basic fundamentals of reading and interpreting building plans and specifications. It is of great value to the person pursuing a career in drafting, construction inspection, real estate, or as a maintenance engineer. Formerly BLD TR 53A.

BLD TR 134 RESIDENTIAL 3 UNITS

CONSTRUCTION ESTIMATING

Hours: 3 Lecture/Discussion

A study of the fundamental concepts, principles, and applications covering the many phases of residential construction estimating. Such items as cost, materials, quality of materials, materials take off, and trade nomenclature will be discussed and studied for each phase of estimating. Formerly BLD TR 54A.

Recommended Prerequisites: Other Building Trades classes offered by C.O.S.; working knowledge of the construction trade; permission of the department.

BLD TR 138 CONTRACTORS 3 UNITS

LICENSE LAW

Hours: 3 Lecture/Discussion

A study of the fundamental concepts, principles, and applications of construction laws, lien laws, safety, and business laws concerning the construction industry. Building Trades 138 is designed for the individual interested in taking the California State examination for the General Contractors (B) License, or the Specialty Contractors (C) License, or for the student interested in the laws governing the construction trade. Formerly BLD TR 59.

Recommended Prerequisites: BLD TR experience or permission of the department.

COURSE DESCRIPTIONS

BUILDING TRADES

BLD TR 150 CABINETMAKING AND MILLWORK 4 UNITS

Hours: 4 Lecture/Discussion
2 Lab

A study of the fundamental concepts, principles, and applications of cabinetmaking and mill work covering many phases of cabinet design, safety, use of materials, cabinet drafting and sketching, planning and estimating, trade nomenclature, theory of cabinet construction, and methods of layout. Formerly BLD TR 77A.

Recommended Prerequisites/Corequisite: Building Trades 104, 105, 114, 115, 200, and 201 or by permission of the department.

BLD TR 151 CABINETMAKING AND MILLWORK 4 UNITS

Hours: 4 Lecture/Discussion
2 Lab

A study of the fundamental concepts, principles, and applications of cabinetmaking and millwork covering the many phases of cabinet design, safety, use of materials, cabinet hardware, glues, clamps, trade nomenclature, cabinet construction, methods of layout, counter tops, and the installing of cabinets and tops. Formerly BLD TR 77B.

Recommended Prerequisites/Corequisite: Building Trades 104, 105, 114, 115, 200, and 201 or by permission of the department.

BLD TR 160 CABINETMAKING AND MILLWORK LAB 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

Materials Fee: \$5.00

A study of the fundamental concepts, principles, and applications of cabinetmaking and millwork covering the many phases of: tool and machine safety, the identification of, proper use of, and maintenance of, the hand tools, power tools and machines used in the cabinet shop. The students will study woodworking techniques, cabinet and milling drawing details, various methods of layout, and construction of the project house millwork. Formerly BLD TR 78A.

Recommended Prerequisites/Corequisite: Building Trades 104, 105, 114, 115, 200, and 201 or by permission of the department.

BLD TR 161 CABINETMAKING AND MILLWORK LAB 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

A study of the fundamental concepts, principles, and applications of cabinetmaking and millwork covering the many phases of: tool and machine safety, identification of hand tools, hand power tools and machines used in the cabinet shop, proper use of hand tools, hand power tools, and machines, tool and machine maintenance, woodworking construction, cabinet and milling details and drawings and various methods of layout, and construction of project house cabinets. Formerly BLD TR 78B.

Recommended Prerequisites/Corequisite: Building Trades 104, 105, 114, 115, 150, 151, 200, and 201 or by permission of the department.

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BUILDING TRADES

BLDG TR 162 CABINETMAKING AND MILLWORK LAB 3 UNITS

Hours: 5 Lecture/Discussion
11 Lab
(Six week course)

This course includes study of the fundamentals, concepts, principles and applications of cabinetmaking and millwork covering: tool and machine safety, identification of hand tools, hand power tools and machines used in the cabinet shop, proper use of hand tools, hand power tools and machines, tool and machine maintenance, woodworking construction, cabinet and milling details and drawings, various methods of layout and the construction of cabinets. Formerly BLD TR 78C.

BLD TR 176 BUILDING SUPERVISION AND INSPECTION—ARCHITECTURE 3 UNITS

Hours: 3 Lecture/Discussion

A one semester course designed to meet the needs of persons engaged in the supervision and inspection of buildings under construction, emphasizing the study of engineering symbols and use of model codes together with the mathematics necessary to interpret plans and specifications for building inspection and project supervision. Formerly BLD TR 83.

Recommended Prerequisites: BLD TR; those engaged in building inspection; those engaged in the construction industry or consent of the department.

BLD TR 180 MULTIPLE RESIDENTIAL FIRE SPRINKLERS 2 UNITS

Hours: 1.5 Lecture/Discussion
1 Lab

Building Trades 180 trains and educates the student to inspect and/or design fire sprinkler systems for homes, apartments and motels. The course is for sprinkler contractors, fire inspectors and building inspectors and interested home owners. The course requires one and one-half hours per week of lectures with extensive class participation. One hour per week will be used to layout and design fire sprinkler systems. At least two hours per week will be required to fulfill homework assignments. Formerly BLD TR 83.

BLD TR 200 DRAWING FOR BUILDING CONSTRUCTION 2 UNITS

Hours: 2 Lecture/Discussion
2 Lab

A required four (4) hour per week practical course in drawing for the building trades. The fundamentals of architectural drafting, blueprint reading, details, symbols, codes and specifications are covered. The floor and foundation plans for the Project House are developed in this class. Formerly BLD TR 51A.

Recommended Prerequisites: BLD TR 104 and BLD TR 114 (usually taken concurrently).

COURSE DESCRIPTIONS

BUILDING TRADES

BLD TR 201 DRAWING FOR THE BUILDING TRADES 2 UNITS

**Hours: 2 Lecture/Discussion
2 Lab**

A required course in drawing for all building trades students. The fundamentals of architectural drafting, blueprint reading, details, symbols, codes and specifications are covered. The ceiling framing plan, roof framing plan, sections, elevations, and electrical plans for the Project House are developed in this course. Formerly BLD TR 51B.

Recommended Prerequisites: BLD TR 104, 105, 114, 115 and 200. BLD TR 101 and 115 are normally taken concurrently.

BUSINESS

BUS 18 BUSINESS LAW 4 UNITS

Hours: 4 Lecture/Discussion

A survey of the principles of business law with particular emphasis given to legal environment, contracts and agency. Students are given guidelines for making a contract for an A and/or B grade. Students experience how preparing and simulating court cases show both sides of the dispute and how such disputes relate to every day business problems. This, or a similar course in legal principles, is required by most four year colleges for a major in business administration. It should be recommended for the paralegal student and also as an elective to the liberal arts student. Success in the course will, to a great degree, depend upon a student's reading, writing, and verbal skills. (CAN-BUS 8)

BUS 20 BUSINESS STATISTICS 3 UNITS

Hours: 3 Lecture/Discussion

This is an introductory course in elementary statistics and probability for business administration majors. The course content includes graphic presentation of data, measures of central tendency and dispersion, times series analysis, index numbers, sampling and sampling techniques, tests of hypothesis, probability distributions including the binomial hypergeometric, poisson, and normal distributions, and simple linear regression and correlation analysis.

Recommended prerequisite: Two years of high school Algebra or completion of Math 230.

BUS 119 QUANTITATIVE METHODS 3 UNITS

Hours: 3 Lecture/Discussion

This is an introductory course in quantitative methods for Business Administration majors. The course is designed to develop an appreciation of the value of quantitative methods in decision making. Formerly BUS 19.

Recommended Prerequisites: Two years of high school Algebra or completion of Math 230.

BUSINESS

BUS 127 INVESTMENTS 3 Units

Hours: 3 Lecture/Discussion

Students will become acquainted with alternative investments such as savings, stocks, bonds, mortgages, and other securities, mutual funds, credit unions, banks, real estate investment, trusts, insurance, portfolio management, and the operations of the financial markets. Formerly BUS 27.

Recommended Prerequisite: Score equal to English 251 on the COS Placement Test.

BUS 138 LEADERSHIP TRAINING I 1 UNIT

Hours: 1 Lecture/Discussion

CROSS REF: Leadership Training 101

This class is offered to give students leadership training and is one of a sequence of classes designed to prepare them for leadership roles. Students learn to write Measurable Learning Objectives, which is a means of establishing a plan of action leading to self-improvement and provides and understanding of how to maximize learning opportunities on the job. Coverage of the organizational structure, the development of management thought, styles of leadership, discipline, communications, and the evaluation process provide a framework for the understanding of the responsibilities of a leader.

BUS 139 LEADERSHIP TRAINING II 1 UNIT

Hours: 1 Lecture/Discussion

CROSS REF: Leadership Training 102

This class builds on Leadership Training I. Students interested in advancing into leadership positions will be instructed in problem solving techniques, which will be presented through lecture and case problem analysis. The presentation of motivation theories and a behavior modification project will add to the understanding of tools available to the leader to accomplish organizational goals. Methods of bringing about change in organizations and a presentation of authority, power, and influence are integral parts of leadership coverage. Students will be instructed on how to present the best image in a job interview and each will be taken through the process of preparing or updating their working papers.

Recommended Prerequisites: Bus 138

BUS 150 ELEMENTARY SHORTHAND 5 UNITS

Hours: 5 Lecture/Discussion

Business 150 is a beginning symbol shorthand class covering the theory and technique of Gregg of Century 21 shorthand. The recommended prerequisites of a score equal to English 251 on the placement test and a keyboarding skill of 30 cwpm are essential if one is to be successful. Students will learn all the theory of the shorthand system, speed building, autonomization of brief forms and the application of the theory. Formerly BUS 50.

Prerequisites: Score equal to English 251 on the placement test and a keyboarding speed of 30 cwpm.

COURSE DESCRIPTIONS

BUSINESS

BUS 151 ADVANCED SHORTHAND 5 UNITS

Hours: 5 Lecture/Discussion

Business 151 is the second semester shorthand course where emphasis is placed on the skills necessary to use shorthand in the office. In addition to shorthand theory, the class covers transcription skills, speed building and vocabulary enlargement. Formerly BUS 51.

Prerequisites: Completion of Business 150 with a grade of "C" or better; or completion of a one or two-year high school shorthand curriculum with a grade of "C" or better. Keyboarding speed of 40 cwpm. Score equal to English 251 on the placement test.

BUS 160 BEGINNING KEYBOARDING 3 UNITS

**Hours: 2 Lecture/Discussion
 3 Lab**

Business 160 is a beginning keyboarding course covering touch typing, formatting letters, reports and tables. Students are expected to develop speed and accuracy on production work and timings. Formerly BUS 60.

BUS 161 INTERMEDIATE KEYBOARDING 3 UNITS

**Hours: 2 Lecture/Discussion
 3 Lab**

Business 161 is an intermediate course with emphasis on business correspondence, forms, tables, manuscripts, and production typing. The student will review the fundamentals of typewriting and will strive to improve his/her speed and accuracy, not only on straight copy materials, but on forms and letters as well. Formerly BUS 61A.

Recommended Prerequisite: Business 160 or one year of previous typing instruction.

BUS 162 ADVANCED KEYBOARDING 3 UNITS

**Hours: 2 Lecture/Discussion
 3 Lab**

Business 162 is an advanced keyboarding class which allows the student to demonstrate his/her proficiency in the application and knowledge of business situations be able to key problems in various letter or table styles, verify information or look it up in the instructions within an acceptable time frame. Provides an opportunity to demonstrate speed and accuracy as well as his/her understanding of typical office problems such as keyboarding letters, legal documents, manuscripts, and business forms. They are given experience in various types of office assignments including general offices, medical offices, legal offices, government, and financial offices. Formerly BUS 61B.

Recommended Prerequisites: Business 161 or its equivalent; Satisfactory keyboarding speed of 40 cwpm.

BUSINESS

BUS 166 PROFESSIONAL EMPLOYMENT 3 UNITS

PREPARATION

Hours: 3 Lecture/Discussion

This course is designed to increase the student's understanding of researching jobs and organizations, employment interviewing, getting a job, professional development including communication skills by presenting theories, techniques, and principles behind these skills. Students will develop a personal portfolio. Formerly BUS 66.

Prerequisite: English 251 or Business English 184 recommended.

BUS 170 RETAIL SALESMANSHIP 3 UNITS

Hours: 3 Lecture/Discussion

A practical course in retail sales principles and practices which emphasizes career opportunities, the current market environment, contemporary sales, techniques and the sales promotion. Open to all students considering permanent or part-time retail sales positions. Required for marketing certificate, and the A.A./A.S. degrees in marketing, general business/clerical skills, and home economics fashion merchandising majors. Formerly BUS 70.

Recommended Prerequisite: English 251 score on the placement test.

BUS 171 APPLIED PROFESSIONAL 3 UNITS

SALESMANSHIP

Hours: 3 Lecture/Discussion

An examination, study, and analysis of general and individual factors and applied techniques which influence persons toward buying goods and services. The selling process is scientifically observed and implemented. Formerly BUS 71.

BUS 182 INTRODUCTION TO BUSINESS 3 UNITS

Hours: 3 Lecture/Discussion

Business 182 is an introductory course which examines the business enterprise. The course covers a wide range of topics which include social responsibility and business ethics; business organization and functions; the historical, environmental and economic setting of business; the human resource; the structure of American business; and management of business. For the business major, this course assists him/her in choosing an area of specialization and an orientation to the business administration field. For other students, this course will show them how the business system affects them in their role as wage earner or consumer. Formerly BUS 92.

Recommended Prerequisite: Score equal to English 251 on the placement test.

BUS 184 BUSINESS COMMUNICATIONS 3 UNITS

Hours: 3 Lecture/Discussion

The student entering this course should be proficient in English grammar. The course is designed to improve the student's communication skills. Written work will be done on personal computers using wordprocessing software so that rewrites can be done easily. Formerly BUS 96B.

Recommended Prerequisites: English 1 score on the placement test or as "C" grade in either English 251 or Business 293.

COURSE DESCRIPTIONS

BUSINESS

BUS 188 HUMAN RELATIONS IN BUSINESS 3 UNITS

Hours: 3 Lecture/Discussion

Students will become acquainted with those accepted patterns of behavior and performance standards which will enhance their skills in the workplace. The student learner will be exposed to management techniques applicable in his/her business, domestic, personal, and social life. Discussion and classroom material explores possible problems and solutions in management and employee relationships. Formerly BUS 98.
Recommended Prerequisite: English 251.

BUS 256 MEDICAL TERMINOLOGY 3 UNITS

Hours: 3 Lecture/Discussion

The course is designed to provide a foundation for the understanding of medical terminology using simple, nontechnical explanations of medical terms. The fundamentals of word analysis are explained to make the understanding of complex terminology easier. Formerly BUS 56.
Recommended Prerequisite: A score equal to English 251 on the COS Placement Test.

BUS 258 OFFICE PROCEDURES 3 UNITS

Hours: 3 Lecture/Discussion

This course will acquaint the students with the secretarial world and help them decide if these are the areas of expertise they wish to pursue throughout their working career. The subject matter covers a broad spectrum of the duties of a clerical worker including composition, telephone techniques, selection of equipment, procedures, grooming, and human relations. It prepares the student for initial office jobs and lays the foundation for job growth. Formerly BUS 58A.

Recommended Prerequisites: Business 161 or its equivalent; Satisfactory keyboarding of 30 cwpm.

BUS 259 RECORDS MANAGEMENT 2 UNITS

Hours: 2 Lecture/Discussion

A business management course presenting a quick overview of the opportunities in the field of filing, the methods for processing, storing, retrieving, and restoring the various kinds of records that businesses must keep. The operation of the most commonly used filing systems and methods are presented. This course is recommended for all business majors. Formerly BUS 59.

BUS 260 CAREER DRESSING 1 UNIT

Hours: 2 Lecture/Discussion

CROSS REF: Fash 260

Designed for students who want to update, enhance, and improve their career appearance. Specific methods for the selection of clothing and accessories suitable for the working environment are presented. Excellent preparation for all students desiring to make the right impression for interviews and career changes. Formerly BUS 58B.

BUSINESS

BUS 268 ELECTRONIC CALCULATING 2 UNITS

Hours: 1 Lecture/Discussion
2 Lab

This course introduces the student to the electronic calculator, develops the touch method, builds speed in using the calculator, reviews the principles of arithmetic, and transfers the skills to the solution of business problems. Formerly BUS 68.

Recommended Prerequisite: Business 395. If the student has not recently had a course in arithmetic, or it may be taken concurrently.

BUS 269 MACHINE TRANSCRIPTION 2 UNITS

Hours: 2 Lecture/Discussion
1 Lab

Machine transcription is a skill course where the student must be able to type, punctuate, format and spell the material that he/she transcribes from taped dictation. Proficiency requires a working knowledge of basic English skills. Upon satisfactory completion the student would be able to transcribe at a rate of 40 to 50 correct words a minute. Formerly BUS 69.

Recommended Prerequisite: Typing 40 cwpm or concurrent enrollment in Business 161; Business 293 or English 251.

BUS 274 MARKETING PRINCIPLES 3 UNITS

Hours: 3 Lecture/Discussion

This course provides basic understanding of marketing principles as well as training and experience in planning, producing, storing, promotion, selling and distribution of commodities.

BUS 282 INDIVIDUAL INCOME TAX 5 UNITS

Hours: 5 Lecture/Discussion

Materials Fee: \$5.00

A study of the Federal and California income tax laws that apply to the individual taxpayer(s), the application of the laws by computation of various practical problems and the completion of forms required by the Internal Revenue Service and the California State Franchise Tax Board. The requirements for becoming a licensed tax preparer and the rules and regulations governing licensed tax preparers. This course may be taken for personal use, but is primarily designed for the vocational student; to orient the student toward working with these problems in an accounting office, a financial institution, an enrolled agent's office, the Internal Revenue Service, the California State Franchise Tax Board, a state licensed tax preparer's office or in their own office as a California state licensed tax preparer. Formerly BUS 82.

BUS 293 BUSINESS ENGLISH 3 UNITS

Hours: 3 Lecture/Discussion

Business 293 is a lecture/discussion class which is designed to help the business student become more proficient in, and therefore more comfortable with, the use of the English language. It provides a complete review of and practice in using the fundamental of English grammar: the parts of speech, spelling, sentence structure, punctuation, and vocabulary building. Students review the concepts and then are expected to use them in written assignments. Formerly BUS 96A.

Recommended Prerequisites: English score on the placement test.

COURSE DESCRIPTIONS

BUSINESS

BUS 295 BUSINESS MATHEMATICS 3 UNITS
Hours: 3 Lecture/Discussion

A broad course designed toward student development of skills and analysis of business computation of percents, discounts, markups, financing on long and short-term loans. Included is the study of APR (Annual Percentage Rate), the Metric System of Measurements and probability, as well as some applied use of algebra in solving equations dealing with ratio and percents.

Recommended Prerequisite: Completion of BUS 395 with a grade of "C" or better or a successful score on the C.O.S. Math Placement Test taken within three semesters. Formerly BUS 95B.

BUS 297 PERSONAL FINANCE 3 UNITS
Hours: 3 Lecture/Discussion

In this general education course open to both business and nonbusiness majors, students gain knowledge of personal income and expenditures. To be discussed are such topics as savings accounts; investments; borrowing money; budgets, charge accounts and installment buying; property, income, estate inheritance and gift taxes; life, health, accident, property, and miscellaneous insurance; pension plans and social security; trust funds and wills; inflation and business cycles; and problems of owning a house. Formerly BUS 97.

BUS 350 CAREER/LIFE PERCEPTIONS 1 UNIT
Hours: 1 Lecture/Discussion

This credit/no credit course is one of a series of courses designed to help students develop competence and confidence necessary for successful college study in both academic, vocational and avocational courses. Students MUST be enrolled in Program SUCCESS. Formerly BUS 150.

Prerequisites: Must be enrolled in SUCCESS Program.

BUS 360 ELEMENTARY KEYBOARDING 1 UNIT
Hours: 9 Lecture/Discussion
17 Lab

An introductory course covering basic keyboarding skills necessary for using a typewriter or computer keyboard by touch. Emphasis is placed on technique accuracy, terminology, and achieving a minimum skill level of 20 cwpm. Formerly BUS 63.

BUS 395 REVIEW OF ARITHMETIC FOR BUSINESS 3 UNITS
Hours: 3 Lecture/Discussion

This course is designed to review the four functions of addition, subtraction, multiplication and division of whole numbers and fractions with emphasis on application to the discipline of business. Time is provided to analyze arithmetic logic rather than memorizing problem-solving skills among an infinite number of business problem situations and to promote reasonable judgment for evaluating outcomes with a sound degree of personal security. Formerly BUS 95A.

C

CHEMISTRY

CHEM 1 GENERAL CHEMISTRY 5 UNITS
Hours: 3 Lecture/Discussion
6 Lab

A study of the fundamental theories and laws of chemistry with an emphasis on the mathematical treatment as well as the underlying concepts and principles. This course includes six hours of laboratory per week. Chemistry 1 is designed for those intending to enter chemistry or professional fields requiring chemistry as a foundation. Topics include stoichiometry, atomic structure, bonding theories, ionic reactions, and properties of gases. Formerly CHEM 1A. (CAN-CHEM 2)

Prerequisite: A previous chemistry course, Algebra II or Math 230, and an acceptable score on the department diagnostic exam.

CHEM 2 GENERAL CHEMISTRY 5 UNITS
Hours: 3 Lecture/Discussion
6 Lab

This course studies the fundamental theories and laws of chemistry with an emphasis on the mathematical treatment of chemistry as well as the underlying concepts and principles. Thermodynamics, kinetics, acid-base theory, ionic equilibria, and redox phenomena are covered. Nuclear chemistry and a brief introduction to organic chemistry may be included. Formerly CHEM 1B. (CAN-CHEM 4)

Prerequisite: Chemistry 1 with a grade of "C" or better.

CHEM 5 ANALYTICAL CHEMISTRY 5 UNITS
Hours: 3 Lecture/Discussion
6 Lab

Fundamental principles and methods of quantitative analysis with a theoretical treatment of the laws and theories which apply. For students interested in medicine, chemistry, clinical work, petroleum, or chemical industries.

Prerequisite: Chemistry 2 with a grade of "C" or better.

CHEM 12 ORGANIC CHEMISTRY 5 UNITS
Hours: 3 Lecture/Discussion
6 Lab

This is the first semester of a comprehensive study of organic chemistry. This course, taught at the sophomore level, is primarily for chemistry or biochemistry majors, premedical, pre-dental students, and medical technicians. Emphasis is on structural and functional groups chemistry studied from a synthetic and mechanistic point of view. Topics include: nomenclature, stereochemistry, free radical processes, introductory infrared and nuclear magnetic resonance spectroscopy. Formerly CHEM 12A.

Prerequisites: Chemistry 1-2 or 20-21 with a grade of "C" or better.

COURSE DESCRIPTIONS

CHEMISTRY

CHEM 13 ORGANIC CHEMISTRY 5 UNITS

Hours: 3 Lecture/Discussion
6 Lab

This is a continuation of Chem 12, a comprehensive study of organic chemistry. The course, taught at a sophomore level, is primarily for chemistry, biochemistry majors, premedical, pre-dental students, and medical technicians. Emphasis is on structural and functional group chemistry studied from a synthetic and mechanistic point of view. Topics include: reactions of aromatic compounds, condensations, natural products chemistry, introductory biochemistry, mass spectrometry and ultraviolet/visible spectroscopy. Formerly CHEM 12B.

Prerequisite: Chem 12 with a grade of "C" or better.

CHEM 20 GENERAL CHEMISTRY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

A study of the fundamental theories and the laws of chemistry including such topics as the metric system, three states of matter, nomenclature and oxidation-reduction, stoichiometry, water and liquids, gas laws and concentrations of solutions, acid-base theory, and ionic equilibria.

Prerequisites: Eligibility for Intermediate Algebra (Math 230) as determined by COS mathematics placement procedures. Formerly CHEM 2A. (CAN-CHEM 6)

CHEM 21 GENERAL ORGANIC AND BIOLOGICAL CHEMISTRY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

Introduction of the basic concepts, nomenclature and reaction of organic and biochemical compounds, including hydrocarbons, alcohols, ethers, carbonyl compounds, amines, their derivatives, and carbohydrates, lipids, amino acids, and proteins. Chemistry 21 is the second semester of a full-year college chemistry course designed to meet the needs of the science related or non-science major (e.g. agriculture, nursing, home economics, physical therapy). Formerly CHEM 2C.

Prerequisite: Completion of Chemistry 20 with a grade of "C" or better.

CHEM 353 SURVEY OF INTRODUCTORY CHEMISTRY 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

This is a one-semester elementary chemistry class recommended for students who have never taken high school chemistry or whose previous work in chemistry did not adequately prepare them for Chem 20 or Chem 1. Basic algebraic manipulations are frequently used. Focus is on: the use of the metric system, basic atomic theory, chemical bonding, chemical nomenclature, equation writing, introduction to the gas laws and stoichiometry. Formerly CHEM 53.

Prerequisites: Since this course starts with elementary algebraic manipulations it is recommended that beginning algebra (Math 210 and 215) or high school algebra be successfully completed prior to enrolling in Chem 353.

CHILD DEVELOPMENT

CHLD CHILD DEVELOPMENT 3 UNITS

DEV 39

Hours: 3 Lecture/Discussion

CROSS REF: Psychology 39

This course traces child development utilizing basic theories such as Piaget, Erikson, and Kolberg. Current research is reviewed and discussed. Study concentrates on normal development from prenatal through adolescence. Students will be required to do observation of children and to write child studies, media critiques and essay exams. Formerly ECE 39. (CAN-HEC 14)

CHLD CHILD, FAMILY AND SOCIETY 3 UNITS

DEV 42

Hours: 3 Lecture/Discussion

A study of the effects of the family and the society on the young child. Content includes family functions, structures and roles; societal influences; community resources; special needs groups. Formerly ECE 41.

CHLD CHILD ABUSE 2 UNITS

DEV 134

Hours: 2 Lecture/Discussion
(18 Hour course)

A study of child abuse that will include causes, detection, reporting, treatment and prevention, as well as prosecution assistance. The California Social Services, mental health, child care education, and judicial system roles relating to child abuse will be examined. Formerly ECE 35.

CHLD MUSIC EXPERIENCES IN 1 UNIT

DEV 135

EARLY CHILDHOOD EDUCATION

Hours: 3 Lecture/Discussion
(18 hour course)

This course investigates various methods of utilizing musical experiences in the curriculum such as songs and fingerplays for different themes, activities and seasons; using and creating musical instruments. Appropriate for teachers, aides, care providers, parents and others who want to enhance children's musical knowledge and experience. Formerly ECE 37A.

CHLD CHILDREN'S LITERATURE 1 UNIT

DEV 136

Hours: 3 Lecture/Discussion
(18 hour course)

This course includes selection of appropriate literature for various ages of children, successful methods of presenting literature of various types and storytelling techniques. Appropriate for teachers, aides, care providers, parents and others interested in selecting literature for children. Formerly ECE 37B.

COURSE DESCRIPTIONS

CHILD DEVELOPMENT

CHLD DEV 137 SCIENCE EXPERIENCES IN EARLY CHILDHOOD EDUCATION 1 UNIT

Hours: 3 Lecture/Discussion (18 hour course)

This course investigates various methods of integrating science experiences into the early childhood curriculum. Students will develop materials and methods appropriate for the development of the child and his/her understanding. Appropriate for teachers aides, care providers, parents and others interested in enhancing the child's science experiences. Formerly ECE 37C.

CHLD DEV 140 PRINCIPLES OF EARLY CHILDHOOD EDUCATION 3 UNITS

Hours: 2 Lecture/Discussion 4 Lab

This course includes the study of early childhood programs, and the needs of the preschool child as related to the physical, mental, social, emotional and creative growth of the child. Together with Child Dev. 140 it prepares the student for classroom teaching. The lab consists of supervised work in the C.O.S. lab school, The Children's Learning Center, or in approved off-campus sites. Formerly ECE 40A.

CHLD DEV 141 PRACTICE IN EARLY CHILDHOOD EDUCATION 3 UNITS

Hours: 2 Lecture/Discussion 4 Lab

This student teaching course includes the study of a broad range of early childhood programs, and requires the student to develop and utilize a self-designed curriculum which meets the physical, mental, social, emotional and creative needs of the preschool child. Included in the lab experience at C.O.S. lab school, the Children's Learning Center, or in approved off-campus sites, is the presentation of 13 curriculum activity presentations and one laboratory session in charge of the classroom as the teacher. Formerly ECE 40B.

Recommended Prerequisite: Child Dev. 140 or equivalent course as articulated with area high schools.

CHLD DEV 143 ADMINISTRATION OF EARLY CHILDHOOD EDUCATION 3 UNITS

Hours: 3 Lecture/Discussion

Students will study the tasks of administering programs for children with special emphasis on the management of preschool and day care programs. The course includes program planning, organization, budgeting, personnel policy, record keeping, legal requirements and relationships with community, parents and regulatory agencies. It fulfills the state requirement for directors in licensed child care centers. Formerly ECE 43A. **Recommended Prerequisite:** Child Dev. 140 and 141 or previous teaching experience.

CHILD DEVELOPMENT

CHLD DEV 144 ADVANCED ADMINISTRATION OF EARLY CHILDHOOD EDUCATION 3 UNITS

Hours: 3 Lecture/Discussion

An advanced course in the administration of quality early childhood education programs, including time management, staff inservice, programs, parent and staff handbooks, grant and accreditation. Fulfills the state requirement for directors in licensed child care centers.

Recommended Prerequisites: Formerly ECE 43B.

140 and 141 or previous teaching experience and Child Dev. 143.

CHLD DEV 145 PARENTING 3 UNITS

Hours: 3 Lecture/Discussion

This course is a comprehensive study of parenting and guidance techniques for those who influence the development of young children from parents to child care providers to teachers. Study is focused on communication, problem solving, positive guidance, environmental structuring and needs of young children. Formerly ECE 44.

CHLD DEV 146 EXCEPTIONAL CHILD 3 UNITS

Hours: 3 Lecture/Discussion

This course provides basic information about the characteristics and distinctive problems of exceptional children and their unique patterns of development. Adaptation of the educational environment is studied, as well as the family's and teacher's roles. Identification is studied with emphasis on early intervention during the preschool years. Formerly ECE 45.

CHLD DEV 147 INFANT/TODDLER-CHILD CARE 3 UNITS

Hours: 3 Lecture/Discussion

A study of the developmental areas of the infant/toddler. Course includes the areas of social/emotional development, nutrition, cognitive/motor development, limit setting, language development, socializing among children, and play and learning. Students will develop a working knowledge to assist parents and care givers. Formerly ECE 46.

CHLD DEV 148 CHILD HEALTH AND SAFETY 3 UNITS

Hours: 3 Lecture/Discussion

A study of health, safety and nutrition as related to the young child. This course enables teachers and parents to become fully aware of their contribution to the overall well-being of the children in their care. Topics include preventive health care, environmental safety, foods and nutrients, children's health problems and emergency and medical procedures. Formerly ECE 47.

COURSE DESCRIPTIONS

CHILD DEVELOPMENT

CHLD **CREATIVE** **2 UNITS**
DEV 149 **ACTIVITIES FOR YOUNG CHILDREN**
Hours: **2 Lecture/Discussion**
 1 Lab **Materials Fee: \$5.00**

Creative Activities is a lecture/lab course in the early childhood education program designed to prepare the student in planning a wide variety of materials for creative activities for use in the integrated thematic early childhood curriculum. Students select, plan and prepare resources for use in the fall semester which include seasonal and holiday themes as well as curriculum areas. Formerly ECE 42A.

CHLD **CREATIVE** **2 UNITS**
DEV 150 **ACTIVITIES FOR YOUNG CHILDREN**
Hours: **2 Lecture/Discussion**
 1 Lab **Materials Fee: \$5.00**

This course includes the selection, planning and preparation of materials for activities in the Early Childhood Development curriculum. Materials relate to a variety of themes with emphasis on the early winter and spring seasons and holidays. Recommended for teachers, education majors (elementary and special), instructional aides, care providers, parents and others who are interested in planning a variety of creative activities for children. Formerly ECE 42B.

CHLD **SCHOOL-AGE** **3 UNITS**
DEV 151 **CHILD CARE**
Hours: **3 Lecture/Discussion**

This course is a study of school-age child care. The content includes an overview of the physical, social and cognitive development of school-age children as well as care programs and community resources. This course investigates a variety of enrichment activities and curriculum for school-age children, including literature, science, drama, music, physical education and arts and crafts. It is appropriate for teachers, aides, family day care providers, parents, and other interested in selecting school-age activities and curriculum. Formerly ECE 34.

CHLD **FAMILY DAY CARE** **1 UNIT**
DEV 156 **MANAGEMENT**
Hours: **18 Lecture/Discussion**
 (18 hour course)

This is an introductory course designed to meet the training needs of family day care providers. This course combines theory and practical application to introduce licensing requirements, health and safety practices, record keeping, developing business policies, support services and procedures unique to family day care. Formerly ECE 96A.

CHLD **FAMILY DAY CARE** **1 UNIT**
DEV 157 **PRINCIPLES AND PRACTICES**
Hours: **18 Lecture/Discussion**
 (18 hour course)

This is an introductory course designed to meet the training needs of family day care providers. This course combines theory and practical application to introduce daily routines for family day care, parent/provider relationships, problem solving, growth and development, discipline techniques, and avoidance of provider burnout. Formerly ECE 96B.

CHILD DEVELOPMENT

CHLD **SUPERVISE** **1-3 UNITS**
DEV 190a-d **PRACTICE**
Hours: **3 Lab per unit**

Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counselling and other employment or volunteer situation where the student is expected to take a leadership role with others. Formerly ECE 48a-c.

Recommended Prerequisite: Department interview.

CHLD **TOPICS IN CHILD** **1 UNIT**
DEV 199 **DEVELOPMENT/**
EARLY CHILDHOOD EDUCATION
Hours: **1 Lecture/Discussion**
 (18 hour course)

The application of child development/early childhood education principles to the specific needs of certificated programs, state mandated certification and community interests. Formerly ECE 97a-d.

CINEMA ARTS

CINEMA **MOTION PICTURE** **2 UNITS**
ARTS 31 **APPRECIATION**
Hours: **1 Lecture/Discussion**
 2 Lab

Explores the origin of motion picture production, objectives of various directors, actors and producers in their films, and technology and aesthetic changes in motion picture production. Students are taught to view the motion picture as an art form and to evaluate the objectives of motion pictures and their attainment. Cinema Arts 31 offered only in fall semester. Covers the period from the beginning to the present with emphasis on American films. Formerly CINEMA ARTS 1.

CINEMA **MOTION PICTURE** **2 UNITS**
ART 32 **APPRECIATION**
Hours: **1 Lecture/Discussion**
 2 Lab

An exploration of the origin of motion picture production, objectives of various directors, actors and producers in their films, and technology and aesthetic changes in motion picture production. Students are taught to view the motion picture as an art form and to evaluate the objectives of motion pictures and their attainment. Cinema Arts 32, offered only in spring semester, covers contemporary film 1930 to present, with emphasis on international films. Formerly CINEMA ARTS 2.

COURSE DESCRIPTIONS

COMPUTER

COMPUTER INTRODUCTION 5 TO COMPUTER INFORMATION SYSTEMS 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$7.00

Computer 5 is a course intended to introduce students to the science of data/information processing. Students will learn how computer systems work and how they are used in society in general and in business in particular. The lecture portion of this course discusses the theory, concepts and terminology used in computer information systems today. In the Lab, students will learn to use a microcomputer system, how to write some very simple programs, and how to use some important applications software packages—a word processing, a spreadsheet and a data base program. Formerly BUS 5. (CAN-BUS 6)

Recommended Prerequisite: Keyboarding capability of at least 20 cwpm.

COMPUTER BASIC PROGRAMMING 6 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$7.00

The class is designed to teach the BASIC programming language and essential analysis and programming techniques for preparing typical business reports. Topics included are: math and logic operation; data editing, storage, and retrieval; arrays or table processing; creating and maintenance of sequential and random file structures; interactive techniques; menu development; sorting and selecting data. Formerly BUS 3. (CAN-CSCI 6)

Recommended Prerequisites: Computer 5 or Computer 131 or concurrent enrollment. Keyboarding requirement of 20 words per minute.

COMPUTER COBOL PROGRAMMING 7 4 UNITS

Hours: 3 Lecture/Discussion
2 Lab

Materials Fee: \$7.00

This is an advanced computer class designed to teach students the Common Business Oriented Language (COBOL), how to plan and program typical business problems in Structured COBOL, how to find and correct errors in the program, and how to document the program. The student will develop increasingly challenging programs to prepare reports, construct and use tables, use date files, and on-line systems. Formerly BUS 7. (CAN-CSCI 8)

Recommended Prerequisites: Computer 5 or Computer 131 or concurrent enrollment. Keyboard requirement of 20 words per minute.

COMPUTER

COMPUTER MICROCOMPUTER 130 OPERATIONS: INTRO 4 UNITS TO PERSONAL COMPUTERS

Hours: 4 Lecture/Discussion

Materials Fee: \$7.00

This course provides instruction in the use of personal computers. Assuming no prior experience, students will learn to operate a personal computer. The course will provide instruction in the use of some of the most popular computer software packages including word processing, spreadsheet, and database applications. Formerly BUS 15.

Recommended Prerequisites: Business 360 or a keyboarding of 20 cwpm.

COMPUTER MICROCOMPUTER 131 OPERATIONS - DOS 3 UNITS

Hours: 3 Lecture/Discussion

Materials Fee: \$7.00

Computer 131 is a first-semester lecture/discussion microcomputer course covering the basic disk operating system commands of Version 3.3 DOS. Students enrolling in the class will be able to understand the function each DOS command performs and be able to use those DOS commands to perform routine operations such as managing files, creating menus, working with sub-directories, making backups, and troubleshooting the systems. No previous computer operating experience is required. It is recommended that students enrolling in this course have a keyboarding speed of 20 cwpm. An additional two to four hours of computer time will be needed each week to enable a student to complete his/her assignments. Formerly BUS 17A.

Recommended Prerequisite: Keyboarding speed of 20 cwpm.

COMPUTER MICROCOMPUTER 132 OPERATIONS - ADVANCED DOS 2 UNITS

Hours: 2 Lecture/Discussion
1 Lab

Materials Fee: \$7.00

Computer 132 is a second semester lecture/lab microcomputer course covering the advanced disk operation system commands of Version 3.3 DOS. The course provides information to help the computer user achieve maximum effectiveness on his/her personal computer. The course will enable DOS users to gain a better understanding of and insight into the DOS environment. Students will be able to analyze and explain various advanced batch files. Formerly BUS 17B.

Recommended Prerequisites: Computer 131 with a grade of "C" or better.

COURSE DESCRIPTIONS

COMPUTER

COMPUTER MICROCOMPUTER 4 UNITS 133 OPERATIONS: DATABASE PROCESSING

Hours: 4 Lecture/Discussion

Materials Fee: \$7.00

Database processing for microcomputers emphasizes relational database theory as well as design and implementation. Practical applications will include using the database software, first to recreate examples from the text, then to design a database, and last to build an application using the database. Formerly BUS 14.

Recommended Prerequisites: Previous experience on microcomputers with a keyboarding speed of 20 cwpm and Computer 130 and 131.

COMPUTER MICROCOMPUTER OPERATIONS: 2 UNITS 134 TELECOMMUNICATIONS

Hours: 2 Lecture/Discussion Materials Fee: \$5.00

Microcomputer Operations: Telecommunications and resulting technology. Provides an understanding and working knowledge of both managerial and technical aspects of microcomputer communications. The student learns how to use communications software, access electronic bulletin boards, data bases, another computer or unattended remote access computers. Various types of hardware, formatting codes, and public information utilities are included. Formerly BUS 16.

Recommended Prerequisites: Business 131 or permission of the department.

COMPUTER MICROCOMPUTER 4 UNITS 135 OPERATIONS: DESKTOP PUBLISHING FOR BUSINESS

Hours: 4 Lecture/Discussion

Materials Fee: \$8.00

This is a basic course in desktop publishing where students will learn the essentials of design, typography, graphics and text using PageMaker Software, Windows, and DOS. Desktop Publishing for Business is the use of a microcomputer based system to produce publication materials. The materials include sales reports, project proposals, notices, fliers, office forms, brochures, reports manuals, and newsletters. Desktop publishing is considered prepress technology. In other words, desktop publishing is the method to produce masters for reproduction. Formerly BUS 64.

Recommended Prerequisites: Computer 131 or its equivalent. English 251 score on the Placement Test.

COMPUTER

COMPUTER MICROCOMPUTER 3 UNITS 136 OPERATIONS: WORD PROCESSING USING WORD PERFECT

Hours: 3 Lecture/Discussion

Materials Fee: \$7.00

The course is designed to teach the student the Word Perfect word processing program.

This competency based course will familiarize the student with advanced operations using proper formatting procedures. An emphasis will be placed on language arts skills, machine transcription, and proofreading as they relate to information/word processing. This course is designed to fulfill the requirement for the Word Processing Major and/or the Word Processing Certificate. Formerly BUS 65C.

Recommended Prerequisite: The ability to write a properly structured sentence; typing 45 wpm; be able to use a transcription machine and type from dictation; Computer 131 or current enrollment.

COMPUTER MICROCOMPUTER 3 UNITS 137 OPERATIONS: WORD PROCESSING WITH WORDSTAR

Hours: 3 Lecture/Discussion
3 Lab

Materials Fee: \$8.00

The course is designed to teach the student the Wordstar word processing application program. This competency based course will familiarize the student with simple to complex operations using proper formatting procedures. An emphasis will be placed on language arts skills, proofreading, and office procedures skills as they relate to information/word processing. This course is designed to fulfill the requirement for the word processing major and/or the word processing certificate

Recommended Prerequisites: Business 160 or keyboard at 35 cwpm. Computer 131 or current enrollment recommended. Formerly BUS 65B.

COMPUTER MICROCOMPUTER 1 UNIT 302 OPERATIONS: INTRODUCTION TO WORDSTAR

Hours: 9 Lecture/Discussion
17 Lab (26 hr. Course)

Materials Fee: \$5.00

The course is designed to give the student an overview of and hands-on experience with the WordStar word processing program. It is a non-degree college credit course. Students will become familiar with the following formats: letters, reports, tables columns, and merging with variables. Formerly BUS 35B.

Recommended Prerequisite: Keyboarding speed of 20-30 cwpm.

COURSE DESCRIPTIONS

COMPUTER

COMPUTER MICROCOMPUTER 1 UNIT
304 **OPERATION:**

INTRODUCTION TO THE SPREADSHEET

Hours: 9 Lecture/Discussion
17 Lab (26 hr. Course)

Materials Fee: \$5.00

Through the use of microcomputers (DOS-based), the student will become able to use a popular electronic spreadsheet program. Basic concepts of spreadsheets will be explored including layouts, command structure, and mathematical formulas. Various types of business and personal applications to solve any problem that can be placed in columns and rows will be explored. The particular spreadsheet used for any offering of this course may be either Lotus 123, SuperCalc, Quattro, depending upon availability. Formerly BUS 35C.

Prerequisites: Keyboarding speed of 20 cwpm is recommended.

COMPUTER MICROCOMPUTER 1 UNIT
306 **OPERATIONS: INTRODUCTION TO**

WORDPERFECT

Hours: 9 Lecture/Discussion
17 Lab (26 hr. Course)

Materials Fee: \$5.00

This course is designed to give the student an overview and hands-on experience of the Wordperfect word processing program. It is a non-degree, college credit course. Students will become familiar with the following formats: letters, reports, tables, columns, and merging shell documents with different variables. Formerly BUS 35E.

Recommended Prerequisite: Keyboarding speed of 20-30 cwpm.

COMPUTER FUNDAMENTALS 3 UNITS
351 **OF KEYBOARDING AND COMPUTER SKILLS**

Hours: 3 Lecture/Discussion

Materials Fee: \$8.00

This SUCCESS Program course, introduced on the IBM Personal Computer designed to walk the first time user, step-by-step through the basic keyboarding skills, microcomputer operation protocol terminology, and basic application software including DOS, data base management, word processing, electronic spreadsheets, and business graphics, and proofreading skills. Formerly BUS 151.

Prerequisites: Must be enrolled in the SUCCESS Program.

CONSUMER/FAMILY STUDIES

CFS 6 **COLOR AND DESIGN** 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

CROSS REF: Art 6

Materials Fee: \$10.00

This is a basic course in art with a primary purpose of familiarizing the students with elements and principles used in design art. It includes fundamental concepts of form, shape, line and color in second dimensions. Formerly H EC 6A. (CAN-H EC 4 includes CFS 6 and 7 or ART 6 and 7)

CONSUMER/FAMILY STUDIES

CFS 7 **COLOR AND DESIGN** 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

CROSS REF: Art 7

Materials Fee: \$10.00

This is an advanced course in the principles of color and design. It includes a further discovery of the basic design elements of form, shape, line, and color. This class takes these previous principles and applies them to the 3-dimensional form. There is an emphasis on personal artistic statements toward assignment in the CFS 7 class. Formerly H EC 6B.

Recommended Prerequisite: CFS 6 or Art 6.

CFS 126 **MARRIAGE AND FAMILY LIFE** 3 UNITS

Hours: 3 Lecture/Discussion

CROSS REF: Sociology 126

An introductory course to marriage and family life. This course will emphasize the following topics: dating, marriage changing roles, communication skills, family planning, human sexuality, parenting, divorce and remarriage. Formerly H EC 26.

Recommended Prerequisite: Eligible for English 1.

CFS 80 **LIFE SPAN DEVELOPMENT** 3 UNITS

Hours: 3 Lecture/Discussion

A study of human development incorporating the major stages of life from conception to old age and death. Emphasis on physical, cognitive, social, emotional, and moral development. Major topics of human growth include human behavior, theory, sexuality, nutrition, health, stress, and relationships to the social and physical environment. Formerly H EC 38.

CFS 186 **PERSONAL MANAGEMENT/
CONSUMER ECONOMICS** 3 UNITS

Hours: 3 Lecture/Discussion

This course is designed to give students a background in personal and family financial management, including money plans, use of credit, and purchase of consumer goods and services such as insurance and housing. This course is valuable for students pursuing careers in service fields such as home economics, social services, financial business occupations, and personal, family and financial counseling. The class is also part of a fundamental education for those who manage their own finances. Formerly H EC 31.

CFS 190a-d SUPERVISED PRACTICE 1-3 UNITS

Hours: 3 Lab per week/per unit

Under the supervision of a master home economics instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling and other employment or volunteer situations where the student is expected to take a leadership role with others. Formerly H EC 48a-c.

COURSE DESCRIPTIONS

CONSUMER/FAMILY STUDIES

CFS 300 INTRODUCTION TO CONSUMER/ FAMILY STUDIES 3 UNITS

Hours: 3 Lecture/Discussion

This is one of a series of courses designed to help students develop competence and confidence necessary for successful college study in both academic and vocational courses. This class will introduce the student to the discipline and related areas. Subject areas include: a brief overview of the college system; child development and family relationships; nutrition and foods; consumer economics; fashion, textiles, clothing; interior design. This course is an elective course in the SUCCESS program. Formerly H EC 80.

Prerequisites: Must be enrolled in the SUCCESS program.

COSMETOLOGY

COSMETOL BASIC COSMETOLOGY 261 12 UNITS

**Hours: 10 Lecture/Discussion
25 Lab**

Cosmetology 261 includes a study of basic scientific theories and techniques as they apply to cosmetology. The course covers disorders, diseases, analysis, and treatment of the skin, hair, scalp, and nails; bacteriology, sterilizations, and sanitation; principles of hair styling, chemicals and applications, fundamentals of massage, facials, and manicuring; ethics in cosmetology and salon management principles.

Classroom and laboratory activities: classroom is 10-12 hours per week; salon and laboratory demonstrations and simulation approximately 25-30 hours per week. Formerly COSMET 61A.

Prerequisite: Admission into the Cosmetology Program.

COSMETOL INTERMEDIATE COSMETOLOGY 262 12 UNITS

**Hours: 10 Lecture/Discussion
25 Lab**

Cosmetology 262 includes a study of basic scientific theories and techniques as they apply to cosmetology. The course covers disorders, diseases, analysis, and treatment of the skin, hair, scalp, and nails; bacteriology, sterilizations, and sanitation; principles of hair styling, chemicals and applications, fundamentals of massage, facials, and manicuring; ethics in cosmetology and salon management principles.

Classroom and laboratory in training activities: classroom is 10-12 hours per week; salon and laboratory demonstrations and simulation approximately 25-30 hours per week. Formerly COSMET 61B.

Prerequisite: Admission to the Cosmetology Program.

COSMETOLOGY

COSMETOL ADVANCED COSMETOLOGY 263 10 UNITS

Hours: 5 lecture, 30 lecture

Cosmetology 263 includes a study of basic scientific theories and techniques as they apply to cosmetology. The course covers disorders, diseases, analysis, and treatment of the skin, hair, scalp, and nails; bacteriology, sterilizations, and sanitation; principles of hair styling, chemicals and applications, fundamentals of massage, facials, and manicuring; ethics in cosmetology and salon management principles. Classroom and laboratory in training activities: classroom is 10-12 hours per week; salon and laboratory demonstrations and simulation approximately 25-30 hours per week. Formerly COSMET 62.

Prerequisite: Admission into the Cosmetology Program.

DAIRY SCIENCE

DAIRY SCI 101 ELEMENTS OF DAIRYING 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

An introductory course designed to give students the basic understanding of dairying in California. Includes calf raising, record evaluation, fitting and showing of dairy cattle, housing, dairy setup facilities, and evaluating of dairy cattle. The course also explores the career opportunities available in the Dairy Industry by visiting several dairies in the local area. Formerly DAIRY SCI 1.

DAIRY SCI 102 PRINCIPLES OF MILK PRODUCTION 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

Dairy Science 102 is designed to give students the factors involved in milk production by dairy cows. Includes anatomy and physiology of the mammary gland, udder health, automatic milking equipment, dairy sanitation, and feeding of dairy cows. Students will also be able to use the computer to calculate economic losses due to high somatic cell counts and to use ration programs to formulate profit maximizing, and least cost rations for dairy cows. Formerly DAIRY SCI 2.

DAIRY SCI 103 COMMERCIAL DAIRY HERD MANAGEMENT 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

Materials Fee: \$5.00

Successfully managing a commercial dairy operation is the goal of this course. Use of computer herd health programs, cost analysis using spreadsheets, and managing techniques are covered. Practical hands-on applications of the decision-making process involving feeding, herd health, labor, and cost of production are covered. Formerly DAIRY SCIENCE 3.

COURSE DESCRIPTIONS

DAIRY SCIENCE

DAIRY BREEDING AND SELECTION OF DAIRY CATTLE 3 UNITS
SCI 104
 Hours: 3 Lecture/Discussion
 1 Lab

Materials Fee: \$5.00

Dairy Science 104 is part of the Dairy Science curriculum at C.O.S. The course is designed to give students an understanding of selection techniques, anatomy, and physiology of dairy reproduction, and artificial insemination. Practical hands-on use of A.I. will be covered by all students. Formerly DAIRY SCI 4.

DAIRY DAIRY CATTLE SELECTION, JUDGING AND SHOWING 1 UNIT
105a-d
 Hours: 1 Lecture/Discussion
 1 Lab

Materials Fee: \$5.00

An introductory course in the selection of dairy cattle. It is designed to give students a basic understanding of how dairy cattle are selected based on body conformation and type. Students also have the option to compete on the local, state, and national level. Formerly DAIRY SCI 5a-d.

DAIRY INTRODUCTION TO DAIRY PRODUCTS TECHNOLOGY 3 UNITS
106
 Hours: 3 Lecture/Discussion
 3 Lab

Dairy Science 106 is an introductory course designed to give students a basic understanding of the science and technology of dairy food products. Dairy manufacturing equipment, dairy processing techniques for fluid milk, butter, cheeses, ice cream, yogurt, concentrated dairy foods, and dried foods. Formerly DAIRY SCI 6.

DAIRY PRACTICAL SKILLS IN DAIRYING 1 UNIT
107a-d
 Hours: 4 Lab

Dairy Science 107 is designed to give students a chance to gain practical skills in dairy production applications. Students will be able to milk and feed cows on the COS Dairy or on other dairies with instructor approval. Other skills learned will be feeding calves, fresh cow care, equipment repair, fitting and showing cattle and general dairy work.

DAIRY DAIRY NUTRITION 3 UNITS
108
 Hours: 3 Lecture/Discussion
 1 Lab

Dairy Science 108 is designed to give advanced dairy students an in-depth study of dairy cattle nutrition. Nutrient requirements of dairy cattle, commodity feeding, ration formulation and feeding systems will be discussed. Computer application of ration formulation will be used along with using spreadsheets to project feed inventories and usage.

Recommended Prerequisites: Dairy Science 101 and 102.

DRAFTING

DRAFT 100 APPLIED DRAWING 3 UNITS
 Hours: 3 Lecture/Discussion
 3 Lab

A study of the fundamentals of technical drawing and practical applications. Emphasis will be placed upon: sketches, lettering, orthographic projection, working drawings, auxiliary views, dimensioning, developments, threads and fasteners, sections, pictorial drawing, duplication, and the interrelationships of each to manufacturing design. The course is recommended for all engineering and industrial technology students.
Recommended Prerequisite: One year of high school drafting or Drafting 200. Formerly DRAFT 22.

DRAFT 101 MANUFACTURING DESIGN GRAPHICS 4 UNITS
 Hours: 3 Lecture/Discussion
 2 Lab

This course involves advanced technical drawing applications and standards. Cams, gears, detail and assembly drawings, manufacturing processes, structural detailing, piping layout, dimensioning and tolerancing are emphasized in the solution of industrial design problems. This course is designed for those seeking the knowledge and skills associated with drafting technology, machine design and mechanical engineering.
Recommended Prerequisite: Drafting 100. Formerly DRAFT 24.

DRAFT 102 DESCRIPTIVE GEOMETRY 3 UNITS
 Hours: 3 Lecture/Discussion
 3 Lab

This course is a study of the fundamental theory, concepts and principles of spatial relationships. These are applied in the solution of three dimensional problems arising in various branches of engineering. Descriptive geometry is needed by everyone pursuing the knowledge and skills associated with architecture, construction, drafting, and engineering. Formerly DRAFT 23

Prerequisite: One year of high school mechanical drawing. DT 100 (Plane Geometry may be taken concurrently).

DRAFT 110 INTRODUCTION TO COMPUTER ASSISTED DRAFTING 4 UNITS
 Hours: 3 Lecture/Discussion
 2 Lab

An introduction to the basic concepts, principles, and applications of a computer driven drafting system. The students will generate simple industrial and architectural drawings with the computer system. This course will greatly benefit all students seeking the knowledge and skills for entry into architecture, construction, engineering, manufacturing, drafting, and computer applications. Formerly DRAFT 26A.

COURSE DESCRIPTIONS

DRAFTING

DRAFT 111 COMPUTER ASSISTED DRAFTING 4 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A study of the fundamental concepts, principles, and application of a computerized drafting system. Through the utilization of computers, students will create working drawings and plans for various industrial and architectural applications. This is an exemplary career preparation course for any person interested in acquiring the requisite knowledge and skills for entry into architecture, construction, engineering, manufacturing, drafting, and computer applications. Formerly DRAFT 26B.

Recommended Prerequisite: Drafting 110.

DRAFT 120 INTRODUCTION TO COMPUTER ASSISTED ILLUSTRATION 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A study of the fundamental concepts and principles of a computerized two dimensional pictorial drawing system and applications in technical illustration professions. Primarily, axonometric and oblique drawings will be generated on a 2-D computer program for industrial applications. In order of their utilization by industry, emphasis will be placed upon the following pictorial drawing methods: 1. Isometric, 2. dimetric, 3. trimetric, 4. cabinet oblique and 5. cavalier oblique. The course is mandatory for those pursuing any career related to illustration and rendering. It would also be an asset for anyone seeking supplemental skills and knowledge for entry into architecture, computer applications, drafting, engineering, and manufacturing. Formerly DRAFT 35A.

Prerequisites: Drafting 100 & 110.

DRAFT 121 COMPUTER ASSISTED ILLUSTRATION 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A study of the fundamental concepts, principles, and application of a computerized three dimensional surface modeling program. Utilizing this program, students will generate pictorial drawings for industrial and architectural applications. This course is necessary for anyone pursuing any career related to illustration and rendering. It would also benefit anyone seeking the knowledge and skills for entry into architecture, manufacturing, engineering, drafting, and computer application. Formerly DRAFT 35B.

Recommended Prerequisites: Draft 111 and Draft 120.

DRAFTING

DRAFT 130 INTRODUCTION TO COMPUTER ASSISTED CABINET DESIGN 4 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A study of the fundamental concepts, principles, and applications of a computerized system covering all phases of cabinet design. By utilizing computers, students will design cabinets, generate cabinet drawings, cutting lists, estimates for material and labor, and contract documents. This course is an invaluable career asset for people interested in architecture, construction, cabinet and furniture manufacturing, drafting, and computer applications. Formerly DRAFT 29.

DRAFT 160 GRAPHIC DESIGN 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A study of graphic design theory, elements, principles, processes, and methodology as used in the graphic communication industry. The skills and knowledge required in creative problem solving by the graphic designer are developed throughout the course with assignments that are actual commercial applications. The students interested in art, design and any field of graphic communications will find this course an invaluable asset. Formerly DRAFT 21A.

DRAFT 161 GRAPHIC DESIGN APPLICATION 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A study in the application of creative problem solving skills and knowledge in the graphic design field. The students will employ the theory, elements, principles, processes, and methodology of design to analyze, evaluate, select and prepare graphic designs for commercial applications. Actual jobs may include designs for various campus publications. The class is designed for students planning to pursue a career in any field of graphic communications. Formerly DRAFT 21B.

DRAFT 200 BEGINNING MECHANICAL DRAWING 2 UNITS

Hours: 2 Lecture/Discussion
2 Lab

A rapid comprehensive coverage of the fundamentals of mechanical drawing and modern drafting practice. Including, but not confined to, the following: lettering, geometric drawing, orthographic projection, pictorial representation, and reproduction. This course is a basis for all drafting related majors and is recommended for students that have had no high school drafting but plan to enter architecture, engineering, drafting, or other graphic communication fields. Formerly DRAFT 52.

COURSE DESCRIPTIONS

DRAFTING

DRAFT 201 CIVIL ENGINEERING DRAFTING 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

A class designed to prepare the participant to function effectively in a civil engineering office or department of public works within a city or county agency as a drafter. Formerly DRAFT 54A.

Prerequisite: A recent (within two years) drafting class or current employment as a drafter.

DRAFT 202 CIVIL ENGINEERING DESIGN 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

A class designed to prepare the participant to function effectively in a Civil Engineering office or department of public works within a city or county agency as a designer/drafter.

Prerequisite: A recent (within two years) drafting class, Drafting 201 or current employment as a drafter. Formerly DRAFT 54B.

E

ECONOMICS

ECON 1 PRINCIPLES OF ECONOMICS I 3 UNITS

Hours: 3 Lecture/Discussion

A study of the principles of national output, income, employment and prices. The subject matter includes an analysis of aggregate production, inflation, the banking system, and the application of fiscal and monetary policy. Macroeconomics also concerns itself with how the United States economy interacts with the rest of the world. Formerly ECONOMICS 1A. (CAN-ECON 2)

ECON 2 PRINCIPLES OF ECONOMICS II 3 UNITS

Hours: 3 Lecture/Discussion

Microeconomics: Principles and applications in the theory of producer and consumer behavior, and the distribution of payments as derived from output markets. Various market structures are reviewed and the role of government production, regulation, and involvement in firm decisions and consumer behavior are analyzed. Formerly ECONOMICS 1B. (CAN-ECON 4)

Recommended Prerequisites: Sophomore standing and high school algebra.

ELECTRONICS

ELECT 101 DC CIRCUITS 5 UNITS

Hours: 4 Lecture/Discussion
4 Lab

Materials Fee: \$5.00

This is the introductory class in the C.O.S. Electronics program. It offers training for students entering the electronics field. Formerly ECONOMICS 1B. (CAN-ECON 4)

Recommended Prerequisite: One semester of algebra with a grade of "C" or better, and concurrently enrolled or completed English 251. Formerly ELECT 1A.

ELECT 102 AC CIRCUITS 5 UNITS

Hours: 4 Lecture/Discussion
4 Lab

Materials Fee: \$5.00

This class offers continued training for students entering the electronics field and includes lecture and laboratory instruction with AC circuits including mathematics, circuit analysis, use of test equipment and soldering. It is the second semester of study for obtaining F.C.C. general radio-telephone license or its equivalent.

Prerequisites: Electronics 101 or an equivalent class with a grade of "C" or better. Formerly ELECT 1B.

ELECT 103 ACTIVE DEVICES 5 UNITS

Hours: 4 Lecture/Discussion
4 Lab

Materials Fee: \$5.00

This is a course in the third of four semesters in the C.O.S. Electronics program. It offers training for student entering the field of electronics. Includes lecture and laboratory projects such as: solid state devices, power supplies, audio circuits, and use of test equipment for testing and trouble-shooting. The third semester in preparation for obtaining the FCC general radio-telephone license or equivalent. Formerly ELECT 2A.

Prerequisites: Must have completed Electronics 102 or equivalent with a grade of "C" or better.

ELECT 104 COMMUNICATION CIRCUITS 5 UNITS

Hours: 4 Lecture/Discussion
4 Lab

Materials Fee: \$5.00

This is the fourth class in the COS Electronics program. It offers training for students seeking employment in electronic communications, including broadcasting and two-way communications. Includes lecture and laboratory instruction with emphasis on use of equipment and trouble-shooting. At completion student should be qualified to obtain an F.C.C. general radio telephone commercial license or equivalent. Formerly ELECT 2B.

Prerequisites: Must have completed electronics 103 or equivalent with a grade of "C" or better.

COURSE DESCRIPTIONS

ELECTRONICS

ELECT 105 INDUSTRIAL FABRICATION AND DESIGN 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$3.00

This course offers the student a working knowledge of the tools, techniques, materials, and procedures used in industry to create prototype and production products. The course will include schematic generation, project documentation, chassis layout and finishing, breadboarding, printed wiring board layout and construction system testing and design philosophy. Formerly ELECT 5.

Prerequisites: Electronics 101 or 110 completed or in progress.

ELECT 110 DIGITAL CIRCUITS 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$3.00

This course offers the student a working knowledge of the theory and application of practical digital circuits. Digital circuits are introduced as combinations of simple circuits such as gates, flip-flops, arithmetic elements and memories. Lab assignments help students understand and troubleshoot standard digital circuit configurations. Formerly ELECT 10.

ELECT 111 MICRO-PROCESSOR/PLC FUNDAMENTALS 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$3.00

This course offers the student a study of basic microprocessor theory. It is an introduction to microprocessor internal architecture and the software techniques used to program proper operation of these devices. Laboratory experiments introduce students to memory and I/O techniques common to small microprocessor systems. Assembly language programs are developed by the student, entered into the trainer, and single-stepped line by line to demonstrate internal operation of the microprocessor. Experiments are directed to PLC application and trouble shooting. Formerly ELECT 11/PLC.

Prerequisites: Students should have completed Electronics 101 and 110 or permission of department.

ELECT 112 MICRO-PROCESSOR APPLICATIONS 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

Materials Fee: \$4.00

This course offers the student a study of advanced microcomputer and microprocessor interfacing techniques. Lectures, demonstrations, and laboratory assignments will study Intel 8085A and 8088 microprocessor-based systems. Special emphasis is placed on "hands-on" laboratory experience with various interface technologies. Formerly ELECT 12.

Prerequisites: Student should have completed Electronics 110 and 111 or permission of department.

ELECTRONICS

ELECT 113 PC TROUBLE-SHOOTING/REPAIR 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab

Materials Fee: \$4.00

This is an advanced digital course covering technical operation, troubleshooting and repair of the IBM PC. Students will be introduced to technical foundations of personal computers, advanced DOS concepts, understanding assembly programs, diagnostic software, and troubleshooting and repair of all PC components and peripherals. Formerly ELECT 13.

Prerequisites: Student should have a basic knowledge of the electronic and digital circuits; and keyboarding skills.

ELECT 114 OPERATIONAL AMPLIFIER CIRCUITS 3 UNITS

Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$3.00

The course is the last offering in a sequence that begins with DC circuits and continues through AC circuits and electronic devices. This course offers the student an advanced study of operational amplifiers. These components are used in a multitude of commercial and military products. The course will include theory of operation, circuit configurations, practical uses, and laboratory breadboarding, troubleshooting, and testing. Formerly ELECT 4.

Prerequisites: Student should have completed Electronics 102 and 103 or permission of department.

EMERGENCY MEDICAL TECHNOLOGY

EMT 351 EMERGENCY MEDICAL TECHNOLOGY 4 UNITS

Hours: 3 Lecture/Discussion
3 Lab (one hour in class;
two hours by arrangement)

This is a vocational education course for students who wish to work as emergency medical technicians on ambulances or in hospital emergency rooms. The course will emphasize the development of skills in the recognition of symptoms of illness and injury and proper procedures of emergency care. This course meets the requirements of the California Department of Health for certification as EMT-I. It is recommended for anyone involved in public safety. Formerly EMT 50.

COURSE DESCRIPTIONS

ENABLER SKILLS

ESKL COMPUTATION 1-3 UNITS
601a-d
Hours: 2-6 Lab
 Designed for the student with learning deficits in computation. Remediation plans will be based on assessment of individual need and learning style. Instruction may include one-to-one, small group, computer-assisted, or larger group instruction. Formerly ENAB SKIL 1a-d.
Recommended Prerequisite: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet state-wide LD eligibility criteria.

ESKL EXPRESSION 1-3 UNITS
602a-d
Hours: 3-9 Lab
 Designed for the student with learning deficits in written expression of ideas, including difficulties with organization of ideas, clarity, grammar, punctuation and word usage. Instruction may include one-to-one, small group, computer-assisted or larger group instruction. Formerly ENAB SKIL 2a-d.
Recommended Prerequisite: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet state-wide LD eligibility criteria.

ESKL DECODING/LANGUAGE 1-3 UNITS
603a-d
Hours: 3-9 Lecture/Discussion
 Designed for the student with learning deficits in reading/language skills. Remediation plans will be based on assessment of individual needs and learning style. Instruction may include one-to-one, small group, computer-assisted or larger group instruction. Formerly ENAB SKIL 3a-d.
Recommended Prerequisite: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet state-wide LD eligibility criteria.

ESKL ORGANIZATION 1-3 UNITS
604a-d
Hours: 3-9 Lecture/Discussion
 Designed for the student with study skills needs and/or tutoring needs for mainstream classes. A structured study skills program covering outlining, organization, notetaking skills and application of these skills, along with a secluded, quiet study area including instruction in word processing will be provided. Instruction may include one-to-one, small group, computer assisted or larger group instruction. Formerly ENAB SKIL 4a-d.
Recommended Prerequisite: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet state-wide LD eligibility criteria.

ENABLER SKILLS

ESKL SEQUENCING 1-3 UNITS
605a-d
Hours: 3-9 Lecture/Discussion
 Designed for the student with deficits in sequencing and spelling. Remediation plans will be based on assessment of individual need and learning style. Instruction may include one-to-one, small group, computer assisted or larger group instruction. Formerly ENAB SKIL 5a-d.
Recommended Prerequisite: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet state-wide LD eligibility criteria.

ENGINEERING

ENGR 1 GRAPHICS 3 UNITS
Hours: 3 Lecture/Discussion
3 Lab
 This is a one-semester course in descriptive geometry generally required of mechanical and industrial engineering majors. The course begins with the simple principles of orthographic projection, developing geometrical relationships between points, lines and planes, to the solution of applied problems such as true shape and development of surfaces, regions of outcrop, cuts and development of surfaces, regions of outcrop, cuts and fills, two- and three-dimensional vectors, graphical integration and differentiation, and empirical equations. Formerly ENGINEER 5A. (CAN-ENGR 2)
Prerequisites: Completion of trigonometry with a grade of "C" or better. Co-requisite of Math 75.

ENGR 2 STATICS 3 UNITS
Hours: 3 Lecture/Discussion
 This is the second semester course of a four-semester sequence of lower division engineering courses generally required of most engineering majors. The course consists of a fundamental treatment of the principles of statics in engineering mechanics. Topics included are: three dimensional vector operation, equilibrium of rigid bodies, support systems of constraint, concentrated and distributed loads on trusses, frames, cables and beams, and energy methods for determination of equilibrium and stability. Formerly ENGINEER 5B. (CAN-ENGR 8)
Prerequisites: Completion of Engineering 1 with a grade of "C" or better. Corequisite: Math 76 and Physics 5.

ENGR 3 MATERIALS SCIENCE 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
 This is the third semester of a four-semester sequence of lower division engineering courses generally required of most engineering majors. The course consists of a fundamental treatment of the principles of materials science in engineering. Topics included are chemical bonding, crystallography, phase diagrams, reaction rates and mechanical and electrical properties of solids. Formerly ENGINEER 5C. (CAN-ENGR 4)
Prerequisites: Completion of Engr 2, Chem 1, and English 1 Technical Writing with a grade of "C" or better. Co-requisite: Math 77 and Physics 6.

COURSE DESCRIPTIONS

ENGINEERING

ENGR 4 ALTERNATING CURRENT CIRCUITS 4 UNITS
Hours: 3 Lecture/Discussion
3 Lab

This is the fourth semester of a four-semester sequence of lower division engineering courses generally required of most engineering majors. The course consists of a fundamental treatment of the principles of electrical circuits, both AC and DC steady-state and transient. Formerly ENGINEER 5D. (CAN-ENGR 6)

Prerequisites: Completion of ENGINEER 3 **Co-requisite:** Physics 7 and Math 8.

ENGR 7 SURVEYING 3 UNITS
Hours: 2 Lecture/Discussion
3 Lab

This is a one-semester plane surveying course generally taken by civil engineering and land surveying majors. It consists of an introduction to the techniques of calculation and instrument use in field measurements involved in the horizontal and vertical control of civil engineering projects. As course requirements in this area differ widely among majors and options the student should consult the catalog of the intended transfer institution.

Prerequisites: Completion of trigonometry. **Co-requisite:** Math 75. (CAN-ENGR 10)

ENGLISH

ENGLISH 1 COLLEGE READING AND COMPOSITION 3 UNITS
Hours: 3 Lecture/Discussion

English 1 refines students conventional oral and written expression through analysis, discussion and production of various expository styles. It emphasizes various techniques of organization, style, clarity, and research. The class also emphasizes close reading of expository writing. Students will be expected to write 6000 to 8000 words.

SCIENTIFIC/TECHNICAL OPTION: A course in critical reading and expository writing for science and engineering majors which emphasizes skills necessary for writing correct, clear, and precise reports. Includes principles of logical reasoning, critical reading/discussion of good science writing, and methods of research. Students will be expected to write 6000 to 8000 words.

Recommended Prerequisites: A score of 25-35 in reading and 28-40 in English Usage on the Assessment Placement Services for Community Colleges or grade of "C" or higher in English 251 or recommendation through departmental evaluation. (CAN-ENGL 2)

ENGLISH

ENGLISH 1H READING AND COMPOSITION - HONORS 4 UNITS
Hours: 4 Lecture/Discussion

English 1 Honors teaches students intelligent and correct oral and written expression through reading and analysis, discussion and production of various expository styles. It emphasizes various techniques of organization, stylistic variation, clarity, integrating research (especially primary research) into students' work and close reading of various writers. Idiomatic and grammatical correctness is assumed. English 1 Honors differs from standard English 1 in that students must be accepted into the Honors Program and will enroll concurrently in a one unit colloquium which meets once per week and which culminates in an appropriate semester project.

Prerequisite: Acceptance into the Honors Program. (CAN-ENGL 2)

ENGLISH 2 LOGIC AND COMPOSITION 3 UNITS
Hours: 3 Lecture/Discussion

This course gives students the opportunity to study and apply logic and cogent thinking to written and oral communication. Students learn to recognize logical fallacies, analyze others' arguments, and produce their own arguments and solutions to problems, using primary and secondary research. Students are required to write 6,000 to 8,000 words. English 2 will fulfill the critical thinking requirement for most state universities and is part of the transfer requirement to the University of California, Berkeley.

Prerequisite: Completion of English 1 with a grade of "C" or better.

ENGLISH 4 COLLEGE COMPOSITION AND LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to literature, including short stories, the novel, poetry, and drama, through close reading, discussion, and writing. Formerly ENGLISH 20. (CAN-ENGL 4)

Recommended Prerequisite: English 1.

ENGLISH 10 CHICANO LITERATURE 3 UNITS
Hours: 3 Lecture/Discussion

An interpretive analysis of Chicano literature from its origins to its contemporary status. Poetry, short stories, essays, drama, and novels are used as a means of providing a panoramic view of literature and interpreting the Chicano experience in today's society. Emphasis will be placed upon the Contemporary Chicano Period or Renaissance of Chicano letters, and explosion in every literary genre. This course analyzes the interrelationships between literature, drama, popular music, art, and dance as reflections of Chicano artistic expression.

Recommended Prerequisite: Eligibility for English 1.

COURSE DESCRIPTIONS

ENGLISH

ENGLISH 15 SURVEY OF BRITISH LITERATURE 1 3 UNITS

Hours: 3 Lecture/Discussion

A survey of English literary history as revealed through an intensive study of some major authors and their typical masterpieces from Beowulf through the period of the Restoration. Formerly ENGLISH 5. (CAN-ENGL 8)

Recommended Prerequisite: English 1.

ENGLISH 16 SURVEY OF BRITISH LITERATURE 2 3 UNITS

Hours: 3 Lecture/Discussion

Complementary course to English 15. A survey of English literary history as revealed through an intensive study of some major authors and their typical masterpieces from the Romantic Period to the present. Formerly ENGLISH 6 (CAN—Eng 10).

ENGLISH 18 BLACK AMERICAN LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

An interpretive survey of Black American Literature from its origins to its present status. Poetry, essays, drama, short stories, autobiographies, biographies, and novels are used to provide a full spectrum of the Black American experience from a literary perspective. Emphasis is placed upon the variety of means used by Black American writers to reflect the views of those out of the mainstream in American culture. Formerly ENGLISH 8.

Recommended Prerequisite: English 1 recommended.

ENGLISH 19 WOMEN IN LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

This course explores the images of women in literature, myths, short stories, essays, novels, and poems. This exploration may examine common stereotypes of women in various life stages, environments, and cultures. Students will be encouraged to connect the course material with their own life experiences. Formerly ENGLISH 9.

ENGLISH 30 U.S. LITERATURE 1 3 UNITS

Hours: 3 Lecture/Discussion

A broad, general, chronological survey of the literature of the United States and a study of analysis of major literary works. This segment of the course considers colonial literature, the literature of the early republic, the American Renaissance and the literature of the Civil War years.

Recommended Prerequisites: English 1. (CAN-ENGL 14)

ENGLISH

ENGLISH 31 U.S. LITERATURE 2 3 UNITS

Hours: 3 Lecture/Discussion

English 31 is the first in a two-semester sequence of study in the literature of the United States. Like English 20, it focuses on reading, interpreting, and appreciating literature—in this case, U.S. literature from 1865-1980's—and on developing thinking and writing skills.

Recommended Prerequisite: English 1. (CAN-ENGL 16)

ENGLISH 32 THE BIBLE AS ENGLISH LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

A general survey of the history, biography, prophecy, narratives, poetry, and drama of the Old Testament and Apocryphal from a literary point of view, including some consideration of the historical background and influences.

Recommended Prerequisite: English 1.

ENGLISH 44 WORLD LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

This course covers the early masterpieces of the world's literature beginning with Greek and Roman works such as the *Iliad* and *Odyssey* by Homer, the *Aeneid* by Virgil followed by such representative works as Dante's *The Divine Comedy*, and concluding with the Renaissance works of Machiavelli and Cervantes. Other works of the periods are presented so that students receive a representative view of the literary works from antiquity to the 15th century.

Recommended Prerequisite: English 1.

ENGLISH 45 WORLD LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

This course covers the world's literature after the Renaissance to the modern period. Such masterpieces as Voltaire's *Candide*, Goethe's *Faust*, Pushkin's *Eugene Onegin*, Dostoevsky's *Notes from the Underground*, Ibsen's *The Wild Duck*, Kafka's "The Hunger Artist" and Proust's *Remembrance of Things Past* are but a few of the many works covered. Other works of the periods are presented so that students receive a representative view world literature.

Recommended Prerequisite: English 1, College Reading and Composition.

ENGLISH 46 SHAKESPEARE 3 UNITS

Hours: 3 Lecture/Discussion

An introduction to Shakespeare through films, lectures, student reports, analysis through a close reading of the plays, oral readings of major portions of the plays, and optional scenes acted by interested students in the class. The scope of the class is broad not only to familiarize the student with the life, historical period, and works of Shakespeare as material for critical essays and discussions, but also to present the works of Shakespeare as living theater which should appeal to the ear and the emotions as well as to the intellect.

Recommended Prerequisite: English 1.

COURSE DESCRIPTIONS

ENGLISH

ENGLISH CREATIVE WRITING 3 UNITS 114a-b

Hours: 3 Lecture/Discussion

An introduction to writing short stories, poems and plays. This course emphasizes class discussion about student writing. Class members are expected to read professional writers from various books and magazines and should write with the correctness required in English 1. English 114 a-b may be taken twice for credit. English 114a is a beginning course; 114b is a more advanced study of the same topics covered in 114a. After that it may be taken under the community service option.

Recommended Prerequisite: A grade of "C" or higher in English 1 or recommendation through departmental evaluation. Formerly ENGLISH 14a-b.

ENGLISH 251 FUNDAMENTALS OF COLLEGE WRITING 3 UNITS

Hours: 3 Lecture/Discussion

This course is designed to give students a background in basic writing for their work in a vocation or for English 1. Students will practice writing short compositions, paragraphs and sentences. Close critical reading is also an integral part of the course. They will also develop their skills in close critical reading. Formerly ENGLISH 51.

TECHNICAL OPTION: This course is designed to give students a background in basic writing for their work in a vocation. Students will practice writing short compositions, paragraphs, sentences and standard communiques such as reports used in business letters and research reports used in business and industry. They will also develop their skills in close critical reading.

Recommended Prerequisite: Acceptable score on English placement test or recommendation of the department through evaluation.

ENGLISH 253 READING FOR ENRICHMENT 3 UNITS

Hours: 3 Lecture/Discussion

This is a course recommended for students who plan to conclude their formal education in the Community College. It is designed to improve a person's ability to read effectively and perceptively. Assigned readings are examined for vocabulary, central themes and main ideas, analysis of major and minor details, facts and inferences; critical thinking skills are emphasized. Formerly ENGLISH 53.

ENG 265a-b DEVELOPMENTAL READING 4 UNITS

Hours: 3 Lecture/Discussion
2 Lab

This course is designed to develop analytic reading skills. The relationship between reading, writing, and critical thinking is stressed. The course also includes study skills and vocabulary development. Formerly ENGLISH 65a-b.

Recommended Prerequisite: Acceptable score on English Placement Test (reading score 19-24; grammar usage 0-8 or 28-40) or grade "C" or better in English 360. Because the course is intended to provide students with additional instruction in reading before they take English 1, the course may be taken concurrently with English 251.

ENGLISH

ENGLISH 360 WRITING, READING, STUDY SKILLS 6 UNITS

Hours: 6 Lecture/Discussion
1 Lab

This is the second course in a developmental, precollegiate sequence. The course is designed to build student self-concept; to teach observation, critical thinking, and study skills; and to review listening, reading, writing, and speaking skills. These communication strategies will be taught in an integrated approach and will prepare the student for college level courses and subsequent vocational and personal endeavors. **Recommended Prerequisites:** "C" or better in English 370 or qualifying placement scores of: Reading 0-18 and English Usage 19-27 or Reading 19-27 and English Usage 9-18 or recommendation of teacher from previous English course. Formerly ENGLISH 60.

ENGLISH READING IMPROVEMENT 4 UNITS 364

Hours: 3 Lecture/Discussion

This course is designed to develop basic reading skills, using a variety of materials, both fiction and non-fiction. A precollegiate course, it is designed for those students who feel they need additional guidance in developing comprehension and vocabulary skills. It is meant to supplement the reading and writing course sequence. Formerly ENGLISH R.

ENGLISH BASIC ENGLISH SKILLS 6 UNITS 370

Hours: 6 Lecture/Discussion
1 Lab

Basic English skills is the first course in a developmental, precollegiate sequence. The course is designed to review basic grammar, sentence structure, and paragraphs; it also includes improvement in vocabulary, reading comprehension, and study skills. Using an integrated approach, reading, writing, and study skills will be taught as a thinking process that requires active, involved participation. Formerly ENGLISH 80.

Recommended Prerequisites: Qualifying placement scores of Reading Test 0-18 and English Usage Test 9-18.

ENGLISH ENGLISH AS A SECOND LANGUAGE, BEGINNING LEVEL 1 8 UNITS 381

Hours: 7 Lecture/Discussion
3 Lab

A beginning English as a Second Language class for student who want to learn to speak, read, and write English. Formerly ENGLISH 70A.

Recommended Prerequisites: Students entering this class should have completed: 1) six years or less of formal education in their native country, or 2) Beginning ESL at a high school or adult school.

COURSE DESCRIPTIONS

ENGLISH

ENGLISH 382 ENGLISH AS A SECOND LANGUAGE, BEGINNING LEVEL 2 8 UNITS
Hours: 7 Lecture/Discussion 3 Lab

A beginning English as a Second Language class for students who want to learn to speak, read, and write English. Formerly ENGLISH 70B.

Recommended Prerequisites: Students entering this class should have completed: 1) seven years or more of formal education in their native country, or 2) Intermediate ESL at a high school or adult school.

ENGLISH 383 ENGLISH AS A SECOND LANGUAGE, INTERMEDIATE LEVEL 1 8 UNITS
Hours: 7 Lecture/Discussion 3 Lab

An intermediate English as a Second Language class for students who want to speak, read, and write English. Formerly ENGLISH 71A.

Recommended Prerequisites: 1) Completion of English 382 with "C" or better, or 2) Appropriate test score on LES Placement Test.

ENGLISH 384 ENGLISH AS A SECOND LANGUAGE, INTERMEDIATE LEVEL 2 8 UNITS
Hours: 7 Lecture/Discussion 3 Lab

An intermediate English as a Second Language class for students who want to learn to speak, read, and write English. Formerly ENGLISH 71B.

Recommended Prerequisites: 1) Completion of English 383 with "C" or better, or 2) appropriate test score on LES Placement Test.

ENGLISH 385 ENGLISH AS A SECOND LANGUAGE, ADVANCED LEVEL 1 8 UNITS
Hours: 7 Lecture/Discussion 3 Lab

An advanced English as a Second Language class for students who want to improve their English reading, writing, listening, and speaking skills. Formerly ENGLISH 72A.

Recommended Prerequisites: 1) Completion of English 384 with a grade of "C" or better, or 2) Appropriate test score on LES Placement Test.

ENGLISH 386 ENGLISH AS A SECOND LANGUAGE, ADVANCED LEVEL 2 8 UNITS
Hours: 7 Lecture/Discussion 3 Lab

An advanced English as a Second Language class for students who want to improve their English reading, writing, listening and speaking skills. Formerly ENGLISH 72B.

Recommended Prerequisites: 1) Completion of English 385 with "C" or better, or 2) Appropriate test score on LES Placement Test.

150

ENGLISH

ENGLISH 401a-d NOSTALGIC AND REMINISCENT WRITING 0 UNITS
Hours: Per class - 3 Per week - 3 (One week course)

A course in writing based upon personal experiences. Members of the class are encouraged to produce short autobiographical, reminiscent, or nostalgic sketches. Samples of such life-reviewing writings will be available if students choose to read them, but emphasis will be on discussion of what students choose to write about themselves. This course is intended primarily for the senior citizen. Formerly ENGLISH 16a-d.

ENVIRONMENTAL CONTROL TECHNOLOGY

ECT 181 BASIC AIR CONDITIONING 8 UNITS
Hours: 7 Lecture/Discussion 7 Lab

Materials Fee: \$10.00

An introductory lecture and demonstration course in residential air conditioning, refrigeration and heating that covers applied electrical and refrigeration theory, including how to evacuate and charge systems, use electrical meters to trouble shoot and diagnose electrical problems and how to properly install an entire duct system in the project house. In addition, proper brazing techniques, tools and safety practices are taught as applied to various other trades. Formerly AIR COND 80A.

Recommended Prerequisite: Math 210.

ECT 182 ADVANCED AIR 1 12 UNITS
CONDITIONING - COMMERCIAL AND DOMESTIC
Hours: 10 Lecture/Discussion 10 Lab

Materials Fee: \$10.00

An advanced course offered in air conditioning and refrigeration that covers commercial and domestic air conditioning and refrigeration theory. Topics include practical wiring circuits and diagnosing of electrical problems found in both commercial and domestic applications and residential and commercial heat load calculations necessary in sizing of equipment. This course provides essential knowledge for a student seeking future advancement in his or her career. Formerly AIR COND 80B.

Recommended Prerequisite: ECT 181.

ECT 260 BASIC REFRIGERATION 2 UNITS
Hours: 2 Lecture/Discussion 1 Lab

An introductory course in residential air conditioning and refrigeration that covers applied electrical and refrigeration theory. The students will learn how to use electrical meters to trouble-shoot and diagnose electrical problems. In addition, proper brazing techniques, tools and safety practices are taught as applied to various other trades. Formerly REFRIG 61.

COURSE DESCRIPTIONS

ENVIRONMENTAL CONTROL TECHNOLOGY

ECT 261 ADVANCED AIR CONDITIONING & REFRIGERATION - COMMERCIAL & DOMESTIC 2 UNITS

**Hours: 2 Lecture/Discussion
1 Lab**

The advanced course offered in air conditioning and refrigeration that covers commercial and domestic air conditioning and refrigeration theory. The students will study the practical wiring circuits and diagnose electrical problems found in both commercial and domestic applications. The student will also become familiar with various types of electrical motors, and their individual characteristics. This course provides essential knowledge for a student seeking further advancement in his/her career. Formerly REFRIG 61.

ECT 262 HEATING SYSTEMS AND CONTROLS 2 UNITS

**Hours: 2 Lecture/Discussion
1 Lab**

An advanced course offered in residential and light-commercial heating that covers theory, design, controls, and operation of modern day space heating systems. The students will study the practical wiring of circuits, and the diagnosing of problems found in both residential and light-commercial applications. In addition, the students will gain an understanding of both L.P. and natural gas fundamentals and applications, controls and safeties, with particular emphasis given to safe work habits and practices. This course provides essential knowledge for a student seeking further advancement in his/her career. Formerly AIR COND 62.

Recommended Prerequisite: ECT 260 or equivalent training/experience.

ECT 263 COMMERCIAL REFRIGERATION. 2 UNITS

Hours: 2 Lecture/Discussion

An advanced course in commercial refrigeration for advanced students. The student will study the practical wiring of circuits, various defrosting methods, piping, design, sizing, and controls commonly used in the industry. This course provides essential knowledge for a student seeking further advancement in his/her career. Formerly REFRIG 63.

Recommended Prerequisite: ECT 260 or equivalent training/experience.

ECT 279 BASIC REFRIGERATION AND HEATING THEORY, OPERATION, INSTALLATION & MAINTENANCE 4 UNITS

**Hours: 3 Lecture/Discussion
3 Lab**

The student will receive instruction and demonstration in the different means of heating and cooling residential and light commercial systems. The student will be exposed to various types of heating and cooling units used, typical applications, sequence of operation, installations, and proper maintenance procedures. Formerly AIR COND 79.

Recommended Prerequisite: ECT 181.

ENVIRONMENTAL CONTROL TECHNOLOGY

ECT 300 INTRODUCTION TO INDUSTRIAL AMMONIA REFRIGERATION 3 UNITS

Hours: 3 Lecture/Discussion

A practical course for the industrial maintenance mechanic. The basic fundamentals of pressure, temperature and heat transfer will be covered as well as the specific uses, methods, components, systems and safety concerns associated with industrial refrigeration systems utilizing ammonia as the refrigerant. The student will have a good understanding of industrial refrigeration fundamentals and should, upon completion of this course, be able to achieve plant operator "B" certification (entry level) through RETA as well as laying a firm foundation for the operator "A" (Engineer level) certification. Formerly REFRIG 90.

Recommended Prerequisite: ECT 260 or 181 or past/presently employed by an industrial ammonia facility.

F

FASHION

FASH 76 TEXTILES 3 UNITS

Hours: 3 Lecture/Discussion

A survey of natural and man-made fiber classifications, methods of textile fabrication, and types of finishes. The selection of textile products for clothing and home furnishings related to consumer's intended use and characteristics of the product. Fulfills lower division requirement for textiles in four year schools. Formerly HEC 3. (CAN-HEC 6)

FASH COSTUMING 3 UNITS

112a-b

**Hours: 2 Lecture/Discussion
4 Lab**

CROSS REF: Theater Arts 112a-b

Materials Fee: \$5.00

A study of the principles and practice of costume construction from pattern to completed garments. Construction techniques, fabrics, basic patterns, wardrobe plotting, and historical styles. Additional hours required to work on crews for college productions.

FASH MAKEUP 3 UNITS

117a-b

**Hours: 2 Lecture/Discussion
4 Lab**

CROSS REF: Theatre Arts 117a-b

Materials Fee: \$10.00

This course is designed to introduce the student to the basic techniques and materials of makeup: theatrical, TV, photos, special occasions, business and evening. Topics include facial shape, hair arrangement, skin care and makeup for various races and skin types. Additional hours required to work on crews for college Theatre Arts and Dance productions.

COURSE DESCRIPTIONS

FASHION

FASH 160a-b CLOTHING CONSTRUCTION 3 UNITS
Hours: 2 Lecture/Discussion 3 Lab

A study of the principles of clothing construction from pattern to completed garment. Emphasis on fabric performance, garment fit and various construction techniques for woven and knit fabrics. Designed for both beginners and experienced sewers. Open to all interested students. Formerly HEC 21a-b. (CAN-HEC 10 Includes 160a only.)

FASH 161a-b TAILORING 3 UNITS
Hours: 2 Lecture/Discussion 3 Lab

A study of traditional and contemporary tailoring techniques, including construction of a man's or woman's coat or suit jacket. Emphasis on garment fit, quality construction and pattern selection. Open to all interested students. Formerly HEC 22a-b.

FASH 162 CREATIVE PATTERN DESIGN 3 UNITS
Hours: 2 Lecture/Discussion 3 Lab

A basic course in apparel design through the use of flat pattern techniques. Includes the design, drafting, and construction of garments. Open to all students interested in clothing design, especially fashion majors, those who are interested in sewing for themselves and others, who may teach in the clothing area or who have fitting problems. Formerly 23A.

Recommended Prerequisites: Clothing construction experience helpful.

FASH 163 ADVANCED PATTERN DESIGN 2 UNITS
Hours: 6 Lab

An advanced lab course in apparel design through the use of flat pattern techniques. Includes the design, drafting and construction of garments. Formerly HEC 23B.

Recommended Prerequisite: Fash 162 or equivalent.

FASH 167 APPLIED COLOR THEORY 2 UNITS
Hours: 2 Lecture/Discussion 1 Lab

A study of color and its relationships to individuals and their environments including interior design, advertising, fashion merchandising, floral design, etc. Contemporary color theories, color perceptions, color matching, and the development of a color nomenclature are included. Projects assist the student in developing a sensitive and discriminating eye for making color choices. Attention is given to the selection of an individualized color palette. Formerly HEC 5A.

FASHION

FASH 168 ADVANCED COLOR THEORY 2 UNITS
Hours: 2 Lecture/Discussion 1 Lab

The advanced color theory course expands color's applications and investigates color uses in areas of student interest. Time is given to visual testing, research and development of skills valuable for planning a color related career. Field work helps the student examine community and regional employment possibilities. Formerly HEC 5B.

Prerequisites: Fashion 167 and Consumer/Family Studies Department Interview.

FASH 170 MODELING 3 UNITS
Hours: 3 Lecture/Discussion
CROSS REF: Theater Arts 170

An introduction to the modeling industry and the roles of models and agencies. Instruction will include experience in basic fashion and photographic techniques; portfolio preparation; stage and photographic makeup; runway techniques; posture, gesture and movement and participation in a fashion production. Students will also analyze and evaluate personal diet, nutrition and exercise, skin care and makeup.

FASH 174a-b FASHION ILLUSTRATION 2 UNITS
Hours: 2 Lecture/Discussion 1 Lab

CROSS REF: Art 174a-b

Fundamentals of fashion illustration, including a study of current fashion ideals; drawing fashion proportioned figures and faces, rendering garment details, fabrics and accessories; familiarizing student with fashion publications; preparing illustration including layout, stylizing drawings, and matting drawings for presentation. Formerly HEC 25a-b.

FASH 175 FASHION IMAGE 3 UNITS
Hours: 3 Lecture/Discussion

An introductory course which offers both the fashion merchandising major and the non-major, a means of exploring the fashion world and discovering image dressing which is appropriate for various lifestyles. Students study clothing selection suited to the male and female physique and demonstrate personal selection skills based upon assessments of the personal image projection, color evaluation and figure analysis. Skills and topics include the use of art principles to make basic wardrobe plans, nutrition management, applied grooming aids, clothing maintenance, and shopping techniques. Formerly HEC 20. (CAN-HEC 20)

COURSE DESCRIPTIONS

FASHION

FASH 177 INTRODUCTION TO FASHION MERCHANDISING 3 UNITS

Hours: 3 Lecture/Discussion

This is an introduction to the production, distribution and consumption of fashion products. This study covers fashion terminology, fashion designers, fashion trends, manufacturers, retail outlets, marketing and career opportunities. The inter-relationship of economics and social factors to the fashion industry are covered. It is required for the fashion merchandising, vocational certificate, the AA degree in Consumer/Family Studies with a fashion merchandising or fashion design major. Formerly HEC 27.

FASH 178 VISUAL MERCHANDISING AND PROMOTION 3 UNITS

Hours: 2 Lecture/ Discussion
3 Lab

A study of the basic techniques needed for visual presentation of merchandise: Store windows and interior displays, as well as their coordination with sales promotion, will be studied. Fashion advertising and publicity will be analyzed. Required for the fashion merchandising vocational certificate, the AA Degree with a fashion merchandising major and the interior design major in Consumer/Family Studies. Formerly HEC 28.

FASH 179 FASHION ANALYSIS 2 UNITS

Hours: 2 Lecture/Discussion

This course is a study of apparel and accessories from a psychological and sociological perspective. It includes the analysis of historical fashion cycles, cultural factors in dress, the relationship of social class, economics, government and religion to apparel and the relationship of clothing to behavior. This is a required course for the fashion merchandising, fashion design, and color/image consulting vocational certificates, and the AA Degree in Home Economics with a fashion merchandising major. Formerly HEC 29.

FASH 260 CAREER DRESSING 1 UNIT

Hours: 2 Lecture/Discussion

CROSS REF: Bus 260

Designed for students who want to update, enhance, and improve their career appearance. Specific methods for the selection of clothing and accessories suitable for the working environment are presented. Excellent preparation for all students desiring to make the right impression for interviews and career changes. Career Dressing is a required course for the fashion design vocational certificates, and the AA degree in Consumer/Family Studies with a fashion merchandising major. Formerly HEC 75.

FASH 360a-d PRINCIPLES OF CLOTHING CONSTRUCTION 2 UNITS

Hours: 3 Lab

A skills-oriented class in clothing construction from pattern to completed garment. Emphases are garment fit, the use of construction techniques for woven and knit fabrics, efficient sewing techniques. Designed for both beginning and experienced sewers. Formerly HEC 70a-d.

FASHION

FASH 361 COLOR SELECTION 1 UNIT

Hours: 3 Lecture/Discussion
(18 total semester hours)

The class features the development of a personal color palette through a systematic, organized process for the selection of individualized colors. The class includes a brief examination and comparison of contemporary color theories. Formerly HEC 77.

FIRE TECHNOLOGY

FIRE TEC* 154 FUNDAMENTALS OF FIRE SERVICE OPERATIONS 3 UNITS

Hours: 3 Lecture/Discussion

Provides the student with the fundamentals of fire department organization, management, and resources, and emphasizes the use of those resources to control various emergencies. Formerly FIRE SCI 54.

FIRE TEC 155 FUNDAMENTALS OF FIRE PROTECTION CHEMISTRY 3 UNITS

Hours: 3 Lecture/Discussion

Provides the student with fundamental information and knowledge of the physical and chemical characteristics of matter, fire, hazardous materials, and basic extinguishment theory. Formerly FIRE SCI 55.

FIRE TEC 156 FIRE SERVICE HYDRAULICS 3 UNITS

Hours: 3 Lecture/Discussion

This is a fire suppression class which studies the theory of water at rest; in motion, under pressure and engineering principles of formulas and mental calculations dealing with hydraulic problems as related to the fire service industry. Formerly FIRE SCI 56.

Prerequisites: Fire Tec 154 and Fire Tec 159.

FIRE TEC* 157 FUNDAMENTALS OF FIRE PREVENTION 3 UNITS

Hours: 3 Lecture/Discussion

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems. Formerly FIRE SCI 57.

COURSE DESCRIPTIONS

FIRE TECHNOLOGY

FIRE TEC 159 INTRODUCTION TO FIRE TECHNOLOGY **3 UNITS**
Hours: 3 Lecture/Discussion
 Provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; Introduction to fire protection systems; Introduction to fire strategy and tactics. Formerly FIRE SCI 59.

FIRE TEC* 161 S.F.M. FIRE PREVENTION 1A **2 UNITS**
Hours: 40 Lecture/Discussion
 This 40-hour course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems. Formerly FIRE SCI 60A.
Prerequisites: Fire Tech 1, concurrent enrollment or equivalent.

FIRE TEC* 162 S.F.M. FIRE PREVENTION 1B **2 UNITS**
Hours: 40 Lecture/Discussion
 This 40-hour course provides information regarding the methods of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention, with fire safety education and detection and suppression systems. Formerly FIRE SCI 60B.
Prerequisites: Fire Technology 161.

FIRE TEC* 165 WILDLAND FIRE CONTROL **3 UNITS**
Hours: 3 Lecture/Discussion
 A course designed to provide the employed firefighter or fire science major with a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior and control techniques. Formerly FIRE SCI 66.
Prerequisites: Completion of Fire Science 54 or Fire Science 59.

FIRE TEC* 170 BASIC FIREFIGHTER I ACADEMY **9 UNITS**
Hours: 108 Lecture/Discussion
132 Lab
 Manipulative and technical training in basic concepts in fire service organization and theories of fire control, including laws and regulations affecting the fire service personnel, and functions; fire organizations; principles of fire behavior; and the basic consideration in fire strategy and tactics. Formerly FIRE SCI 70.

FIRE TECHNOLOGY

FIRE TEC* 171 S.F.M. FIRE INSTRUCTOR 1A **2 UNITS**
Hours: 40 Lecture/Discussion
 This 40-hour course is recommended for Fire Service personnel having training responsibilities within their fire department. Deals with such topics as: terms pertaining to instruction; supplementary instruction sheets; concepts of learning; course development; lesson development; planning, organizing and managing instructional activities; teaching methods and teaching aids as they relate to teaching both manipulative skills and technical information in the fire service. Formerly FIRE SCI 71A.

FIRE TEC* 172 S.F.M. FIRE INSTRUCTOR 1B **2 UNITS**
Hours: 40 Lecture/Discussion
 This 40-hour course is recommended for Fire Service personnel having training responsibilities within their fire department. Deals with such topics as: terms pertaining to instruction; supplementary instruction sheets; concepts of learning; course development; lesson development; planning, organizing and managing instructional activities; teaching methods and teaching aids as they relate to teaching both manipulative skills and technical information in the fire service. Formerly FIRE SCI 71B.
Prerequisite: Fire Science 171.

FIRE TEC* 173 FIRE COMMAND 1A **2 UNITS**
Hours: 40 Lecture/Discussion
 This 40-hour course provides the Company Officer with information and experience in command and control techniques at the scene of an emergency. The course emphasizes the act of commanding, the authority to command and the personnel, and act under a commander. It is part of the performance requirements for a Fire Service Officer and is taught in compliance with regulations and requirements of the California State Fire Marshal's Office. Formerly FIRE SCI 72A.
Prerequisites: Full-time employee of a fire department and completion of Fire Tec 154, or equivalent experience.

FIRE TEC 174 FIRE COMMAND 1B **2 UNITS**
Hours: 40 Lecture/Discussion
 This 40-hour course provides the Fire Company Officer with information and experience in command and control techniques at the scene of a Hazardous Materials emergency. It is part of the performance requirements for a Fire Service Officer. Formerly FIRE SCI 72B.
Prerequisites: Fire Tec 173.

COURSE DESCRIPTIONS

FIRE TECHNOLOGY

FIRE TEC* FIRE MANAGEMENT I 2 UNITS
177

Hours: 40 Lecture/Discussion

This 40-hour course is a review of the most important findings in modern industrial psychology and behavioral management, and then, very quickly through the use of in-action exercises, simulations, and case studies, allows each student to experience how these basic principles can be effectively applied for on-the-job results. The emphasis throughout is on building practical skills that constitute the "how to's" of basic leadership. Formerly FIRE SCI 77A.

Prerequisite: Must have completed nine (9) units in Fire Science Program or currently employed by a fire department.

FIRE TEC S.F.M. - NON AMBULANCE EMT 4 UNITS
240

Hours: 3 Lecture/Discussion

This course instructs the student in appropriate procedures of emergency care and an introduction in utilizing improvised and commercial tools safely in vehicle extrication. It meets the requirements of the State of California and the State Fire Marshal's Office for EMT-1 Non-Ambulance/Fire Service. Satisfactory completion of this course enables the student to function in the Fire Service as an EMT-21 Non-Ambulance/Fire Service on an engine company. Formerly FIRE SCI 40.

Prerequisite: Employment in the fire service.

FOSTER CARE

FOSTER DISCIPLINE 0 UNITS
C 400

Hours: 2 Lecture/Discussion
(16 total semester hours)

A basic course in discipline for foster parents that will provide parenting skills and techniques needed to care for foster children in their care. Emphasis will be placed on the child's special needs, the possible problematic behaviors and the regulations within the protective service system. Formerly ECE 98B.

FOSTER WORKING WITH THE SYSTEM 0 UNITS
C 401

Hours: 2 Lecture/Discussion
(32 hour course)

This course covers the very complex foster care system in California. It is designed to enable foster parents to more effectively and efficiently work within the system. The various agencies are studied and communication skills developed. This course is also valuable for any professional working with foster children, natural parents and foster parents. Formerly ECE 94.

FOSTER CARE

FOSTER DISRUPTIVE 0 UNITS
C 402 BEHAVIOR

Hours: 2 Lecture/Discussion
(16 total semester hours)

A study of disruptive behaviors including lying, stealing, aggressiveness and destructiveness, acting-out, bedwetting and others as found in foster children. The course provides training for foster parents and social service staff to identify and intervene in these problematic behaviors. Formerly ECE 99.

FOSTER CHILD SEXUAL 0 UNITS
CR 403 ABUSE

Hours: 2 Lecture/Discussion
(12 total semester hours)

A study of sexual child abuse from five vantage points: the child, the legal system, the social service system, the parents and the mandated reporters. Content will include detection, intervention and prevention. Formerly ECE 98A.

FOSTER SPECIAL NEEDS 0 UNITS
C 404

Hours: 2 Lecture/Discussion
(16 total semester hours)

A study of health problems as related to the foster child. Content includes information to enable the foster parent and social worker to identify and manage the child with special health needs resulting from abuse, neglect, abnormal prenatal development and genetic defects. Formerly ECE 95.

FOSTER ADULT 0 UNITS
CR 405 INDEPENDENT LIVING

Hours: 7 Lecture/Discussion
(28 total semester hours)

A course in independent living for foster parents of youths ages 16-18. This course helps foster parents develop a mentor/teacher role model to aid youths in learning independent living skills during their last one or two years in foster care. Foster parents learn to assess skills and plan for skill development.

FOSTER YOUTH 0 UNITS
CR 406 INDEPENDENT LIVING

Hours: 7 Lecture/Discussion
(28 total semester hours)

A course in independent living for foster youths from ages 16-18 who need skills to leave foster care and live on their own (emancipated). The course helps develop the ability to assess skills, develop goals, develop a plan and develop skills in preparation for a very difficult, ambivalent developmental period. The foster parents of these youths are simultaneously training to facilitate this process.

COURSE DESCRIPTIONS

FRENCH

FRENCH 1 ELEMENTARY FRENCH I 4 UNITS

Hours: 4 Lecture/Discussion

This course is committed to the use of French and French cultural aspects as the medium of instruction and to the four skills of understanding, speaking, reading and writing. It is the first semester course in a series of four. It introduces the student to the French sentence patterns and words that are found in basic everyday topics, activities, and culture.

FRENCH 2 ELEMENTARY FRENCH 2 4 UNITS

Hours: 4 Lecture/Discussion

This course is committed to the use of French and French cultural aspects as the medium of instruction and to the four skills of understanding, speaking, reading and writing. It is the second semester course in a series of four. It also strengthens and broadens the student knowledge of topics, activities and culture of the French speaking world.

Prerequisites: French 1 or two years of high school French or permission of department.

FRENCH 3 INTERMEDIATE FRENCH 4 UNITS

Hours: 4 Lecture/Discussion

This course is the third semester course in a series of four. It is conducted in French. It is committed to the development of communicative skills in a cultural context. Reading, listening and writing skills are strengthened by the exposure to and the analysis of contemporary texts and French media sources.

Recommended Prerequisites: French 2 or three years of high school French or permission of the department.

FRENCH 4 ADVANCED FRENCH 4 UNITS

Hours: 4 Lecture/Discussion

French 4 is the fourth course in a series of four. Classes are conducted in French. The development and the acceleration of conversational skills are stressed within cultural contexts. The morphology and the syntax of the French language are studied in detail. Writing practice is intensive and related to contemporary cultural-socio-economical aspects of the French society. An overview of French literary genres is presented.

FRENCH 350 CONVERSATIONAL FRENCH I 2 UNITS

Hours: 3 Lecture/Discussion

This is the first conversational French course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Very basic grammar points will be touched upon. Formerly FRENCH 50.

FRENCH

FRENCH 351 CONVERSATIONAL FRENCH II 2 UNITS

Hours: 3 Lecture/Discussion

This is the second conversational French course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Basic grammar points will be touched upon. Formerly FRENCH 51.

Prerequisite: Conversational Level I.

FRENCH 352 CONVERSATION FRENCH III 2 UNITS

Hours: 3 Lecture/Discussion

This is the third conversational French course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Grammar points will be introduced as necessary for clear communication. Formerly FRENCH 52.A

Prerequisites: Conversational Level II.

FRENCH 353 CONVERSATIONAL FRENCH IV 3 UNITS

Hours: 3 Lecture/Discussion

This is the fourth conversational French course in a series of four for the student interested in speaking the language at a fluent level with an emphasis on survival and consumer skills. Basic grammar points will be introduced as necessary for clear communication.

Recommended Prerequisites: Conversational Level III or permission of department.



GEOGRAPHY

GEOG 1 PHYSICAL GEOGRAPHY 3 UNITS

Hours: 3 Lecture/Discussion

An investigation and interpretation of weather, climate, vegetation, soils, land forms, oceans, and maps. An emphasis is placed on explaining the distribution of physical phenomena on the surface of the earth and the relationship between man and the natural environment. (CAN-GEOG 2)

Recommended Prerequisites: Eligible to enroll in Math 230 and English 1.

COURSE DESCRIPTIONS

GEOGRAPHY

GEOG 2 WORLD REGIONAL GEOGRAPHY 3 UNITS

Hours: 3 Lecture/Discussion

Aspects of physical and cultural geography such as landforms, climate, vegetation, soils, natural resources, demography, political and economic organization and urbanization are applied to various world regions. An emphasis is placed on understanding man-land relationships, promoting cultural awareness, and examining current world problems from a geographical perspective.

Recommended Prerequisite: Eligible to enroll in English 1.

GEOG 3 CULTURAL GEOGRAPHY 3 UNITS

Hours: 3 Lecture/Discussion

A general background to cultural geography including topics such as population, cultural origins, settlement patterns, economic and political systems, resources, man-environment relationships, and map interpretations. An emphasis is placed on promoting cross-cultural understanding and examining current world problems from a global perspective.

Recommended Prerequisites: Eligible for English 1.

GEOLOGY

GEOLOGY 1 PHYSICAL GEOLOGY 4 UNITS

**Hours: 3 Lecture/Discussion
3 Lab**

A study of the physical activities that work to change the surface of the earth. Included are topics about stream activities, earthquakes, landsliding, shoreline hazards, groundwater contamination and depletion, and the formation of mineral deposits and their economic development. The concepts of plate tectonics will be integrated into the course. Formerly GEOLOGY 1A. (CAN-GEOL 2).

Recommended Prerequisites: Eligible to enroll in Math 230.

GEOLOGY 12 ENVIRONMENTAL GEOLOGY 3 UNITS

Hours: 3 Lecture/Discussion

A study of man's geologic environment. Earthquakes, landslides, volcanic activity, and flooding will be studied. Emphasizes hazards, materials, energy and water resources, human interference with geologic processes and effects of urbanization, with particular reference to California. One or more optional field trips during the semester will be scheduled.

Recommended Prerequisites: Eligible to enroll in Math 230.

GEOLOGY FIELD GEOLOGY OF .5 UNITS

351 A PORTION OF THE MOJAVE DESERT

**Hours: 2 Lecture/Discussion
8 Lab
10 Activity**

A field trip course which introduces the student to a portion of the Mojave Desert from Tehachapi to Yermo, and that portion of the San Joaquin Valley from Visalia to Bakersfield. The course emphasizes the physical geology of the area and the interactions of man and his geological environment. NOTE: Graded on a credit/no credit basis. Formerly GEOLOGY 50A.

Co-requisite: Concurrent enrollment in Geology 1 or Geology 12.

GEOLOGY

GEOLOGY FIELD GEOLOGY 0 UNITS

352 BETWEEN VISALIA AND THE CENTRAL CALIFORNIA COAST

**Hours: 3 Lecture/Discussion
2 Lab
5 Activity**

A field trip course which introduces the students to a portion of California between Visalia and the Central California Coast and along the coast from Santa Maria to Cambria. The course emphasizes the physical geology of the area and the interactions of man and his geological environment. NOTE: Graded on a credit/no credit basis. Formerly GEOLOGY 50B.

Prerequisite: Concurrent enrollment in Geology 1 or Geology 12.

GERMAN

GERMAN 350 CONVERSATIONAL GERMAN 2 UNITS

Hours: 3 Lecture/Discussion

This is the first conversational German course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Very basic grammar points will be touched upon. Formerly GERMAN 50.

GERMAN 351 CONVERSATIONAL GERMAN II 2 UNITS

Hours: 3 Lecture/Discussion

This is the second conversational German course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Basic grammar points will be touched upon. Formerly GERMAN 51.

Prerequisite: Conversational Level I or permission of instructor.

GERMAN 352 CONVERSATIONAL GERMAN III 2 UNITS

Hours: 3 Lecture/Discussion

This is the third conversational German course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Grammar points will be introduced as necessary for clear communication. Formerly GERMAN 52.

Prerequisites: Conversation Level II or permission of instructor.

COURSE DESCRIPTIONS

H

HISTORY

HIST 4 THE HISTORY OF WESTERN CIVILIZATION TO 1648 3 UNITS

Hours: 3 Lecture/Discussion

History 4 "Western Civilization to 1648," is the first of an optional two-semester course sequence which surveys the development of Western Civilization. Covering events from approximately 3000 BCE to 1648 CE, it defines "civilization" and traces how institutions and ideas from the ancient Mideast, Greece, Rome, and medieval Europe came together by the middle of the seventeenth century to form a mature "Western" civilization. This course fulfills general-education requirements for CSU-Fresno and for the University of California, as well as most private liberal-arts colleges. It is recommended for all transfer students with college-level reading and writing skills. Formerly HIST 4A. (CAN-HIST 2)

Prerequisites: Eligible to enroll in English 1, or with counselor recommendation and department approval.

HIST 5 THE HISTORY OF WESTERN CIVILIZATION SINCE 1648 3 UNITS

Hours: 3 Lecture/Discussion

History 5 is the second of an optional two-course sequence which surveys the history of the modern world. It begins with a study of the rise of absolute dynastic states and commercial empires in the eighteenth century. Then it investigates the impact of the French Revolution and the rise of the industrial economy on Europe in the nineteenth and first half of the twentieth century. And finally it describes the so-called information revolution after the Second World War and suggests some of its possible consequences in light of previous historical patterns. This course fulfills general-education requirements for CSU-Fresno and for the University of California, as well as most private liberal-arts colleges. It is recommended for all transfer students with college-level reading and writing skills. Formerly HIST 4B. (CAN-HIST 4)

Prerequisites: Eligible to enroll in English 1, or with counselor recommendation and department approval. History 4 recommended.

HIST 17 THE PEOPLE OF THE UNITED STATES 3 UNITS

Hours: 3 Lecture/Discussion

A study of the people of the United States from earliest beginnings to the Reconstruction emphasizing the interaction of political, economic, and social factors in the evolution of American culture. Formerly HIST 17A. (CAN-HIST 8)

Recommended Prerequisite: Eligibility for English 1.

HIST 18 THE PEOPLE OF THE UNITED STATES 3 UNITS

Hours: 3 Lecture/Discussion

A study of the people of the United States from Reconstruction to the present time emphasizing the interaction of political, economic, and social factors in the evolution of American Culture. Formerly HIST 17B. (CAN-HIST 10)

Recommended Prerequisite: Eligibility for English 1.

HISTORY

HIST 18H AMERICAN HISTORY THROUGH THE EYE OF FICTION 4 UNITS

Hours: 3 Lecture/Discussion

A study of the people of the United States from 1865 to the present, emphasizing the interaction of political, economic, and social factors in the evolution of American culture. In addition, this course will emphasize the reflection of each era in the work of representative writers of each period. A one hour colloquium is also required for the fourth unit of credit. Formerly 17BH.

Prerequisite: Acceptance into the COS Honors Program.

HIST 19 THE PEOPLE OF COLONIAL LATIN AMERICA 3 UNITS

Hours: 3 Lecture/Discussion

A comparative study of the culture and heritage of the people of Latin America from the Pre-Columbian period to the end of the wars for independence. Emphasis will be placed upon the social, political, and economic factors shaping the destiny of the countries of Latin America up to the 1850's. Formerly HIST 18A.

Recommended Prerequisites: Eligible for English 1.

HIST 20 THE PEOPLE OF LATIN AMERICA IN THE 19TH & 20TH CENTURIES 3 UNITS

Hours: 3 Lecture/Discussion

A comparative study of the culture and heritage of the people of Latin America from the 1850's to the present. Emphasis will be upon the social, political and economic factors shaping their destiny and role in today's world community. Formerly HIST 18B.

Recommended Prerequisite: Eligible for English 1.

HIST 21 THE PEOPLE OF MEXICO 3 UNITS

Hours: 3 Lecture/Discussion

A study of the culture and heritage of the people of Mexico from the Native American period to the present time with an emphasis on the social, political, and economic factors shaping their destiny in the world today. Through assigned reading, discussion, and writing, the students gain critical insights into the history and development of Mexico, as well as its literary, artistic, and sociopolitical contributions to world culture and civilizations.

Recommended Prerequisite: Eligible for English 1.

HIST 23 MEXICAN AMERICAN HISTORY 3 UNITS

Hours: 3 Lecture/Discussion

A study of the culture and heritage of the Mexican American people from the Native American period to the present time with an emphasis on the social, political, and economic factors shaping their destiny in American society.

Recommended Prerequisite: Eligible for English 1.

COURSE DESCRIPTIONS

HISTORY

HIST 31 THE PEOPLE OF CALIFORNIA 3 UNITS

Hours: 3 Lecture/Discussion

A study of the people of California from the earliest Indian civilizations and subsequent white settlements right down to the present. An Inquiry into the political, social, and economic institutions of California as a part of Spain, Mexico, and the United States. Open to both transfer and two-year students.
Recommended prerequisite: Eligible for English 1.

HUMANITIES

HUMANITIES THE GREEK WORLD 4 UNITS

1H

Hours: 4 Lecture/Discussion

A study of the fundamental ideas and values evolved in the Greek world from 4000 B.C. through the Hellenistic period and their reflection in mythology, literature, philosophy, and visual arts. Formerly HUMANITIES 10H.
Prerequisite: Admission to the Honors Program.

HUMANITIES THE WORLD OF LATINO-AMERICA 4 UNITS

102H

Hours: 4 Lecture/Discussion

A study of the fundamental ideas and values evolved in Latin America, their ties with geography, and their expression in art, archaeological remains, historical records, and more recent oral traditions and literature. Formerly HUMANITIES 20H.
Prerequisite: Admission to the Honors Program.

HUMANITIES INTRO TO HUMANITIES 3 UNITS

301

Hours: 3 Lecture/Discussion

This is one of a series of courses designed to help students develop the competence and confidence necessary for successful college study in both academic and vocational courses. Introduction to Humanities is an introductory course in the visual arts which traces the development of Western civilization from Paleolithic times to the present. Although the course will focus on man's artistic creations, these objects are explored as reflections of their cultural contexts. Formerly ART 64.

Recommended Prerequisites: Must be enrolled in the SUCCESS program.

HUMAN DEVELOPMENT

HUM DEV PEER COUNSELING 3 UNITS

122a-d

Hours: 2 Lecture/Discussion
2 Lab

Human Development 22 focuses on interpersonal communication and interaction skills within the setting of student-to-student advising. Emphasis is placed on communication in dyadic, group, and intercultural contexts. Counseling theories and research provide a foundation upon which to understand human behavior and appropriate intervention as Peer Advisors. Students will acquire skills important to the applications of general psychology to solve non-clinical academic, personal, and social problems while serving as assistants to faculty and paraprofessionals. Formerly HUMAN DEVELOP 22a.

Recommended Prerequisites: Completion of Psych 1 and English 251.

HUM CAREER 1 UNIT

DEV 251a-c AWARENESS

Hours: 2 Lecture/Discussion

This course provides an introduction to basic work characteristics and employment trends that expands the student's knowledge of present and future employment opportunities. It also exposes the student to different self-assessment inventories that relate to career/life planning areas. Formerly HUMAN DEVELOP 51a.

HUM SUPERVISED TUTORING 0 UNITS

DEV 324 a-d

Hours: Up to 2 weeks per subject.

This course is designed to provide students with tutorial assistance. Tutees may work either individually or in small groups. They may work with computer programs developed specifically to meet their needs or they may work with tutors who have been recommended by faculty as having achieved a degree of proficiency in the area they are tutoring. Formerly HUMAN DEV 24.

HUMAN COLLEGE SUCCESS SKILLS 1 UNIT

DEV 330

Hours: 1 Lecture/Discussion

This is one of a series of courses designed to help students develop competence and confidence necessary for successful college study in both academic and vocational courses. Human Development 330 is specifically designed to increase the student's success in college by assisting the student in obtaining skills necessary to reach his/her educational objectives. The skills covered in this course are meant to supplement the study skills covered in other precollegiate courses. The skills are introduced and reinforced primarily through discussion of topics which affect a student's progress and are instrumental in determining his/her success.

Prerequisite: Must be enrolled in SUCCESS Program or EOP&S student with permission of department.

COURSE DESCRIPTIONS

HUMAN DEVELOPMENT

HUM DEV 358 SUMMER COLLEGE READINESS PROGRAM 6 UNITS

Hours: The Summer College Readiness Program provides students with the skills and necessary knowledge to become self-directed individuals. Desired outcomes of the program are that students become independent thinkers capable of making intelligent choices, develop the self-confidence to participate in classroom activities, become conscientious in their study habits, and ultimately take the responsibility for their actions. Formerly HUMAN DEVELOP 58.

HUMAN SERVICES

HUM SER 120 INTRODUCTION TO SOCIAL WELFARE 3 UNITS

Hours: 3 Lecture/Discussion
A general survey of the social, economic, political, historical and philosophic components in the development of social welfare programs. Major contemporary public assistance programs in the United States and California government are evaluated. Formerly HUMAN SERV 20.

HUM SER 121 INTERVIEWING 4 UNITS

Hours: 3 Lecture/Discussion
2 Lab
Methods and techniques of interviewing. Emphasis is on obtaining social information, presenting social agencies, developing sensitivity and awareness of the needs, feelings and concerns of those being interviewed; developing skills and the use of interpreters. Special programs, problems in interviewing the children, the troubled and the aged. Formerly HUMAN SERV 21.

HUM SER 122 INTRODUCTION OF HUMAN SERVICES 3 UNITS

Hours: 3 Lecture/Discussion
A study of the uses of human services (social work) in meeting the social problems of the community. An examination in the field as a profession, along with a survey of the techniques of social case work is a method of intervention in personal, marital, inter-personal and community dysfunction. Formerly HUMAN SERV 22.

HUM SER 228 ALCOHOLISM, INTERVENTION, TREATMENT, AND RECOVERY 2 UNITS

Hours: 2 Lecture/Discussion
This course provides knowledge about alcoholism and chemical dependency from a social clinical perspective. Emphasis is placed on programs for intervention, treatment, and recovery. Formerly HUMAN SERV 28.

HUMAN SERVICES

HUM SER 229 PHYSICAL AND PSYCHOLOGICAL ASPECTS OF DRUG USE 2 UNITS

Hours: 2 Lecture/Discussion
This course explores physiological and psychological aspects of drug abuse and addiction; physical and psychological dependencies, psychological effects of commonly used drugs; and various methods of treatment and prevention. Formerly HUMAN SERV 29.

I INDUSTRY & TECHNOLOGY

I & T 110 BASIC MACHINING 3 UNITS

Hours: 3 Lecture/Discussion
3 Lab
This is the first basic machining course for a machining major or a certificate program. This course will be a continuing study of the materials and their composition; the machines - with their safe and proper use; and, the skills for many of the techniques that may be used to manufacture a product. Formerly I&T 10A.
Recommended Prerequisites: Drafting 100 and 101. Permission of the department.

I & T 111 MACHINING - MANUFACTURING PROCESSES 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab
Industry and Technology 111 is the second semester course in the study of manufacturing processes, with the emphasis placed on the milling machine and its application via metal working processes within the metal working industry. Formerly I&T 10B.
Recommended Prerequisites: I&T 110 and Drafting 100.

I & T 140 GENERAL METALWORKING 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab
Introductory course designed to study the fundamental techniques and processes involved in the design and construction of metal projects. Such areas as materials and manufacturing processes of sheet metal, sheet metal layout, soldering, heat treating, bench metal, art metal, wrought iron, foundry, forging and lathe work. Formerly I&T 40A.

I & T 142 AIR CONDITIONING SHEET METAL 3 UNITS

Hours: 3 Lecture/Discussion
3 Lab
3 Activity
General sheet metal work including bending, shaping, soldering, riveting, and spot welding. Layout and fabrication of sheet metal fittings with basic hand tools of the sheet metal air conditioning trade. Formerly I&T 41.
Prerequisite: Drafting 100.

COURSE DESCRIPTIONS

INDUSTRY AND TECHNOLOGY

I & T 143 ADVANCED AIR CONDITIONING DUCT SHEET METAL 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab

Training in the layout, fabrication, and installation of sheet metal fittings used in heating and air conditioning (cooling-heating) duct systems and kitchen equipment. Development of triangulation and true length line layout and fabrication. Formerly I&T 42.

Recommended Prerequisite: I&T 142.

I & T 220 WATER TREATMENT FUNDAMENTAL 3 UNITS

Hours: 3 Lecture/Discussion

Basic methods for providing safe public drinking water are presented. Main underlying concepts of mathematics and science are introduced. Course fulfills specialized training requirement and prepares student for grades 1 and 2 water treatment operator certification exam administered by California Department of Health Services. Formerly I&T 20A.

I & T 221 WASTEWATER TREATMENT FUNDAMENTALS 3 UNITS

Hours: 3 Lecture/Discussion

Basic methods for removing pollutants from sanitary sewage and industrial wastewater are presented. Main underlying concepts of mathematics and science are introduced. Course fulfills educational point requirement which, in conjunction with required experience, qualifies student to take the State Water Resources Control Board (SWRCB) grades I and II Wastewater Treatment Plant Operator (WWTPO) exams. Course prepares student for SWRCB WWTPO grades I and II exams. Formerly I&T 20B.

I & T 270 RESIDENTIAL WIRING 3 UNITS

Hours: 3 Lecture/Discussion

This course fulfills the necessary education and background in the electrical field for a person to become a residential electrician. The student will learn all aspects of the national, state, and local electrical codes; proper wiring methods necessary for branch circuits pertaining to lights, receptacles, and special outlets; how to install and maintain service entrance breaker panels, sub-panels, low voltage circuits, alarms, and swimming pool wiring. Formerly I&T 70.

I & T 271 ELECTRICAL WIRING, COMMERCIAL 3 UNITS

Hours: 3 Lecture/Discussion

An introductory course in commercial wiring methods that covers the various phases of commercial wiring. The students will study blueprints, building codes, wiring methods, nomenclature, building layouts, fasteners, and various other units used in commercial construction. Formerly I&T 71.

Prerequisites: I & T 270 or approval of department.

INDUSTRY AND TECHNOLOGY

I & T 272 ELECTRICAL WIRING, INDUSTRIAL 3 UNITS

Hours: 3 Lecture/Discussion

The third in a series of three electrical wiring courses. This course is recommended for all students entering the field of electrical contracting or maintenance technology. It builds on the knowledge and experience gained through working with the I & T residential and commercial class. Formerly I&T 72.

Prerequisites: I & T 271 or approval of department.

I & T 273 ELECTRIC MOTOR CONTROLS 2 UNITS

Hours: 2 Lecture/Discussion
1 Lab

This course fulfills the necessary education and background in the motor control field for an industrial maintenance electrician. The student will learn the necessary codes for proper wiring methods and installation. The student will learn how to design ladder diagrams from a sequence of operation of various types of industrial machinery at the same time providing all safety precautions necessary to make a safe operation. Safety of personnel and equipment is heavily stressed in this course. Formerly I&T 73.

Recommended Prerequisites: Basic electrical and mechanical knowledge. Computer literacy.

I & T 274 ELECTRIC MOTOR CONTROLS - PROGRAMMABLE CONTROLLERS 2 UNITS

Hours: 1.5 Lecture/Discussion
1.5 Lab

This course fulfills the necessary education and background in the motor control field of programmable controllers for maintenance electricians. The student will learn the coding, numbering, wiring methods and programming of motor controllers. The student will learn how to design ladder diagrams from a hard wired diagram or from a sequence of operation. Formerly I&T 73.

Prerequisite: I & T 274 or experience in industrial controls with permission of I & T department.

I & T 275 SOLID STATE FUNDAMENTALS FOR ELECTRICIANS 2 UNITS

Hours: 2 Lecture/Discussion
1 Lab

I&T 275 is a lecture/laboratory course in the electronic field that is necessary for the industrial electrician. The student will learn solid state devices and their uses. This course is an integral part of an extensive electrical trades program intended for those persons desiring to enter the construction or maintenance electrician field. Formerly I&T 74.

COURSE DESCRIPTIONS

INDUSTRY & TECHNOLOGY

I & T 300a-b MAINTENANCE TECHNICIAN - LEVEL I 12 UNITS
Hours: 10 Lecture/Discussion
 20 Lab

Maintenance Technician Level I requires two semesters of 450 hours each to complete the certification requirements. This employment oriented class will provide the student with knowledge and skill in the areas of: electricity theory and application, machine tool operation, welding, hydraulics/pneumatics and refrigeration.

I & T 303 HOME MAINTENANCE 1 UNIT
Hours: 2 Lecture/Discussion
 1 Lab

This 9-week course is intended to teach basic maintenance and simple repair jobs needed around a house. Safety in work habits for the home, use of tools, and storage of materials will be emphasized. Items to be covered are a tool kit for the home, how to measure, how to saw, types of fasteners, kinds of glues and adhesives, paints and other finishing materials, simple electrical problems, simple plumbing problems, maintenance and repair of door locks, patching plaster and sheetrock walls, detecting termites, dryrot and etc. Students will be able to bring in problems from their own home.

Prerequisite: Must be enrolled in SUCCESS Program.

I & T 351 INDUSTRY AND TECHNOLOGY MATH 2 UNITS
Hours: 2.5 Lecture/discussion

This is a class designed specifically for Industry and Technology students. It provides a review of basic mathematical principals necessary for the various vocational fields. Includes both discussion and laboratory instruction. Utilizes use of the scientific calculator. Formerly I&T 80.

INDEPENDENT STUDY

IND ST 151 INDEPENDENT STUDY TRANSFER STATUS UNITS: Variable
Hours: 54-162 Lecture/Discussion

The purpose of independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent study requires a minimum of 54 hours of academic work per unit. Formerly 49A, B, C, and D under the disciplines of each department.

Prerequisite: Completion of all beginning level courses offered at COS or equivalent, in the selected subject area. In addition, the student must file an Independent Study form through the Admissions office to obtain approval to enroll in Independent Study.

INDEPENDENT STUDY

IND ST 251 INDEPENDENT STUDY NON-TRANSFER STATUS UNITS: Variable
Hours: 54-162 Lecture/Discussion

The purpose of independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent study requires a minimum of 54 hours of academic work per unit. Formerly 49A, B, C, and D under the disciplines of each department.

Prerequisite: Completion of all beginning level courses offered at COS or equivalent, in the selected subject area. In addition, the student must file an Independent Study form through the Admissions office to obtain approval to enroll in Independent Study.

INSURANCE

INS 121 PRINCIPLES OF INSURANCE 3 UNITS
Hours: 3 Lecture/Discussion

This is the first course in a three-semester program leading to the Certificate in General Insurance from the Insurance Institute of America (IIA) which is designed for persons who have a need of insurance contract knowledge. The first semester of study begins with an introduction to the concept of risks, methods of handling risks, and the various operation of insurance companies. Formerly BUSINESS 21.

Recommended Prerequisite: Score equal to English 251 on the placement test.

INS 122 PERSONAL INSURANCE 3 UNITS
Hours: 3 Lecture/Discussion

This is the second course in a three semester program leading to the Certificate in General Insurance from the Insurance Institute of America (IIA) which is designed for persons who have a need for insurance contract knowledge. The second semester of study addresses the personal loss exposures of individuals, how to identify these exposures, and the various insurance contracts used in the personal insurance field. Formerly BUSINESS 22.

Prerequisites: Business 121 and a score equal to English 251 on the placement test.

INTERDISCIPLINARY STUDIES

IS 101a-d CROSS CULTURAL EDUCATION 2 UNITS
Hours: 2 Lecture/Discussion
 2 Field Work (Activity)

This course is designed to acquaint students with cross cultural experiences with migrant children. It will consider the special needs of migrants and how they are addressed. Ways of working with the various age levels of migrant children will be explored. Philosophies and types of available cross-cultural programs will also be examined. Formerly EDUCATION 26a-d.

COURSE DESCRIPTIONS

INTERDISCIPLINARY STUDIES

IS 102a-d STUDENTS IN GOVERNMENT AND LEADERSHIP 2 UNITS

Hours: 2 Lecture/Discussion

A course for members of the Executive Board of ASB for the study of the student body, constitution, parliamentary procedure, organizations, publicity, and finance, and the development of leadership qualities through participation in campus governance and administration of the student activities program.

Recommended Prerequisites: Election by the Associated Student Body or appointment by the membership committee of the Executive Board of the Associated Student Body.

INTERIOR DESIGN

INT DES 121 INTERIOR DESIGN MATERIALS 3 UNITS

Hours: 3 Lecture/Discussion

Examination and application of various products and materials available to the professional interior designer in creating functional and aesthetically pleasing interior environments. Emphasis on presentation techniques, use of elements and principles of design, color theory and textiles, window treatments and other design materials. This course is appropriate for career oriented individuals or for persons interested in interior design in general. Formerly HOME EC 1.

INT DES 122 INTERIOR DESIGN/HOUSING 3 UNITS

Hours: 3 Lecture/Discussion

A study of the basic architectural skills used by the professional interior designer in the field of commercial/residential design. Emphasis given to space planning, lighting, electrical, furniture layouts and blueprint reading. This course is appropriate for career oriented individuals or for persons interested in designing their own home. Formerly HOME EC 2.

INT DES 124 INTERIOR DESIGN (14TH -20TH CENTURIES) 3 UNITS

Hours: 3 Lecture/Discussion

A stylistic survey of historical period style furniture designs. This course is designed to give the student a background of the various period styles of furniture design from antiquity to present times. Students will research and discuss the influence that historical events had on period styles. Formerly HOME EC 4.

ITALIAN

ITALIAN 350 CONVERSATIONAL ITALIAN I 3 UNITS

Hours: 3 Lecture/Discussion

This is the first conversational Italian course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Very basic grammar points will be touched upon. Formerly ITALIAN 50.

ITALIAN 351 CONVERSATIONAL ITALIAN II 3 UNITS

Hours: 3 Lecture/Discussion

This is the second conversational Italian course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Basic grammar points will be touched upon. Formerly ITALIAN 51.

Prerequisite: Italian 350 or permission of instructor.

ITALIAN 352 CONVERSATIONAL ITALIAN III 3 UNITS

Hours: 3 Lecture/Discussion

This is the third conversational Italian course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Grammar points will be introduced as necessary for clear communication. Formerly ITALIAN 52.

Prerequisites: Italian 351 or permission of instructor.

J

JOURNALISM

JOURNAL 1 BEGINNING NEWSWRITING 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A comprehensive approach to learning the fundamentals of newswriting. The course covers all phases of production of news and feature stories. Source development, interviewing techniques, and writing, organizing, and editing a story for publications, as well as the development of news judgment, will be covered. (C AN-JOUR 2).

Prerequisites: Qualification for English 1: a score of 25-35 in reading and 28-40 in English usage on assessment placement services for community colleges. Ability to type 35 words per minute, or permission of department.

JOURNAL 7 MASS COMMUNICATIONS 3 UNITS

Hours: 3 Lecture/Discussion
CROSS REF: Political Science 7

A survey course covering media of mass communications, newspapers, radio, television, magazines, book publishing, films, and the recording industry. Students will study strengths and weaknesses of each medium, as well as the major challenges to a democratic society including censorship, sensationalism, pornography, propaganda, and monopoly. The course focuses on the interrelationship of mass media and society. (CAN - JOUR 4).

COURSE DESCRIPTIONS

JOURNALISM

JOURNAL NEWSPAPER PRODUCTION 3 UNITS 103 a-d

This course provides practical experience in all aspects of producing a newspaper through work on The Campus. Course content includes writing, editing, page layout, headline writing, and general editorial development. Students should be prepared to assist in the pasting up of the paper Tuesday afternoon. Formerly JOURNAL 3.
Prerequisites: Journalism 1

JOURNAL EDITORIAL BOARD 2 UNIT 104 a-d

Hours: 2 Lecture/Discussion 1 Lab
This course provided advanced experience in all aspects of newspaper production. Students enrolled in the class are editors for The Campus. The course includes instruction in leadership techniques, editing, page design, and the legal aspects of newsgathering. Formerly JOURNAL 4a-d
Prerequisites: Journalism 1 and 103.

JOURN PHOTO-JOURNALISM 2 UNITS 110a-d

Hours: 2 Lecture/Discussion
2 Lab

CROSS REF: Photography 110a-d
Material Fee: \$10.00 - lab
A course designed for students who would like practical publication experience and an opportunity to publish their photographs in the school newspaper. Formerly JOURNAL 10.

L

LEADERSHIP TRAINING

LDRSHP LEADERSHIP TRAINING I 1 UNIT TRN 101

Hours: 1 Lecture/Discussion
CROSS REF: Business 138
This class is offered to give students leadership training and is one of a sequence of classes designed to prepare them for leadership roles. Students learn to write Measurable Learning Objectives, which is a means of establishing a plan of action leading to self-improvement and provides an understanding of how to maximize learning opportunities on the job. Coverage of the organizational structure, the development of management thought, styles of leadership, discipline, communications, and the evaluation process provide a framework for the understanding of the responsibilities of a leader. Formerly LEADERSHIP 1.

LEADERSHIP

LDRSHP LEADERSHIP TRAINING 2 1 UNIT TRN 102

Hours: 1 Lecture/Discussion
CROSS REF: Business 139
This class builds on Leadership Training 1. Students interested in advancing into leadership positions will be instructed in problem solving techniques, which will be presented through lecture and case problem analysis. The presentation of motivation theories and a behavior modification project will add to the understanding of tools available to the leader to accomplish organizational goals. Methods of bringing about change in organizations and a presentation of authority, power, and influence are integral parts of leadership coverage. Students will be instructed on how to present the best image in a job interview and each will be taken through the process of preparing or updating their working papers. Formerly LEADERSHIP 2.
Recommended Prerequisite: Leadership Training 101.

M

MATHEMATICS

MATH 15 COMPUTER SCIENCE I 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to structured programming and algorithm design using the FORTRAN language, including data types, program design, conditional control structures, looping, subroutines and functions. The emphasis will be on using the computer as a problem-solving tool. Formerly MATH 15A. (CAN-CSI 4)
Prerequisites: Completion of Math 70 with a grade of "C" or better, or a successful score on the Mathematics Placement Test.

MATH 17 COMPUTER SCIENCE II 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to structured programming and algorithm design using the Pascal language, including discrete and dynamic data structures, program design, efficiency and testing, conditional control structures, looping, procedures and functions, recursion, and search/sort algorithms. The emphasis will be on using the computer as a problem-solving tool. Formerly MATH 15B. (CAN-CSI 12)
Prerequisite: Completion of Math 15 with a grade of "C" or better.

COURSE DESCRIPTIONS

MATHEMATICS

MATH 21 INTRODUCTION TO STATISTICS 4 UNITS

Hours: 4 Lecture/Discussion

An introductory course in elementary probability and statistics for social science and physical science majors. It is also appropriate for those who wish to gain an understanding of data analysis and statistics. Topics include: graphic presentation of data, probability; probability distributions such as the binomial, Poisson, and normal distributions; Central Limit theorem; one- and two sample hypothesis tests and confidence intervals; simple linear regression and correlation, Chi-Square goodness of fit and contingency analysis tables, and analysis of variance. Extensive use of computers will be made throughout this course. (CAN-STAT 2)

Prerequisites: Completion of Math 230 with a grade of "C" or better or an appropriate score on the C.O.S. Math placement test.

MATH 45 MODERN APPLICATIONS OF MATHEMATICS 3 UNITS

Hours: 3 Lecture/Discussion

This course is designed to fulfill the CSU mathematics/quantitative reasoning general education requirement. The emphasis is on providing an overview of the practical applications of mathematics as well as developing an appreciation of the history of mathematics and its role in understanding nature. It is designed particularly for non-science majors. Three or more topics are chosen from among the following areas: management science; statistics; size, shape, and growth; geometry and measurement; computer science.

Prerequisite/Corequisite: Completion of Math 230 with a grade of "C" or better or an appropriate score on the COS Math Placement Test taken within three semesters which indicates mastery of intermediate algebra.

MATH 61 SURVEY OF CALCULUS 1 3 UNITS

Hours: 3 Lecture/Discussion

A first semester course in a two semester sequence of differential and integral calculus for the business, industrial technology, biology, or social science major. It is also appropriate for those interested in acquiring an intuitive understanding of calculus. Topics include algebraic, exponential and logarithmic functions; limits, differentiation, the differential, and definite and indefinite integrals. Applications include graphing, optimization, related rates and average value with many examples of the utility of calculus taken from biology and economics. Formerly MATH 16A. (CAN-MATH 30)

Prerequisites: Completion of Math 70 with a grade of "C" or better or appropriate score on COS Mathematics Placement Test.

MATHEMATICS

MATH 62 SURVEY OF CALCULUS 2 3 UNITS

Hours: 3 Lecture/Discussion

A second semester course in a two-semester sequence in differential and integral calculus for the business, industrial technology, biology, or social science major. Topics include: differentiation and integration of the exponential and logarithmic functions and of trigonometric functions; further integration techniques; applications of the integral to biology and economics; the calculus of functions of several variables; differential equations; sequences and series; probability; approximation techniques in calculus. Formerly MATH 16B. (CAN-MATH 32)

Recommended Prerequisite: Completion of Math 61 with a grade of "C" or better.

MATH 70 PRECALCULUS 5 UNITS

Hours: 5 Lecture/Discussion

This is a college algebra and advanced trigonometry course which proceeds at an intense pace. Topics include: functions and graphs, applications of functions, exponential and logarithmic functions, trigonometric functions and analytic trigonometry, right-triangle trigonometry and vectors, systems of equations, analytic geometry, and roots of polynomial equations. This course is intended for students planning to take calculus. Formerly MATH 4.

Prerequisites/Co-requisites: Completion of Math 154 with a grade of "C" or better, or appropriate score on the C.O.S. Math Placement Test taken within three semesters.

MATH 75 CALCULUS WITH ANALYTIC GEOMETRY 1 5 UNITS

Hours: 5 Lecture/Discussion

A first semester course in differential and integral calculus. Topics include limits, differentiation and integration of algebraic, trigonometric and transcendental functions. Applications include: related rates, curve sketching, relative and absolute extrema, areas, volumes, arc length, area of surface of revolution, work, and fluid pressure. Math 75 is designed for majors including mathematics, science, and engineering. It is also appropriate for those individuals interested in mathematics related professional fields. Formerly MATH 5A. (CAN-MATH 18)

Prerequisites: Math 70 (Precalculus) or appropriate score on the COS Math Placement Test taken within three semesters.

MATH 76 CALCULUS WITH ANALYTIC GEOMETRY 2 5 UNITS

Hours: 5 Lecture/Discussion

A second semester course in differential and integral calculus. Topics include logarithm and exponential functions, inverse trigonometric and hyperbolic functions, techniques of integration, improper integrals and L'Hopital's rule, infinite series, analytic geometry, polar coordinates and parametric equations, vectors and three-dimensional space. Applications include: exponential growth, first-order differential equations, numerical integration, Taylor series approximations to functions, arc length, vectors and projections of vectors. Math 76 is designed for majors including mathematics, science, and engineering. It is also appropriate for those individuals interested in mathematics related professional fields. Formerly MATH 5B. (CAN-MATH 20)

Prerequisites: Completion of Math 75 with a grade of "C" or better.

COURSE DESCRIPTIONS

MATHEMATICS

MATH 77 CALCULUS WITH ANALYTIC GEOMETRY 3 3 UNITS

Hours: 3 Lecture/Discussion

This course is the third semester of the introductory calculus sequence. Topics covered include differentiation and integration of vector-valued functions, partial differentiation, directional derivatives, Lagrange Multipliers, multiple integration with application to surface area, centroids and centers of gravity, and Green's, Stoke's, and Divergence Theorem. Math 77 is designed for majors including mathematics, science, and engineering. It is also appropriate for those individuals interested in mathematics related professional fields. Formerly MATH 5C. (CAN-MATH 22)

Prerequisites: Completion of Math 76 with a grade of "C" or better.

MATH 80 LINEAR ALGEBRA 3 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to linear algebra including systems of linear equations, vectors, matrices and determinants, two- and three-dimensional vectors, vector spaces, linear transformations, eigenvalues and eigenvectors, and canonical forms. Formerly MATH 11. (CAN-MATH 26)

Prerequisites: Completion of Math 76 or Math 62 with a grade of "C" or better.

MATH 81 DIFFERENTIAL EQUATIONS 5 5 UNITS

Hours: 5 Lecture/Discussion

An introduction to the methods of solving of ordinary and partial differential equations including matrix solutions of linear systems, Laplace transforms, series solutions, difference equations, separation of variables in partial differential equations, boundary value problems and Fourier series. Formerly MATH 6. (CAN-MATH 24)

Prerequisites: Completion of Math 77 and Math 80 with a grade of "C" or better.

MATH 154 TRIGONOMETRY 3 3 UNITS

Hours: 3 Lecture/Discussion

An intensive one-semester course in the elements of trigonometry including: trigonometric functions, solving triangles for unknown parts, proving and applying identities, graphing, solving trigonometric equations, and expressing and using complex numbers in trigonometric form. Formerly MATH 54. (CAN-MATH 8)

Prerequisites: Completion of Math 220 and Math 230 with a grade of "C" or better, or an appropriate score on the C.O.S. Math Placement Test within three semesters.

MATHEMATICS

MATH 210 ELEMENTARY ALGEBRA 1 2 UNITS

Hours: 36 hr. Lecture/discussion per semester

This is an intensive course in elementary algebra (part 1) covering fundamental operations, linear equations and inequalities, systems of equations, graphing, and word problems. Formerly MATH 51.

Recommended Prerequisite: Completion of Math 360 with a grade of "C" or better or an appropriate score on the COS Math Placement Test taken within three semesters.

MATH 215 ELEMENTARY ALGEBRA 2 2 UNITS

Hours: 36 lecture/discussion per semester

This is an intensive course in elementary algebra (part 2) covering factoring, rational expressions, exponents, radicals, and word problems. Formerly MATH 51.

Prerequisite: Completion of Math 210 with a grade of "C" or better.

MATH 220 PLANE GEOMETRY 3 3 UNITS

Hours: 3 Lecture/Discussion

An intensive one-semester course in the elements of plane geometry covering rectilinear figures, the circle, similar figures, ratio and proportion and areas of plane figures. The logic and construction of deductive proofs will be emphasized throughout the course. It is designed for students who are deficient in high school geometry. Formerly MATH 52.

Prerequisite/Co-requisite: Completion of Math 210 & 215 with a grade of "C" or better, or an appropriate score on the COS Math Placement Test.

MATH 230 INTERMEDIATE ALGEBRA 4 4 UNITS

Hours: 4 Lecture/Discussion

An intensive one-semester course in intermediate algebra covering: linear and quadratic equations and inequalities in one and two variables, operations with polynomials, rational expressions, exponents, radicals, logarithms, word problems and graphing. Formerly MATH 53

Prerequisites: Completion of Math 210 & 215 with a grade of "C" or better or an appropriate score on the C.O.S. Math Placement Test taken within three semesters.

MATH 360 PRE-ALGEBRA 4 4 UNITS

Hours: 4 Lecture/Discussion

A study of the fundamental operations with whole numbers, fractions, mixed numbers, decimals, and their use in applied problems. Other topics include factors and multiples, divisibility, ratio, proportion, introductory algebra, percent, metric units, geometric measurements, and signed numbers. All arithmetic topics will be taught with a pre-algebra perspective. Math 360 is a non-transferable arithmetic course to benefit students who need a firmer grasp of arithmetic concepts and skills. Formerly MATH 60.

Prerequisite: An appropriate score on the C.O.S. Math Placement Test taken within three semesters.

COURSE DESCRIPTIONS

METEOROLOGY

METEOR 1 ELEMENTARY METEOROLOGY 3 UNITS

Hours: 3 Lecture/Discussion

An introductory course designed to provide insights into physical processes and laws that underlie the phenomena of weather and climate. Topics include solar radiation, temperature, humidity, condensation, precipitation, air pressure, wind, air masses, severe weather, forecasting, air pollution, atmospheric optics, and climatology. An emphasis is placed on understanding current meteorological-environmental problems by examining the relationship between man and the atmosphere.

Recommended Prerequisites: Eligible to enroll in Math 230 and English 1.

MUSIC

MUSIC 1 MUSIC FUNDAMENTALS 3 UNITS

Hours: 3 Lecture/Discussion

This is a course designed for the non-major, the elementary or secondary school teaching credential candidate, and the music major who seeks remedial instruction prior to beginning the Comprehensive Musicianship sequence. The basic elements of music are included: pitch and rhythm notation, scales, major and minor keys and key signatures, transposition, intervals, chords, elementary acoustics, and an introduction to the keyboard.

MUSIC 4 COMPREHENSIVE MUSICIANSHIP I 5 UNITS

Hours: 5 Lecture/Discussion

Integrated approach to the study of music theory and the development of musical skills. This includes the study and analysis of melody, rhythm, and elementary harmony; and the development of ear training, sight singing, and keyboard skills. The integrated approach of this course is designed to encourage practical application of theoretical concepts. Formerly MUSIC 4A.

Recommended Prerequisites/Corequisites: Music 1 or the equivalent. Instrumental or vocal performance activity and/or class piano.

MUSIC 5 COMPREHENSIVE MUSICIANSHIP II 5 UNITS

Hours: 5 Lecture/Discussion

Integrated approach to the study of music theory and the development of musical skill. This includes the structural elements of music, primarily harmony and musical forms, and the development of ear training, sight singing, and keyboard skill. The integrated approach of this course is designed to encourage practical application of theoretical concepts. Formerly MUSIC 4B.

Prerequisite/Corequisite: Instrumental or vocal performance activity and/or class piano.

MUSIC

MUSIC 6 COMPREHENSIVE MUSICIANSHIP III 5 UNITS

Hours: 5 Lecture/Discussion

Integrated approach to the study of music theory and the development of musical skill. This includes a historical-analytical-compositional approach to the music of the 16th, 18th, and 19th Centuries—with an emphasis on the contrapuntal styles of Palestrina and Bach, and the chromatic harmony of the 19th Century—along with ear training, sight singing, and keyboard musicianship. The integrated approach of this course is designed to encourage practical application of theoretical concepts. Formerly MUSIC 14A.

Prerequisite/Corequisites: Music 5 or the equivalent. Instrumental or vocal performance activity and/or class piano.

MUSIC 7 COMPREHENSIVE MUSICIANSHIP IV 5 UNITS

Hours: 5 Lecture/Discussion

This course is designed primarily for music majors, and is the fourth semester in a 2-year program. (Music 4, 5, & 6 precede it.) Like these three earlier courses, it is an integrated approach to the study of music theory and the development of musical skills. Music 7 involves the formal analysis of the music of Haydn, Mozart, Beethoven, and others. Selected compositions by the following composers serve as models for student compositions: Wagner, Wolf, Debussy, Stravinsky, Bartok, Schoenberg, Webern; and the contemporary composers Cage, Reich, and Glass. The integration of the ear training, sight singing, and keyboard components of the course is designed to encourage practical application of theoretical concepts. Formerly MUSIC 14B.

Prerequisites/Corequisite: Music 6 or the equivalent. Instrumental or vocal performance activity and/or class piano.

MUSIC 8a-b ORCHESTRATION 3 UNITS

Hours:

3 Lecture/Discussion

Ranges, transpositions, technical capabilities, and idiomatic writing for the instruments of the orchestra. Analysis of 18th, 19th, and 20th Century scores, and assignments in scoring for selected instrumental combinations. Different topics will be covered and different projects will be assigned in alternate semesters so that the course may be repeated without duplication. Formerly MUSIC 17a-b.

Recommended Prerequisites: Music 4, 5 or equivalent.

MUSIC 10 APPRECIATION OF MUSIC HISTORY AND LITERATURE 3 UNITS

Hours:

3 Lecture/Discussion

Designed to aid the average student in developing a better understanding and an enjoyment of music. Includes (1) the elements of music, and (2) a chronological survey of music and composers from the Middle Ages to the present. No previous musical training is necessary.

COURSE DESCRIPTIONS

MUSIC

MUSIC 20 PIANO I 1 UNIT

Hours: 1 Lecture/Discussion
1 Lab

Designed for the student who has had no previous piano training. Students will learn specific skills enabling them to read music and identify musical symbols on sight while performing repertoire by various composers in all periods of music. The student will also perform finger/dexterity skills in musical exercises, such as scales, to strengthen finger, wrist, hand muscles. Formerly MUSIC 8A.

MUSIC 21 PIANO II 1 UNIT

Hours: 1 Lecture/Discussion
1 Lab

Designed for the student who has had one semester previous piano training. Students will learn specific skills enabling them to read music and identify musical symbols on sight while performing repertoire by various composers in all periods of music. The student will also perform finger/dexterity skills in musical exercises to strengthen finger, wrist and hand muscles at a higher level of learning of skill and activity. Formerly MUSIC 8B.

Recommended Prerequisite: Music 20 or one year of private piano.

MUSIC 22a-d INTERMEDIATE/ADVANCED PIANO 1 UNIT

Hours: 2 Lecture/Discussion
1 Lab

Designed for the intermediate pianist who has had prior instruction. Students will learn specific skills enabling them to read music and identify musical symbols on sight. Students will also learn and acquire knowledge of the development of the piano through different periods of history to the present in our country as well as foreign countries.

Recommended Prerequisites: Music 21 or one year or more of piano instruction.

MUSIC 23a-d ORGAN I, II, III AND IV 1 UNIT

Hours: 2 Lecture/Discussion
1 Lab

Music 23a-d is a course designed for the student who has had at least one year private instruction on a keyboard instrument, such as piano, organ or accordion. Students will learn specific musical symbols on sight while performing repertoire by various composers in the areas of theatre, classical or liturgical organ music. The student will also perform finger/dexterity skills in musical exercises, such as scales and arpeggios on both manual and pedal keyboards, to strengthen finger, wrist, foot, ankle, and hand/foot body muscles. Formerly MUSIC 70a-d.

Recommended Prerequisite: One year keyboard, either piano, organ or accordion. Audition by department.

MUSIC

MUSIC 30a-b VOICE 1 UNIT

Hours: 1 Lecture/Discussion
1 Activity

Studies in the technical, stylistic, and aesthetic components of singing, designed to help the individual student improve his/her voice and develop solo vocal repertoire.

MUSIC 32a-d WOMEN'S CHORUS 1 UNIT

Hours: 2 Activity

Music 32a-d offers a study and performance of choral literature for treble voices from the Renaissance to Contemporary with emphasis on vocal production and tone quality, balance and blend, and musical precision and accuracy. Participation in public performance is required. Formerly MUSIC 43a-d.

MUSIC 34a-d CONCERT CHOIR 2 UNITS

Hours: 1 Lecture/Discussion
4 Lab

Materials Fee: \$5.00

Music 34a-d offers a study and the performance of choral literature from the Renaissance to Contemporary with emphasis on vocal production and tone quality, balance and blend, and musical precision and accuracy. Participation in public performance is required. Formerly MUSIC 23a-d.

Recommended Prerequisites: Audition by department.

MUSIC 36a-d CHAMBER SINGERS 2 UNITS

Hours: 5 Activity

Music 36a-d a selected performing group limited to twenty-four members selected from the concert choir. Chamber singers offers the study and performance of choral music written especially for small ensembles. Participation in public performance is required. Formerly MUSIC 42a-d.

Prerequisites: Music 34a-d. Audition by department.

MUSIC 40a-d PERFORMANCE MUSIC 1 UNIT

Hours: 2 Lab

Performance in music activities such as recitals, rallies, musicals, concerts, or in groups ensembles such as band, chorus, orchestra, and jazz ensemble. Hours are arranged for those wishing to participate but are unable to meet the regular schedule. Physical education credit is not granted.

Prerequisite: Permission of department only.

COURSE DESCRIPTIONS

MUSIC

MUSIC STRING INSTRUMENTS 2 UNITS

50a-d

Hours: 1 Lecture/Discussion
1 Lab

This course provides beginning instruction on instruments of the string family. These include, violin, viola, cello, and bass. Emphasis will be on care of instruments, tone production, bowing, technique, and playing position. Formerly MUSIC 7a-d.

Recommended Prerequisite: Knowledge of one or more instruments.

MUSIC STRING ORCHESTRA 1 UNIT

52a-d

Hours: 2 Lab

A study and performance of string orchestra repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship. Some outside or public performances are required. Formerly MUSIC 22a-d.

Recommended Prerequisites: Musicians must play a string instrument (violin, viola, cello, or bass). Enrollment by audition or permission of department.

MUSIC BRASS INSTRUMENTS 1 UNIT

60a-d

Hours: 1 Lecture/Discussion
1 Lab

This course provides beginning instruction on instruments of the brass family. Emphasis will be on care of instruments, tone production, breathing technique and playing position. Formerly MUSIC 5a-d.

Recommended Prerequisite: Knowledge of one or more instruments.

MUSIC PERCUSSION INSTRUMENTS 1 UNIT

61a-d

Hours: 1 Lecture/Discussion
1 Lab

This course provides beginning instruction on instruments of the percussion family. Emphasis will be on the care of instruments, tone production, proper grips, technique and playing position. Formerly MUSIC 6a-d.

Recommended Prerequisite: Knowledge of one or more instruments.

MUSIC WOODWINDS INSTRUMENTS 1 UNIT

62 a-d

Hours: 1 Lecture/Discussion
1 Lab

This course provides beginning instruction on instruments of the woodwind family. These include, flute, clarinet, oboe, saxophone and bassoon. Emphasis will be on care of instruments, tone production, embouchure development, technique and playing position. Formerly MUSIC 3a-d.

Recommended Prerequisites: Knowledge on one or more instruments.

MUSIC

MUSIC CONCERT BAND 2 UNITS

74 a-d

Hours: 5 Lab

Materials Fee: \$10.00

A study of performance of standard concert band repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship. Some outside or public performances are required. Formerly MUSIC 19a-d.

Recommended Prerequisite: Advanced musicians of band instruments. Enrollment by permission of department only.

MUSIC MARCHING BAND 2 UNITS

75a-d

Hours: 6 Lab

CROSS REF: PE 41a-d

Materials Fee: \$10.00

This course is open to all students who demonstrate ability to play a band instrument. The marching band represents the college in public functions which may include the performance of band literature at concerts, parades, rallies and athletic events. Emphasis is placed on the development of music performance and marching skills. Formerly MUSIC 18a-d.

Prerequisites: Prior experience in high school or equivalent or an ability to play a band instrument competently.

MUSIC PEP BAND 1 UNIT

76a-d

Hours: 2 Lab

This course is designed for students who are interested in performing in smaller groups at athletic functions (basketball, football, volleyball, etc.). This class is an extension of the marching band and will occasionally use some of the same literature. Formerly MUSIC 16a-d.

Recommended Prerequisites: Advanced musicians of band instruments. Marching Band is a prerequisite and concurrent enrollment is permissible. Enrollment by permission of department.

MUSIC CHORUS OF THE SEQUOIAS 1 UNIT

90a-d

Hours: 2 Activity

Materials Fee: \$5.00

Chorus of the Sequoias is open to all interested singers. The chorus offers a study and the performance of choral literature from the Renaissance to Contemporary with particular emphasis on the major choral works of the Baroque, Classical, Romantic, and Contemporary periods. Evening rehearsals. Formerly MUSIC 57a-d.

COURSE DESCRIPTIONS

MUSIC

MUSIC REHEARSAL 2 UNITS
91a-d AND PERFORMANCE LAB
Hours: 120 Activity
 The College of the Sequoias Musical Theater Orchestra will emphasize the rehearsal and performance techniques necessary to accompany in the production of a musical. Formerly MUSIC 11a-d.
Recommended Prerequisites: Advanced musicians of orchestral instruments. Enrollment by permission of department.

MUSIC NIGHT JAZZ ENSEMBLE 1 UNIT
92a-d
Hours: 3 Lab
 A study and performance of jazz ensemble repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside travel and public performances are required. Formerly MUSIC 58a-d.
Recommended Prerequisites: Advanced musicians of jazz band instruments. Enrollment by audition or by permission of department.

MUSIC NIGHT 1 UNIT
94 a-d DANCE BAND
Hours: 3 Lab
Materials Fee: \$10.00
 A study and performance of dance band repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside travel and public performances are required. Formerly MUSIC 60a-d.
Recommended Prerequisites: Advanced musicians of jazz band instruments. Enrollment by audition or by permission of department.

MUSIC MUSICAL THEATRE PERFORMANCE 2 UNITS
97a-d
Hours: 120 Activity
CROSS REF: Theater Arts 20a-d, Dance 41a-d
 Experience in drama and theater through active participation in major musical and dramatic productions. Includes training and experience in all facets of the theater. Formerly MUSIC 41a-d.

MUSIC JAZZ ENSEMBLE 2 UNITS
172a-d
Hours: 1 Lecture/Discussion
2 Lab
Materials Fee: \$10.00
 A study and performance of jazz ensemble repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside travel and public performances are required. Formerly MUSIC 21a-d.
Recommended Prerequisites: Advanced musicians of jazz band instruments. Enrollment by audition or by permission of department.

MUSIC

MUSIC NIGHT STUDIO BAND 1 UNIT
183a-d
Hours: 3 Lab
 A terminal course which rehearses all types of music performed in the recording studio. Recording on tapes and making a professional quality record will be a major project. Formerly MUSIC 62a-d.
Recommended Prerequisite: Prior experience and ability to competently play a jazz instrument.

MUSIC 201 BEGINNING GUITAR 1 UNIT
Hours: 2 Lab
 This is a beginning, nontransferrable guitar course for students with limited musical experience. Students will learn to read and play melody lines which use the notes on all six strings and are written in simple rhythmic patterns. Students must provide their own guitars. Acoustic instruments only. Formerly MUSIC 2A.

MUSIC 202 INTERMEDIATE GUITAR 1 UNIT
Hours: 2 Lab
 Music 202 is nontransferrable and designed to follow Music 201. Students will learn increasingly difficult melodies and chords in a variety of styles. Students will increase their knowledge of reading music which employs more complicated notes and more complicated rhythmic notation than in Music 201. Several accompaniment patterns will be used to teach fingerpicking and strumming patterns. Formerly MUSIC 2B.
Recommended Prerequisite: Music 201 or ability to read and play simple melodies using all strings and ability to play chords in the first position or department's consent.

MUSIC 203 ADVANCED GUITAR 1 UNIT
Hours: 2 Lab
 Students will learn increasingly difficult melodies and chords in various keys. Melodic and chord transposition to other keys will be learned. Formerly MUSIC 2C.
Recommended Prerequisite: Music 202 or department's consent.

MUSIC KEYBOARD ACCOMPANIMENT 1 UNIT
224a-d
Hours: 2 Lecture/Discussion
1 Lab
 This course involves small groups, such as soloist and ensembles in vocal, string, brass and the larger groups such as a symphony and chorus. Other items covered would be the utilization of the synthesizer and computer, musical theatre auditions, as well as duets between piano/piano, piano/organ, organ/organ (liturgical vs. theatre). Formerly MUSIC 25a-d.
Recommended Prerequisites: Music 34a-d, 52a-d, 172, or 270. Also, at least one year or more of private instruction. Audition by department.

COURSE DESCRIPTIONS

MUSIC

MUSIC 231 SIGHT SINGING AND BASIC FUNDAMENTALS OF MUSIC 1 UNIT

Hours: 1 Lecture/Discussion
1 Activity

A practical course in sight singing, aural perception, and rhythmic analysis including the study of notes/rests, scales, triads, key and meter signatures, intervals and musical terminology. Formerly MUSIC 44.

MUSIC 242a-d MADRIGAL DINNER 1 UNIT

Hours: 60 Activity

The Madrigal Dinner is an Elizabethan (Shakespearean/Renaissance) Feast performed by singers, instrumentalists, actors, court jesters, mimes, tumblers, and others structured around a formal meal served in several courses announced by brass fanfares. Authenticity of music, drama, costuming, staging and all aspects of the performance is essential. A Christmas theme serves as the central focus of the dinner which is traditionally presented several evenings in late November and/or early December.

MUSIC 270a-d DIXIELAND BAND 1 UNIT

Hours: 2 Lab

A study and performance of Dixieland band repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside or public performances are required. Formerly MUSIC 20a-d.

Recommended Prerequisites: Advanced musicians of Dixieland band instruments. Enrollment by permission of department.

MUSIC 295a-d SEQUOIA WINDS 1 UNIT

Hours: 2 Lab

A study and performance of standard symphonic band repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship. Some outside or public performances are required. Formerly MUSIC 64a-d.

Recommended Prerequisites: Sequoia Winds is open to all interested instrumental band musicians.

N

NURSING

NURSING 101 REGISTERED NURSING THEORY 10 UNITS

Hours: 6 Lecture/Discussion
12 Lab

Materials Fee: \$15.00

This course is an introduction to the elements of patient care based on the nursing process. It emphasizes human needs related to communication, safety and comfort, mobility, nutrition, and growth and development. This course introduces the student to the meaning of nursing in health and disease. It includes studies of physical and mental health, interpersonal relationships, legal aspects of nursing and the principles and techniques of patient centered care. The student will give nursing care to selected patients, under supervision in the clinical area. Formerly NURSING 1.

Prerequisites: Biology 30, Biology 31, Biology 40, Chemistry 20, Nutrition 18, and English 1.

NURSING 102 REGISTERED NURSING THEORY 12 UNITS

Hours: 6 Lecture/Discussion
18 Lab

Materials Fee: \$15.00

Nursing 102 focuses on the patient and family in perinatal areas, pediatrics and oncology - particularly the gerontology patient. Lecture content includes discussion of disease entities unique to these patient populations, as well as methods to promote and maintain wellness. Regulation and maintenance of fluid and electrolyte homeostasis and acid-basis balance is also discussed. The student is expected to function as an adult learner and to do rigorous preparation for lecture/discussion. The clinical laboratory component includes the planning and delivery of primary care of perinatal, pediatric, oncology and gerontology patients in hospital, clinic, and home settings. Formerly NURSING 2.

Prerequisites: Successful completion of Nursing 101 and Nursing 122 (Physical Assessment).

NURSING 103 REGISTERED NURSING THEORY 12 UNITS

Hours: 6 Lecture/Discussion
18 Lab

Materials Fee: \$15.00

This third semester course is a study of the nursing process centered around patient needs related to safety and comfort, sexual expression, altered regulatory mechanisms of the cardiopulmonary systems and gastrointestinal-genitourinary-renal systems. Formerly NURSING 3.

Prerequisites: Nursing 102, Nursing 122 or Licensure as a Vocational Nurse.

COURSE DESCRIPTIONS

NURSING

NURSING 104 NEUROLOGICAL/PSYCHIATRIC NURSING AND LEADERSHIP AND NURSING MANAGEMENT 13 UNITS

**Hours: 6 Lecture/Discussion
21 Lab**

Material Fee: \$15.00

This fourth semester Registered Nursing course is a study of the nursing process centered on the human needs of individuals, with a focus on regulatory and activity mechanisms, safety and comfort, and emotional integrity. It also focuses on the study of management and leadership principles with skills integrated into practice while utilizing the nursing process. Formerly NURSING 4.

Prerequisite: Nursing 103

NURSING 106 CULTURAL DIVERSITY IN HEALTH AND ILLNESS 3 UNITS

Hours: 3 Lecture/Discussion

This course is designed to introduce basic concepts of culture, language and communication, social organization, social interaction and change as they relate to the health care field. Focused upon the client (individual, family or social group), the course investigates values, beliefs, and customs as they effect health and illness behaviors. Formerly NURSING 6.

NURSING 110 PHARMACOLOGY 2 UNITS

Hours: 2 Lecture/Discussion

This course is the study of pharmacologic agents, their action, uses, and implications for the professional nurse. Topic areas will include the pharmacodynamics, pharmacokinetics, dosages appropriate for various age groups, uses, side effects, nursing actions and drug interactions for the following drug categories: steroids, narcotic and non-narcotic analgesics, non-steroidal anti-inflammatory drugs, hypnotics, anti-infectives, and anti-neoplastics. Also discusses are the skills and techniques necessary to deliver intravenous fluids. Formerly NURSING 10. **Prerequisites:** Successful completion of Nursing 101 and Nursing 122.

NURSING 120 PERIOPERATIVE NURSING 6 UNITS

**Hours: 4 Lecture/Discussion
24 Lab**

This is an elective course in perioperative nursing. This course is designed to prepare a competent and knowledgeable practitioner to administer optimum care to select surgical patients during pre-operative, intra-operative and post-operative phases of surgical intervention. Formerly NURSING 20.

Recommended Prerequisite: Nursing 101 and 122.

NURSING

NURSING 122 FOUNDATIONS OF NURSING PRACTICE 3 UNITS

**Hours: 2 Lecture/Discussion
2 Lab
1 Activity**

Based on a human needs approach, this course is a guide to the foundations of nursing practice. Nursing practice is implemented through the nursing process, which is a systematic method of problem solving used to identify individual needs of clients. The course emphasizes the assessment phase of the nursing process, incorporating both interviewing and physical assessment. Interviewing includes taking the health history as well as therapeutic communication. Physical assessment is accomplished by a review of anatomy and physiology of the human body, and techniques of the physical examination with emphasis on recognition of normal parameters. The acquisition of these abilities leads the student to the development of nursing diagnoses.

Prerequisites: Biology 30, Biology 31 and acceptance into Registered Nursing Program.

NURSING 125 CARE OF THE PATIENT IN ICU 6 UNITS

**Hours: 4 Lecture/Discussion
24 Lab**

This course is a study of nursing intervention focused on the needs of the critically ill patient in an intensive care unit. The principles related to the patient's cardiac, respiratory, neurological and emotional needs will be stressed in coordination with actively caring for this type of patient. Formerly NURSING 25.

Prerequisites: Nursing 103 or permission of the department. Licensure as a Vocational Nurse.

NURSING 127 ONCOLOGY NURSING 6 UNITS

**Hours: 4 Lecture/Discussion
24 Lab**

This course is designed to increase student understanding of the patho-physiologic process of cancer and the psychosocial effect upon the client and family. The student will utilize the nursing process to plan and implement individualized care of the oncology client. Formerly NURSING 27.

Prerequisite: Nursing 101.

NURSING 134 MENTORSHIP: TRANSITION FROM STUDENT TO NURSE 1 UNIT

Hours: 1 Lecture/Discussion

This course is designed for the Registered Nurse who wishes to prepare for clinical teaching and supervision of senior nursing students in a mentorship role. It involves the study and application of principles of nursing and teaching/learning theory, to guidance and evaluation of the student nurse's clinical practice. Formerly NURSING 34.

Prerequisites: Registered Nurses with a minimum of one year experience in acute care, that have or will serve as mentors to C.O.S. Nursing IV students.

COURSE DESCRIPTIONS

NURSING

NURSING GENERAL MATHEMATICS 321 RELATED TO NURSING 3 UNITS
Hours: 3 Lecture/Discussion

This course focuses on the development of skills in arithmetic, algebra and geometry for use in nursing applications. Selected topics from consumer mathematics, graphing, the metric system, statistical measurement will be included. Emphasis is placed on calculation of medication problems with clinical application. Formerly NURSING 21.

NURSING INTRAVENOUS THERAPY CERTIFICATION CLASS 333 1 UNIT
Hours: 1 Lecture/Discussion
3 Lab

This course is designed to prepare Licensed Vocational Nurses to initiate and maintain intravenous therapy in a clinical agency which has protocols to provide for such function. It includes theory, laboratory practice, and supervised clinical practice in IV therapy techniques. Formerly NURSING 33.

Prerequisite: Must be a licensed Vocational Nurse employed in an agency with an Inservice Education Department.

NURSING CARDIOPULMONARY RESUSCITATION 405 5 UNITS
Hours: 4 Lecture/Discussion
14 Lab

This 18 hour course is designed according to the standards of the American Heart Association to teach the student to recognize signs and symptoms of cardiopulmonary arrest and to appropriately implement CPR. Successful completion of this course certifies the student in basic CPR. Formerly NURSING 5.

NURSING NURSING ASSISTANT 451 5 UNITS
Hours: 3 Lecture/Discussion
6 Lab

A course in basic patient care, including principles and practice in providing for patient needs of safety and comfort, personal hygiene and protection. The student will practice the role of the nursing assistant in a supervised clinical situation. Introductory material related to ethics, communication, nutrition, socialization, and rehabilitation will also be presented. Basic anatomy and physiology will be integrated throughout the course. The course will fulfill requirements for California Nursing Assistant Certification. Formerly NURSING 51.

NUTRITION/FOODS

NUTR/ NUTRITION 3 UNITS
FOOD 18
Hours: 3 Lecture/Discussion

A scientific study of the basic chemical, biological and physiological principles and concepts of human nutrition. Current scientific theories and research are reviewed, clarified and discussed as these trends apply to the development of sound and preventive nutrition practices. The study includes the adapting of these principles to the individual's uniqueness and the translation of this knowledge into food choices throughout life. Formerly NUTR 18. (CAN-HEC 2)

NUTR/ FOODS 3 UNITS
FOOD 101
Hours: 2 Lecture/Discussion
3 Lab

Materials Fee: \$10.00

A study and application of the basic principles of food preparation, the development of the ability to plan, purchase, prepare and serve attractive, well balanced individual and family meals, with emphasis on conserving time, money, energy, and nutritional needs. Formerly HOME EC 10A. (CAN-HEC 8)

NUTR/ FOODS 2 UNITS
FOOD 102
Hours: 1 Lecture/Discussion
3 Lab

Materials Fee: \$10.00

A foods class designed for students with basic food preparation skills. This course will explore a wide range of topics such as experimental cooking, entertaining, creative cooking, foreign foods, quantity cooking, and special diets. Formerly HOME ECONOMICS 10B.

NUTR/ COMMERCIAL FOODS I 3 UNITS
FOOD 105
Hours: 2 Lecture/Discussion
4 Lab

This class is designed for students who wish to prepare for employment and careers in restaurant, institutional and hotel settings. The curriculum provides an orientation to the food service industry with training and hands-on experience in the preparation of salads and vegetables, breakfast dishes, grilled foods, meats, soups and sauces, as well as dining room service and kitchen management. The course also includes training in employability skills such as interviewing, resume writing and human relations at work. Formerly HOME EC 15A.

COURSE DESCRIPTIONS

NUTRITION/FOODS

NUTR/ **COMMERCIAL FOODS II** **3 UNITS**
FOOD 106
Hours: **2 Lecture/Discussion**
 4 Lab

This course is designed so that performance standards meet employer expectations and enhance students' job market value so that they can be matched to reasonable employment prospects. Students will demonstrate proficiency in a number of food service skills such as food presentation, sauces, meat cookery, baking and specialty cuisine. Formerly HOME EC 15B.

NUTR/ **SANITATION & SAFETY** **1 UNITS**
FOOD 107
Hours: **18 Lecture/Discussion**

Basic concepts of sanitation and safety and their application in the food service industry. Federal, state and local regulations. Formerly HOME EC 14.

NUTR/ **CHILDREN'S NUTRITION** **3 UNITS**
FOOD 112
Hours: **3 Lecture/Discussion**

A survey course of children's nutritional requirements. This course focuses on children's nutrition prior to conception through adolescence. Study centers on nutrition basics, feeding principles, and current topics. Fulfills three units toward the California State Children's Center permit. An appropriate course for students in education and social services. Formerly HOME EC 12.

NUTR/ **NUTRITION FOR FITNESS,** **2 UNITS**
FOOD 119 **EXERCISE, AND SPORTS**
Hours: **2 Lecture/Discussion**
Cross Ref: **PE 119**

This course is designed to acquaint students with the nutritional needs of physically active persons. Topics include special nutritional needs, evaluation of current information and application of personal food choices. Open to all students interested in the relationship between nutrition, exercise and total fitness. Recommended for those interested in recreational and competitive sports. Formerly NUTR 19.

NUTR/ **TOPICS IN FOODS** **1-4 UNITS**
FOOD 199 **AND NUTRITION**
Hours: **1-4 Lecture/Discussion**

The application of food and nutrition principles to the specific needs of certificated programs, state-mandated certification and community interests. Each section covers a different topic dependent on need. Formerly HOME EC 90a-d.

NUTRITION/FOODS

NUTR/ **MODERN MEALS** **2 UNITS**
FOOD 203
Hours: **1 Lecture/Discussion**
 3 Lab **Materials Fee: \$10.00**

Basic meal planning and preparation to meet the needs of individuals and families. Emphasis on economy, efficiency, nutrition and attractiveness. Open to all interested students. Formerly HOME EC 60.



ORNAMENTAL HORTICULTURE

OH 2 **PLANT IDENTIFICATION 1** **3 UNITS**
Hours: **3 Lecture/Discussion**
 1 Lab

Ornamental Horticulture 2 is a detailed study of trees, shrubs, vines, herbaceous plants, and their identification. This course consists of two sections of different planting materials. Formerly OH 2A.

OH 3 **PLANT IDENTIFICATION 2** **3 UNITS**
Hours: **3 Lecture/Discussion**
 1 Lab

Ornamental Horticulture 3 is a detailed study of trees, shrubs, vines, herbaceous plants, and their identification. This course consists of two sections of different planting materials. Formerly OH 2B.

Recommended Prerequisites: OH 2.

OH 7 **LANDSCAPE DESIGN** **3 UNITS**
Hours: **3 Lecture/Discussion**
 1 Lab

Materials Fee: \$5.00

OH 7 is an ornamental horticulture class that teaches the basic principles of landscape design as applied to residential, industrial, and public properties. The basic course in landscape design is appropriate for transfer students and two-year majors. Formerly OH 6.

Recommended Prerequisite: OH 106

OH 101 **BASIC ORNAMENTAL** **3 UNITS**
 HORTICULTURE
Hours: **3 Lecture/Discussion**
 1 Lab

Materials Fee: \$5.00

This course is an introduction to ornamental horticulture and the basic skills used in the landscaping, turf management, and nursery fields. Formerly OH 1.

COURSE DESCRIPTIONS

ORNAMENTAL HORTICULTURE

OH 105 PLANT PROPAGATION 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

A plant science course that studies the principles of plant propagation by seed, cutting, layering, division, grafting, and budding. The primary focus of this course is the propagation of fruit and ornamental plants. Formerly OH 4.

Recommended Prerequisite: One of the following: OH 101, Plant Science 12 or 113, or Biology 21.

OH 106 LANDSCAPE DRAFTING 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

This course teaches the basic drafting techniques and standards used in creating landscape designs. Students learn landscape symbols, lettering styles and techniques as well as methods of designing landscape plans using section and detail drawings. Sketching and the use of drafting equipment from landscape and architectural fields are also stressed. Formerly OH 5.

OH 108 LANDSCAPE CONSTRUCTION 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

A basic course in ornamental horticulture for transfer and two year horticulture majors that teaches the fundamentals of construction as they relate to landscape design and the maintenance of landscape plants. Formerly OH 7.

OH 109* LANDSCAPE MAINTENANCE 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

OH 109 is a lecture and lab course on the maintenance of landscape of homes, parks, schools, golf courses, plus street and highway plantings. The students study pruning, fertilization, irrigation, pest control and landscape management. Formerly OH 8.

OH 110 TURFGRASS MANAGEMENT 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab

Materials Fee: \$5.00

An introduction to the field of turfgrass management that includes selection and use of turfgrass varieties for use in parks, recreation areas, golf courses, and home lawns. Formerly OH 9.

ORNAMENTAL HORTICULTURE

OH 111 FLORAL DESIGN 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$50.00

OH 111 is an introductory lecture and lab course in commercial floristry that covers the various phases of floral design. It is a general course for a two-year certificate and transfer students and is not limited to agriculture majors. Formerly OH 10.

OH 112 SYMPATHY FLOWERS 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$50.00

Ornamental Horticulture 112 is a course for two year and certificate students. It is a requirement for the floral industries certificate. OH 112 teaches the advanced styling and design of flowers specifically for sympathy work, casket sprays, wreaths, hospital arrangements and solid work. Formerly OH 12.

Recommended Prerequisites: OH 111.

OH 113 WEDDING FLOWERS 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$50.00

Ornamental Horticulture 113 is a course for 2-year and certificate students. It is a requirement for the Floral Industries certificate. OH 113 teaches advanced styling of floral designs to wear and carry, as practiced specifically in wedding work, including complete coverage of wedding bouquets, corsages, church decorations, balloons and bouquet decor. Formerly OH 13.

Recommended Prerequisites: OH 111.

OH 114* HORTICULTURE INDUSTRIES TOUR 3 UNITS
(Northern California)
Hours: 3 Lecture/Discussion

Ornamental Horticulture 114 is a field trip to ornamental horticulture outlets and the industries that supply them. Garden centers, flower shops, foundation and display garden with retail outlets and public educational facilities are studied. Visits to wholesalers, jobbers, display houses, advertising agencies and others working with retailers are included. Formerly OH 14A.

OH 115* HORTICULTURE INDUSTRIES TOUR 3 UNITS
(Southern California)
Hours: 3 Lecture/Discussion
1 Lab

Ornamental Horticulture 115 is a field trip to ornamental horticulture outlets and the industries that supply them. Garden centers, flower shops, foundation and display gardens with retail outlets and public educational facilities are studied. Visits to wholesalers, jobbers, display houses, advertising agencies and other working with retailers are included. Formerly OH 14B.

COURSE DESCRIPTIONS

ORNAMENTAL HORTICULTURE

OH 116* HORTICULTURE INDUSTRIES TOUR 3 UNITS
(Central California)
Hours: 3 Lecture/Discussion
 Ornamental Horticulture 116 is a field trip to ornamental horticulture outlets and the industries that supply them. Garden centers, flower shops, foundation and display gardens with retail outlets and public educational facilities are studied. Visits to wholesalers, jobbers, display houses, advertising agencies and other working with retailers are included. Formerly OH 14C.

OH 118 XERISCAPE 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: \$5.00
 A study and application of the principles and theories of landscape planning, designing, installation and maintenance of wise use water management in large and small scale landscapes. Formerly OH 18.
Prerequisites: OH 101 and OH 106

OH 119 INTERIORSCAPES 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: \$5.00
 A study of the principals of residential and commercial interior design relating to plant materials for aesthetic purposes, is the main focus of this class. Formerly OH 19.

OH 400 HOME VEGETABLE GARDENING 0 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: \$10.00
 OH 400 is an introductory lecture course in small scale vegetable production. The students study plant selection, soils, fertilizers, and care, as well as methods of planting of irrigation and harvesting. This course is of great value to anyone who desires to learn proper techniques of home vegetable gardening. Formerly OH 17a-d.

P

PARALEGAL

PARA 101 INTRODUCTION TO PARALEGALISM 3 UNITS
Hours: 3 Lecture/Discussion
 This required survey course is the initial course in a program designed to train the student for employment as a paralegal. The student is given basic knowledge of the role of a paralegal in the legal community, career opportunities, legal ethics, legal analysis including case briefing, introduction to the law library and exposure to various substantive and procedural areas of the law. Formerly PARA 1.
Recommended Prerequisite: Paralegal 102 (co-requisite) and English 1 eligibility.

PARALEGAL

PARA 102 LEGAL TERMINOLOGY 1 UNIT
Hours: 1 Lecture/Discussion
 A required course acquainting the student with legal terminology, concepts, and definitions. Formerly PARA 6.
Recommended Prerequisite: Concurrent enrollment in Paralegal 101.

PARA 103 CIVIL PROCEDURE I 3 UNITS
Hours: 3 Lecture/Discussion
 A required course designed to familiarize the paralegal student with the concepts of both California and Federal Civil Procedure and the stages of civil litigation. The student will be instructed in the use of standard judicial forms. Formerly PARA 4A.
Prerequisites: Paralegal 101.

PARA 104 CIVIL PROCEDURE II 3 UNITS
Hours: 3 Lecture/Discussion
 A second semester course which draws upon the basic concepts of civil procedure learned in Paralegal 4A to enable the student to learn to draft complicated civil pleadings, discovery devices, and extraordinary writs. Formerly PARA 4B.
Prerequisites: Paralegal 101, 103, & 105.

PARA 105 LEGAL RESEARCH AND WRITING I 3 UNITS
Hours: 3 Lecture/Discussion
 This required course is designed to familiarize the paralegal with the basic tools of researching both Federal and California law. The student will learn to locate authority relevant to particular cases and clearly and concisely write various legal documents and memoranda based on that research. Analysis and interpretation of statutes and judicial opinions are also included. Formerly PARA 2A.
Recommended Prerequisites: Paralegal 101 and 103.

PARA 106 LEGAL RESEARCH AND WRITING II 3 UNITS
Hours: 3 Lecture/Discussion
 A second semester required course in advanced legal research and writing designed to expand the paralegal student's ability to perform more complicated legal research and legal analysis. Assignments include drafting points and authorities and appellate briefs. Formerly PARA 2B.
Prerequisites: Paralegal 101, 103, and 105.

PARA 107 CLIENT INTERVIEWING FOR THE PARALEGAL 1 UNIT
Hours: 1 Lecture/Lab
 This required course will familiarize the student with interviewing techniques, ethical considerations for the interviewer, and methods of documenting and summarizing interviews. Formerly PARA 21.
Prerequisites: Paralegal 101, 103, 105, and concurrent enrollment in Paralegal Internship.

COURSE DESCRIPTIONS

PARALEGAL

PARA 108 LAW OFFICE MANAGEMENT 1 UNIT
Hours: 1 Lecture/Discussion
A required course designed to train the student in the management of a law office. Content of the course includes law office organization, time keeping, and time management, accounting, scheduling, and calendaring, management of personnel, retrieval systems for law, other aspects of law office management for the efficient operation of a law office. Formerly PARA 3.
Prerequisites: Paralegal 101, 103 and 105 and concurrent enrollment in Paralegal 193, 194, 195, & 196.

PARA 130 TORT LAW 1.5 UNITS
Hours: 1.5 Lecture/Discussion
This elective course provides a broad overview of torts including intentional torts, negligence and strict liability as well as defenses to the same. The student will learn to draft standard form complaints based on common tort theories. Formerly PARA 10.
Prerequisites: Paralegal 101 and 103.

PARA 131 CONTRACT LAW 1.5 UNITS
Hours: 1.5 Lecture/Discussion
This elective course provides a general knowledge of what constitutes a contract, how to locate and utilize forms associated with contract lawsuits. Formerly PARA 11.
Prerequisites: Paralegal 101 and 103.

PARA 132 WILLS, TRUSTS, AND PROBATE 3 UNITS
Hours: 3 Lecture/Discussion
This is an elective course designed to familiarize the student with the legal aspects of wills, trusts, and probate. Included is the effect of death upon property ownership, community property and the drafting of forms associated with probate law. Formerly PARA 12.
Prerequisites: Paralegal 101 and 103.

PARA 133 CORPORATE LAW 1 UNIT
Hours: 1 Lecture/Discussion
This elective course enables the paralegal to understand the corporate structure and gives special attention to the areas of agency, partnership, rights of stockholders, and the drafting of legal documents associated with these business entities. Formerly PARA 13.
Prerequisites: Paralegal 101 and 103.

PARA 134 REAL ESTATE LAW 1 UNIT
Hours: 1 Lecture/Discussion
This is an elective course covering practices and procedures of real estate and landlord-tenant law, including the drafting of legal forms used in these areas. Formerly PARA 14.
Prerequisites: Paralegal 101 and 103.

PARALEGAL

PARA 135 BANKRUPTCY 1 UNIT
Hours: 1 Lecture/Discussion
This is an elective course which provides general knowledge of the types of bankruptcy, jurisdiction, bankruptcy court procedures, duties of bankrupts and trustees, and adversary proceedings. Formerly PARA 8.
Prerequisites: Paralegal 101 and 105.

PARA 136 ADMINISTRATIVE LAW 1 UNIT
Hours: 1 Lecture/Discussion
This is an elective course covering the practices and procedures of state and federal administrative agencies. Students learn to draft documents for use in agency proceedings. Formerly PARA 16.
Prerequisites: Paralegal 101 and 105.

PARA 137 FAMILY LAW 3 UNITS
Hours: 3 Lecture/Discussion
This is an elective course designed to familiarize the paralegal with California law relating to adoption, annulment, dissolutions, paternity, and community property. The student will become acquainted with the necessary forms related to dissolution actions. Formerly PARA 7.
Prerequisites: Paralegal 101 and 103.

PARA 138 ENFORCEMENT OF JUDGMENTS 1 UNIT
Hours: 1 Lecture/Discussion
This elective course will familiarize the student with methods of collecting money judgments. It will emphasize actual preparation of legal documents necessary to enforce money judgments. Formerly PARA 23.
Prerequisites: Paralegal 101 and 103 or consent of department.

PARA 139 WORKERS COMPENSATION LAW 1 UNIT
Hours: 1 Lecture/Discussion
This is an elective course covering the practices and procedures related to workers compensation actions. Students learn to draft documents for use in this agency. Formerly PARA 19.
Prerequisites: Paralegal 101 and 105.

PARA 197 PROFESSIONAL RESPONSIBILITY 1 UNIT
Hours: 1 Lecture/Discussion
This required course is designed to assist the second year paralegal student make the transition from the classroom to the law office. The course covers ethics, regulation of paralegals, job realities, career opportunities, and advanced legal analysis.
Prerequisite: Paralegal Cooperative Work Experience

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

General Activities

P.E. 3a-d* PAR COURSE TRAINING FOR AEROBIC FITNESS 1 UNIT

Hours: 4 Activity

Par Course Jogging for Aerobic Fitness is designed for students who desire to improve their aerobic and strength. Each student will demonstrate through par course jogging how to develop fitness by exercise in the following: flexibility, cardiovascular fitness, proper jogging techniques and strength, with the use of various exercise stations. Formerly PE 14a-d.

P.E.4a-d WEIGHT LIFTING 1 UNIT

**Hours: 1 Lecture/Discussion
2 Activity**

Introduction to the scientific and theoretical components of resistance training for transfer students. Inclusive of basic principles of strength development, bodybuilding, diet, nutrition and weight control. Based on the foundation of resistance prescriptions. Course will focus on barbells, dumbbells and machines as the vehicle for development of the major muscle groups. Proper mechanics of exercise and safety factors are stressed. Formerly PE 12a-d.

P.E. 12a-d ADVANCED BASEBALL 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

A physical education activity class for students who wish to gain advanced skills. Advanced skills in throwing, fielding, batting, and pitching a baseball will be taught and practiced. Formerly PE 26a-d.

Recommended Prerequisites: Recommendation of department.

P.E. 14a-d BASKETBALL 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

This course is designed for any student interested in the sport of basketball; both experienced players and those not familiar with the game are encouraged to take this class. Basketball is an enjoyable sport and provides yet one more way a student can become physically fit through competition. This class is coed, both men and women may enroll. Formerly PE 17a-d.

P.E. 15a-d FUNDAMENTALS OF FOOTBALL 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

An activity class for students who wish to gain advanced football skills. The student will understand and develop advanced fundamentals of playing football, application of rules, and terms of the game of football. Formerly PE 42a-d.

PHYSICAL EDUCATION

General Activities

P.E.16* CONDITIONING FOR FOOTBALL 1 UNIT

**Hours: 1 Lecture/Discussion
2 Activity**

The use of plyometric exercises to improve power and speed for football conditioning.

Recommended Prerequisite: Referral from the Department.

P.E. 18a-b BEGINNING GOLF 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

A physical education activity class in golf fundamentals. Focus on understanding the basic fundamentals of playing golf, learning rules and terms of the game. Formerly PE 8a-d.

P.E. 19a-b ADVANCED GOLF 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

A physical education activity class for students who wish to gain advanced golf skills. The student will understand and develop advanced fundamentals of playing golf, application of rules, and terms of the game of golf. Formerly PE 37a-d.

Recommended Prerequisite: PE 18a-b or recommendation of department.

P.E. 20a-d RACQUETBALL 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

Designed for the student who is a novice and desires knowledge in history and strategy of racquetball. The student will learn all the rules, scoring and basic strokes to successfully play and compete in class participation. The student will learn basic strategy for single and doubles play. This class is not recommended for the highly skilled player. Formerly PE 23a-d.

P.E. 21a-d SOCCER 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

This course is designed for any student interested in the sport of soccer; both experienced players and those not familiar with the game are encouraged to take this class, one of this game are thoroughly addressed. Soccer is an enjoyable sport and provides yet one more way a student can become physically fit through competition. This class is coed, both men and women may enroll. Formerly PE 4a-d.

P.E. 22a-d ADVANCED SOFTBALL 1 UNIT

**Hours: .5 Lecture/Discussion
1.5 Activity**

A physical education activity class for students to gain advanced softball skills. Advanced skills in throwing, fielding, batting and pitching a softball will be taught and practiced.

Recommended Prerequisites: Recommendation of department.

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

General Activities

P.E. 25a-d BASIC SWIMMING 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

Basic Swimming is a general introduction to swimming and aquatics. It is an appropriate class for the beginning swimmer who wants to learn aquatic fundamentals and received swimming stroke instruction in front crawl, back crawl, elementary backstroke, sidestroke, breaststroke and butterfly. Formerly PE 34a-d.

P.E. 26a-d SWIMMING FOR FITNESS 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

A general introduction to swimming and aquatics. It is an appropriate class for the beginning swimmer who wants to learn aquatic fundamentals and receive swimming stroke instruction in front crawl, back crawl, elementary backstroke, sidestroke, breaststroke and butterfly. Formerly 9a-d.

P.E. 30a-b BEGINNING TENNIS 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

Beginning Tennis is an activity course designed for the student who wishes to develop an understanding and appreciation for the game of tennis. Basic skills, strategies and rules will be covered. Formerly PE 10a-d.

P.E. 31a-b ADVANCED TENNIS - MEN 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

This course is designed for the advanced tennis player. It will prepare the student for tennis competition with physical fitness training and intra-class play. Formerly PE 22c-d.

Recommended Prerequisite: PE 30a-b or permission of department.

P.E. 32a-b ADVANCED TENNIS - WOMEN 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

This course is designed for the advanced tennis player. It will prepare the student for tennis competition with physical fitness training and intra-class play. Formerly PE 22a-b.

Recommended Prerequisite: PE 30a-b or permission of department.

PHYSICAL EDUCATION

General Activities

P.E. 34a-b BEGINNING VOLLEYBALL 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

Development of basic fundamental skills in volleyball through drills and play. Formerly 24a-b.

P.E. 35a-b ADVANCED VOLLEYBALL 1 UNIT
Hours: .5 Lecture/Discussion
 1.5 Activity

A physical education activity class for students who wish to gain advanced volleyball skills. The student will understand and develop advanced fundamentals of playing volleyball, application of rules, and terms of the game of volleyball. Formerly PE 24c-d.

Recommended Prerequisite: PE 34a-b or permission of department.

P.E. 36 INTRODUCTION TO PHYSICAL EDUCATION 2 UNITS
Hours: 2 Lecture/Discussion

A course of introductory nature designed primarily for those interested in becoming Physical Education Teachers, but presented in a format which will make it of value to anyone thinking about entering some areas of the teaching profession. Formerly PE 30.

P.E. 41a-d MARCHING BAND 2 UNITS
Hours: 6 Lab
Cross Ref: MUSIC 75a-d
Materials Fee: \$10.00

This course is open to all students who demonstrate ability to play a band instrument. The marching band represents the college in public functions which may include the performance of band literature at concerts, parades, rallies and athletic events. Emphasis is placed on the development of music performance and marching skills. Formerly PE 15a-d.

Prerequisites: Prior experience in high school or equivalent or an ability to play a band instrument competently.

P.E. 95 FITNESS FOR SENIOR CITIZENS 0 UNITS
Hours: 3 Activity

This course is considered mild exercise and is basically designed for senior citizens. The course is geared to the needs of senior citizens, taking into consideration the limitations of all or certain individuals within a class. The course consists of various stretching, bending, twisting and leaning from different positions while sitting in a chair.

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

General Activities

P.E. 117a-b THEORY OF FOOTBALL **2 UNITS**
Hours: 2 Lecture/Discussion
 This course is designed for the student with an interest in coaching football. Philosophy fundamentals, strategies, and rules will be emphasized. Formerly PE 79a-b.

P.E. 119 NUTRITION FOR FITNESS, EXERCISE, AND SPORTS **2 UNITS**
Hours: 2 Lecture/Discussion
Cross Ref: Nutr/Food 119
 This course is designed to acquaint students with the nutritional needs of physically active persons. Topics include special nutritional needs, evaluation of current information and application of personal food choices. Open to all students interested in the relationship between nutrition, exercise and total fitness. Recommended for those interested in recreational and competitive sports. Formerly PE 29.

P.E. 137 INTRODUCTION AND THEORY OF COACHING **2 UNITS**
Hours: 2 Lecture/Discussion
 Designed for the student wishing to gain knowledge of coaching individuals and team sports. Common problems and solutions will also be covered. Formerly PE 71.
Recommended Prerequisite: English 251 or permission of department.

P.E. 142a-d VARSITY PERFORMANCE **2 UNITS**
Hours: 2 Lecture/Discussion
 4 Activity
 Varsity Performance is designed to enhance the performing skills of the Pep Squad and provide opportunity to prepare for support of all athletic teams. Formerly PE 82a-d.
Prerequisite: The member is chosen by election (Judges) in order to become a part of the C.O.S. Pep Squad.

P.E. 301a-d AQUA CALISTHENICS **1 UNIT**
Hours: .5 Lecture/Discussion
 1.5 Activity
 Aqua Calisthenics is a P.E. activity course designed for students who wish to develop, maintain or improve their cardiovascular fitness level in an aquatic environment. No swimming skills are necessary.

PHYSICAL EDUCATION

Hygiene

HYGIENE 1 PERSONAL HYGIENE **2 UNITS**
Hours: 2 Lecture/Discussion
 A general course including the facts necessary for maintenance of physical and mental health. Special emphasis is given to the use of drugs in our society including alcohol, tobacco, stimulants, analgesic narcotics, and "over the counter" drugs. Total fitness, diet and weight control, environmental health safety, sexually transmitted diseases and effective family living are among other subjects studied.

HYGIENE 3 STANDARD FIRST AID **2 UNITS**
Hours: 2 Lecture/Discussion
 Hygiene 3 covers the American Red Cross Standard First Aid course, including Cardiorespiratory Resuscitation (CPR), Safety Factors in Daily Living, Emergency Treatment for Various Types of Injuries and Emergency Childbirth. Certificate will be issued with a fee paid to the American Red Cross when requirements are met.

HYGIENE 7 SPORTS HEALTH **2 UNITS**
Hours: 2 Lecture/Discussion
 Using sport as the vehicle, this class covers the same basic subject matter as hygiene 1. The effects of pain and stress on performance are studied. Diet, weight control, fitness and exercise, genetics, and their influence on training are examined. The consequences of using alcohol, tobacco and anabolic steroids and other drugs are explained in terms of their effects on human performance. An understanding of the anatomy of common injuries and their treatment and prevention is developed.

HYGIENE 104 DRUGS AND SOCIETY **2 UNITS**
Hours: 2 Lecture/Discussion
 1 Lab
 This course covers the broad spectrum of drug use in our society. The material is constantly updated to reflect the current interests of students and new information made available by the scientific community. This course meets the Hygiene requirement. Formerly HYGIENE 4.

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

Intercollegiate Athletics

IA 1a-d INTERCOLLEGIATE ATHLETICS-BASEBALL - MEN'S **2 UNITS**
Hours: 2 Lecture/Discussion
8 Activity

Intercollegiate Varsity Baseball is designed for the student who excels in athletic ability and wishes to compete at a high level of baseball against other California community colleges. Formerly PE 52a-d.

Recommended Prerequisites: P.E. 12a-d.

IA 2a-d INTERCOLLEGIATE BASKETBALL - MEN **1 UNITS**
Hours: 1 Lecture/Discussion
4 Lab

An advanced skill course for male students who want to participate in an intercollegiate basketball program. Course includes advanced techniques of offense, defense, rebounding, transition and related philosophies will be taught and used in intercollegiate competition. Off court time will be required for travel and overnight trips. Formerly PE 51a-d.

Recommended Prerequisite: Permission of department.

IA 3a-d INTERCOLLEGIATE BASKETBALL - WOMEN **1 UNITS**
Hours: 1 Lecture/Discussion
4 Lab

An advanced skill course for female students who want to participate in an intercollegiate basketball program. Advanced techniques of offense, defense, rebounding, transition and related philosophies will be taught and used in intercollegiate competition. Formerly PE 51a-d.

Off court time will be required for travel and overnight trips.
Prerequisites: Permission of the department.

IA 4a-d INTERCOLLEGIATE ATHLETICS - MEN'S CROSS COUNTRY **2 UNITS**
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the student/athlete who is interested in competing in intercollegiate cross country. The course involves daily practices as well as participation in cross country meets. Each meet consists of a 4-mile run, therefore, all workouts are geared toward running this distance. Intercollegiate Cross Country not only allows the student/athlete to better himself as an individual athlete, but contributes to a team effort, as well. Formerly PE 58a-d.

Recommended Prerequisite: Permission of department.

PHYSICAL EDUCATION

Intercollegiate Athletics

IA 5a-d INTERCOLLEGIATE ATHLETICS - WOMEN'S CROSS COUNTRY **2 UNITS**
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the student/athlete who is interested in competing in intercollegiate cross country. The course involves daily practices as well as participation in cross country meets. Each meet for women consists of a 3-mile run, therefore all workouts are geared towards running this distance. Intercollegiate Cross Country not only allows the student/athlete to better herself as an individual athlete, but contributes to a team effort, as well. Formerly PE 58a-d.

IA 6a-d INTERCOLLEGIATE ATHLETICS - FOOTBALL **2 UNITS**
Hours: 2 Lecture/Discussion
8 Activity

This course is designed for the student/athlete to compete in intercollegiate varsity football at the community college level. The student/athlete should not schedule any other classes from 2 p.m. through 6:30 p.m. Monday-Friday. Formerly PE 50a-d.

IA 7a-d INTERCOLLEGIATE ATHLETICS - GOLF **2 UNITS**
Hours: 2 Lecture/Discussion
8 Activity

Designed for the student/athlete who wishes to play competitive golf on an intercollegiate golf team competing against teammates and other community colleges. Formerly PE 57a-d.

Prerequisites: By permission of department.

IA 8a-d INTERCOLLEGIATE ATHLETICS - WOMEN'S SOFTBALL **2 UNITS**
Hours: 2 Lecture/Discussion
8 Activity

This course is designed for the female student interested in competing in intercollegiate softball. The course involves daily practices as well as competition at the collegiate level at league games and various tournament play. Intercollegiate softball not only allows the student/athlete to better herself as an individual athlete, but contributes to team effort as well. Formerly PE 61a-d.

Prerequisite: Permission from the department.

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

Intercollegiate Athletics

IA 9a-d* INTERCOLLEGIATE 2 UNITS
ATHLETICS - SWIMMING - MEN'S
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the student/athlete who is interested in competing in intercollegiate swimming. The course consists of daily practices and competition in scheduled meets. The goal of the program is to prepare participants to compete successfully at the junior college level. Formerly PE 55a-d.

IA 10a-d* INTERCOLLEGIATE 2 UNITS
ATHLETICS - SWIMMING - WOMEN'S
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the student/athlete who is interested in competing in intercollegiate swimming. The course consists of daily practices and competition in scheduled meets. The goal of the program is to prepare participants to compete successfully at the junior college level. Formerly PE 55a-d.

IA 11a-d INTERCOLLEGIATE 2 UNITS
ATHLETICS - TENNIS - MEN'S
Hours: 2 Lecture/Discussion
8 Activity

Designed for the student who wishes to play competitive tennis on an intercollegiate tennis team competing against teammates and other community colleges. Formerly PE 54a-d.

Recommended Prerequisite: P.E. 15a-d and permission of the department.

IA 12a-d INTERCOLLEGIATE 2 UNITS
ATHLETICS - TENNIS - WOMEN'S
Hours: 2 Lecture/Discussion
8 Activity

This course is designed for the female student who wishes to play competitive tennis on an intercollegiate tennis team competing against teammates and other community college students. Formerly PE 54a-d.

Recommended Prerequisites: P.E. 32a-d and by permission of the department.

PHYSICAL EDUCATION

Intercollegiate Athletics

IA 13a-d INTERCOLLEGIATE 2 UNITS
ATHLETICS - TRACK AND FIELD - MEN'S
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the athlete who is interested in competing in intercollegiate track and field. The course involves daily practices as well as participation in track and field meets. Each meet for the men consists of 12 running events and 8 field events; therefore all work-outs are geared towards these individual events as well as general physical fitness. Intercollegiate track and field not only allows the student to better himself as an individual athlete, but contributes to a team effort as well. Formerly PE 53a-d.

IA 14a-d INTERCOLLEGIATE ATHLETICS - 2 UNITS
TRACK AND FIELD - WOMEN'S
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the athlete who is interested in competing in intercollegiate track and field. The course involves daily practices as well as participation in track and field meets. Each meet for the women consists of 11 running events and six field events; therefore all work-outs are geared towards these individual events as well as general physical fitness. Intercollegiate track and field not only allows the student to better herself as an individual athlete, but contribute to a team effort as well. Formerly PE 53a-d.

IA 15a-d INTERCOLLEGIATE 2 UNITS
WATER POLO
Hours: 2 Lecture/Discussion
8 Activity

This class is designed for the student/athlete who is interested in competing in intercollegiate Water Polo. The course consists of daily practices and competition in scheduled games. The goal of the program is to prepare interested student/athletes to successfully compete at the junior college level. Formerly PE 60a-d.

IA 16a-d INTERCOLLEGIATE ATHLETICS 2 UNITS
VOLLEYBALL - WOMEN'S
Hours: 2 Lecture/Discussion
8 Activity

Designed for the female student who wants to continue her volleyball competition at an intercollegiate level. The course involves daily practice as well as participation in intercollegiate volleyball matches and tournaments. Formerly PE 56a-d.

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

Recreation

REC 101 INTRODUCTION TO COMMUNITY RECREATION 3 UNITS

Hours: 3 Lecture/Discussion

Philosophical, theoretical and historical approach to recreation and leisure services in contemporary American society. For the student who want to develop a personal philosophy of leisure through education, information and simulation.

Prerequisite: English 251.

Sports Medicine

SPORTS THE CARE AND PREVENTION OF ATHLETIC INJURIES 3 UNITS

MED 40
Hours: 3 Lecture/Discussion
1 Lab

This course partially fulfills the regulations and requirements of the National Athletic Trainers Association Certificate. The course is open and recommended for all students who have an interest in learning about sport(s) injuries and their prevention and management.

SPORTS CONCEPTS IN HEALTH AND FITNESS 3 UNITS

MED 60
Hours: 3 Lecture/Discussion

An examination of recommended health practices and concerns. Emphasis is on basic understanding of critical health and fitness issues and applying these to everyday living.

SPORTS SPORTS MEDICINE, FALL SPORTS 2 UNITS

MED 70
Hours: 1 Lecture/Discussion
4 Lab

Exposure to immediate recognition and treatment of sports injuries unique to fall sports. Emphasis on rehabilitation and taping techniques to enable athletes to return to competition.
Recommended Prerequisites: Sports Medicine 40, Hygiene 3

SPORTS SPORTS MEDICINE, SPRING SPORTS 2 UNITS

MED 71
Hours: 1 Lecture/Discussion
4 Lab

The study and exposure to immediate recognition and treatment of sports injuries unique to spring sports. Emphasis will be placed on rehabilitation and taping techniques to aid in healing of the body and returning the athlete to competition.
Recommended Prerequisite: Sports Medicine 40, Hygiene 3

PHYSICAL EDUCATION

Sports Medicine

SPORTS SPORTS MEDICINE, ADVANCED, FALL SPORTS 2 UNITS

MED 72
Hours: 1 Lecture/Discussion
3 Lab

This course will give students additional exposure to the immediate recognition and treatment of sports injuries unique to Fall sports. Students will have hands-on experience and will be able to apply different techniques in the treatment of injuries.

Recommended Prerequisites: Sports Medicine 40, Hygiene 3, Sports Medicine 70.

SPORTS ADVANCED SPORTS MEDICINE, SPRING SPORTS 2 UNITS

MED 73
Hours: 1 Lecture/Discussion
3 Lab

This course will give students additional exposure to immediate recognition and treatment of sports injuries unique to spring sports. Students will have hands-on experience and will be able to apply different techniques in the treatment of injuries.

Recommended Prerequisites: Sports Medicine 40 and 70, Hygiene 3.

PHYSICAL SCIENCE

PHYS SCI 12 INTRODUCTION TO PHYSICAL SCIENCE 3 UNITS

Hours: 3 Lecture/Discussion
2 Lab

A laboratory based course in physical science designed to meet the laboratory science requirement for transfer students who are not science majors. This course emphasizes the methods and reasoning used in the physical sciences. Topics include observation and interpretation, measurement, laws of nature, characteristic properties, uncertainty, solubility, compounds and separation of substances.

Recommended Prerequisites: Eligible for Math 230 and English 251. Not open to students with credit in Physical Science 350.

PHYS SCI INTRODUCTION TO PHYSICAL SCIENCE 3 UNITS

12H
Hours: 3 Lecture/Discussion
2 Lab

A laboratory based course in physical science designed to meet the laboratory science requirement for transfer students who are not science majors. This course emphasizes the methods and reasoning used in the physical sciences. Topics include observation and interpretation, measurement, laws of nature, characteristic properties, uncertainty, solubility, compounds and separation of substances.

Prerequisites: Acceptance into the C.O.S. Honors Program. Eligible for Math 230 and completion of English 1. Not open to students with credit in Physical Science 350 or Physical Science 12.

COURSE DESCRIPTIONS

PHYSICAL SCIENCE

PHYS SCI 350 FUNDAMENTALS OF PHYSICAL SCIENCE 3 UNITS
Hours: 3 Lecture/Discussion 2 Lab

This class will introduce the student to the fundamental reasoning and methods used in the physical sciences. It is designed to help students develop the competence and confidence necessary for successful college study in both academic and vocational courses. Formerly PHYS SCI 50.

Prerequisite: Must be enrolled in SUCCESS Program.

PHYSICS

PHYSICS 5 PHYSICS FOR SCIENTISTS AND ENGINEERS 4 UNITS
Hours: 4 Lecture/Discussion 2 Lab

This is the first semester of a three semester introductory calculus-based physics course. It is a fundamental treatment of the general principles of physics for engineering and physical science majors. Topics included are statics, kinematics, dynamics of particles and rigid bodies, simple harmonic motion and mechanical properties of solids. Formerly Physics 5A. (CAN-PHYS 8)

Recommended Prerequisites: Completion of Math 75 with a grade of "C" or better.

PHYSICS 6 PHYSICS FOR SCIENTISTS AND ENGINEERS 4 UNITS
Hours: 4 Lecture/Discussion 2 Lab

This is the second semester of a three semester introductory calculus-based physics course. It is a fundamental treatment of the general principles of physics for the engineering and physics major. Topics included are mechanical properties of matter, fluid mechanics, wave motion, thermodynamics, and electrostatics. Formerly PHYSICS 5B. (CAN-PHYS 10)

Prerequisites: Completion of Physics 5 with a grade of "C" or better.

PHYSICS 7 PHYSICS FOR SCIENTISTS AND ENGINEERS 4 UNITS
Hours: 4 Lecture/Discussion 2 Lab

This is the third semester of a three semester introductory calculus-based physics course. It is a fundamental treatment of the general principles of physics for the engineering and physics major. Topics included are electricity, magnetism, and optics. Formerly PHYSICS 5C. (CAN-PHYS 12)

Prerequisites: Completion of Physics 6 with a grade of "C" or better.

PHYSICS

PHYSICS 20 GENERAL PHYSICS 4 UNITS
Hours: 4 Lecture/Discussion 2 Lab

This is the first semester of a two-semester introductory non-calculus based physics course. This course includes laboratory experiments in addition to lectures. It is required for premedical, pre-dental, pre-pharmacy, and occasionally science and math students. Topics included are statics; kinematics, dynamics of particles and rigid bodies, simple harmonic motion, and thermal physics. Formerly PHYSICS 2A. (CAN-PHYS 2)

Prerequisites: Completion of Trigonometry (Math 154 or equivalent) with a grade of "C" or better. Co-requisite of Math 61 or equivalent.

PHYSICS 21 GENERAL PHYSICS 4 UNITS
Hours: 4 Lecture/Discussion 2 Lab

This is the second semester of a two-semester introductory non-calculus based physics course. This course includes laboratory experiments in addition to lectures. It is required for premedical, pre-dental, pre-pharmacy, and occasionally science and math students. Topics included are: electricity and magnetism, optics, modern and nuclear physics. Formerly PHYSICS 2B. (CAN-PHYS 4)

Prerequisite: Physics 20 with a grade of "C" or better. Co-requisite of Math 62 or equivalent.

PLANT SCIENCE

PLNT SCI 1 INTRODUCTION TO CROP SCIENCE 3 UNITS
Hours: 3 Lecture/Discussion 1 Lab

A general survey of crop production in California. This course includes an overview of crop area and uses, current economic and market conditions, plant taxonomy and classification, and basic botany.

PLNT SCI 12 FRUIT AND NUT TREE PRODUCTION 3 UNITS
Hours: 3 Lecture/Discussion 1 Lab

An introductory course in California fruit and nut tree production. Basic cultural and management practice in nut, stone, and pome fruits are included in this course.

Prerequisites: Plant Science 1 recommended.

COURSE DESCRIPTIONS

PLANT SCIENCE

PLNT SCI 102 ROW CROPS 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

The production principles and management practices for row crops including cotton, corn, and sugar beets in the San Joaquin Valley. Formerly PLNT SCI 2.

Prerequisites: Plant Science 1 recommended.

PLNT SCI 103 CEREAL AND OIL CROPS 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

This course covers the production principles for small grains including sorghums and oil crops in the San Joaquin Valley. Topics include fundamental taxonomy, botany and cultural practices including tillage, planting, irrigation, pest control, and harvesting. Formerly PLNT SCI 5.

Prerequisites: Plant Science 1 recommended.

PLNT SCI 104 FORAGE CROPS 3 UNITS

**Hours: 3 Lecture/Discussion
1 Lab**

A study of the common forage crops: alfalfa, silages, permanent pastures, and natural ranges. Cultural practices to be studied will include: land preparation, irrigation needs, fertilization, seeding rates, methods of utilization, grazing silage or dry hay, and harvesting. Formerly PLNT SCI 3.

PLNT SCI 105 WEEDS AND WEED CONTROL 3 UNITS

**Hours: 2 Lecture/Discussion
2 Lab**

This course covers identification, cultural, chemical, and biological control or prevention of the major weeds affecting crops and livestock in the Tulare-Kings counties area. Formerly PLNT SCI 4.

PLNT SCI 111 CITRUS PRODUCTION 3 UNITS

**Hours: 2 Lecture/Discussion
2 Lab**

Economic importance of the citrus industry. Topics include: historical development, areas of production, environmental requirements and citrus climatology, citrus botany, commercial varieties and rootstocks. Critical evaluation and comparison of citrus regions around the world. Orchard planning and development, nursery practices, tree management, pest and disease control, irrigation and fertilization, pruning, harvesting, and marketing. Formerly PLNT SCI 14.

PLANT SCIENCE

PLNT SCI 113 GRAPE AND VINE PRODUCTION 3 UNITS

Hours: 3 Lecture/Discussion

This course is a survey of the grape industry, grape varieties, and economics with a study of the cultural practices of table and wine grape production in California. Formerly PLNT SCI 15.

Prerequisite: Plant Science 1 is recommended.

POLITICAL SCIENCE

POLI SCI 5 FEDERAL, STATE, AND LOCAL GOVERNMENT 3 UNITS

Hours: 3 Lecture/Discussion

An introduction to the principles and problems of national, state and local government, with particular emphasis on the Constitution of the United States and the state and local governments of California. (CAN-GOVT 2)

Recommended Prerequisite: Eligible for English 1.

POLI SCI 5H FEDERAL, STATE AND LOCAL GOVERNMENT 4 UNITS

**Hours: 3 Lecture/Discussion
1 Honors Colloquium**

An introduction to the principles and problems of national, state and local government, with particular emphasis on the Constitution of the United States and the state and local governments of California. In addition this course will explore and analyze conflicting problems affecting government on the national, state, and local levels. A one hour colloquium is also required for the fourth unit of credit. (CAN-GOVT 2).

Prerequisite: Completion of English 1-H.

POLI SCI 7 INTRO TO MASS COMMUNICATIONS 3 UNITS

Hours: 3 Lecture/Discussion

CROSS REF: Journalism 7

A survey course covering all media of mass communications, newspapers, radio, television, magazines, book publishing, films, and the recording industry. Students will study strengths and weaknesses of each medium, as well as the major challenges to a democratic society including censorship, sensationalism, pornography, propaganda, and monopoly. The course focuses on the interrelationship of mass media and society. (CAN-JOURN 4)

COURSE DESCRIPTIONS

PSYCHOLOGY

PSYCH 1 GENERAL PSYCHOLOGY 3 UNITS
Hours: 3 Lecture/Discussion
This course involves an introduction to the field of psychology through a study of the facts and principles involved in learning, development, motivation, personality, adjustment, and the physiological bases of behavior. The basic concepts and scientific method as employed in psychology are presented. Particular emphasis is placed on those concepts which relate to an understanding of human behavior. (CAN-PSY 2)
Recommended Prerequisite: Eligibility for English 1.

PSYCH 5 SOCIAL PSYCHOLOGY 3 UNITS
Hours: 3 Lecture/Discussion
A scientific exploration and application of the psychological basis of people's interactions with one another and the way thoughts, feelings and action are influenced by others. Topics include: perception, roles, conformity, prejudice, aggression, altruism and groups dynamics. Social psychology is interdisciplinary—drawing on the fields of Anthropology, Psychology and Sociology.
Prerequisites: Psychology 1 and eligibility for English 1.

PSYCH 10 HUMAN SEXUALITY 3 UNITS
Hours: 3 Lecture/Discussion
A comprehensive introduction to the biological, psychological and sociocultural aspects of human sexual behavior.
Prerequisites: Eligibility for English one and Psychology 1.

PSYCH 34 ABNORMAL PSYCHOLOGY 3 UNITS
Hours: 3 Lecture/Discussion
This course is designed to present a broad general survey of the field of abnormal psychology. It utilizes the many theoretical views of psychopathology in human behavior in order to explore the nature and development of these deviations.

PSYCH 39 CHILD DEVELOPMENT 3 UNITS
Hours: 3 Lecture/Discussion
CROSS REF: Child Dev 39
This course traces child development utilizing basic theories such as Piaget, Erikson, and Kolberg. Current research is reviewed and discussed. Study concentrates on normal development from prenatal through adolescence. Students will be required to do observation of children and to write child studies, media critiques and essay exams. (CAN-HEC 14)

PSYCH 130 INTRODUCTION TO BEHAVIOR MODIFICATION 3 UNITS
Hours: 3 Lecture/Discussion
This semester course is designed for teachers, paraprofessionals, and those pursuing a career in psychology. Student will develop skills in assessing behavior change program. This course will combine both the theoretical and practical models for understanding human behavior. Formerly PSYCH 30.
Recommended Prerequisites: Eligible for English 1 and completion of Psychology 1.

PSYCHOLOGY

PSYCH 133 PERSONAL AND SOCIAL GROWTH 3 UNITS
Hours: 3 Lecture/Lab
A practical survey of psychological principles which contribute to the individual's well being and his/her relationship with others. The main focus is on understanding the behavior and personality traits which most improve or interfere with realizing one's potential. Specific topics may include love, sex, emotions, shyness, values, and effective communication. Formerly PSYCH 33.

PSYCH 250 INTRODUCTION TO BASIC PSYCHOLOGY 3 UNITS
Hours: 3 Lecture/Discussion
This course presents the principles and findings of psychology in a manner most relevant to application by the individual in daily life. Learning, motivation, emotions, and interpersonal relations are among the many topics examined. It is not intended for transfer to a university. Formerly PSYCH 50.

PUBLIC ADMINISTRATION

PUB ADMIN* MANAGING ORGANIZATIONS 1 UNIT
211
Hours: 8 Lecture/Discussion
A general course in the managing of the public sector organizations in the 1990's. Specific content to include: conflict resolution, management styles, organizational stress and organizational behavior as it relates to the everyday management of organizations. This would be an excellent course for managers to gain insight to their strengths and weaknesses and how they manage organizations as a practical matter. Formerly PUB ADMIN 6A.
Recommended Prerequisites: Either previous college classes, business/work experience, consent of the instructor.

R

REAL ESTATE

REAL ES REAL ESTATE PRINCIPLES 3 UNITS
140
Hours: 3 Lecture/Discussion
A general survey of the Real Estate industry in California emphasizing basic real estate principles. Tracing of a typical real property transaction from beginning to completion. Real property ownership and investments explored. This course will be an aid to those planning to take the California State Real Estate Brokers or Salesman Examination but should not be contrived as a prep course in itself. The pros and cons of real estate as a career are discussed and should be a help to someone who is exploring real estate as a vocation. Formerly BUS 40A.

COURSE DESCRIPTIONS

REAL ESTATE

REAL ES REAL ESTATE FINANCE 3 UNITS
141

Hours: 3 Lecture/Discussion

This course covers the ways to finance real estate, provisions regarding real estate financing, and the various taxation aspects of real estate finance. Formerly BUS 41.

Recommended Prerequisites: Real Es 140

REAL ES LEGAL ASPECTS 3 UNITS
142 OF REAL ESTATE

Hours: 3 Lecture/Discussion

This course covers the practical applications of real estate law, utilizing illustrative cases and examples designed to help avoid legal difficulties arising from real estate transactions, instruments, zoning, and planning. This course is aimed at career minded people, both already in the real estate business and those planning to enter it. This course is required for the California Real Estate Brokers examination. Formerly BUS 42A.

Recommended Prerequisite: Real Estate 140

REAL ES REAL ESTATE ECONOMICS 3 UNITS
143

Hours: 3 Lecture/Discussion

Real Estate 143, Real Estate Economics, is a field of study that uses economic principles to help solve Real Estate problems. The student will be exposed to techniques in analyzing national, regional, city and neighborhood trends in an effort to interpret what affect these trends will have on the Real Estate market. This course qualifies towards the AA/AS degree, Real Estate Career Certificate Program, and the California Real Estate Brokers License. Formerly BUS 43.

REAL ES REAL ESTATE APPRAISAL 3 UNITS
145

Hours: 3 Lecture/Discussion

This course is an introductory course in basic residential appraisal techniques emphasizing the cost, market and income approach. The student develops skills in residential appraising. This course is part of the course work necessary for the California Real Estate Broker's Examination. Formerly BUS 45.

Recommended Prerequisite: Real Es 140.

S

SIGN LANGUAGE STUDIES

SIGN BEGINNING AMERICAN 3 UNITS
LANG 101 SIGN LANGUAGE I

Hours: 3 Lecture/Discussion

Students with no prior knowledge of American Sign Language will be able to function comfortably in a variety of situations with deaf people. They will learn of the cultural differences between deaf and hearing people and appropriate behaviors for social interaction. This course covers the first half of level one of the **Signing Naturally** curriculum which emphasizes the functions of everyday communication and uses only the target language in class.

Prerequisite: Recommend at least English 251 level eligibility.

SIGN BEGINNING 3 UNITS
LANG 102 AMERICAN SIGN LANGUAGE II

Hours: 3 Lecture/Discussion

A continuation of SLS 101: The skills introduced in SLS 101 will be expanded. Students will be able to express considerably more complicated needs and will become more adept at functioning in the Deaf community. Formerly SIGN LANG 2.

Prerequisite: SLS 101

SIGN INTERMEDIATE 3 UNITS
LANG 103 AMERICAN SIGN LANGUAGE

Hours: 3 Lecture/Discussion
1 Activity

A continuation of SLS 102: The skills introduced in SLS 101 and 102 will be expanded to the point where students can function comfortably in a wide variety of situation in the Deaf community. Students will be able to express more complicated needs and be more aware of the Deaf culture. Formerly SIGN LANG 3.

Prerequisites: Completion Sign Lang 101 and 102.

SOCIOLOGY

SOC 1 INTRODUCTION 3 UNITS
TO SOCIOLOGY

Hours: 3 Lecture/Discussion

Sociology 1 is an introductory course covering basic principles and concepts, including culture, personality, social inequality, institutions, population and ecology, and social change. Formerly SOC 1A. (CAN-SOC 2).

Prerequisite: English 1 eligibility.

COURSE DESCRIPTIONS

SOCIOLOGY

SOC 2 THE SOCIOLOGY OF SOCIAL PROBLEMS 3 UNITS

Hours: 3 Lecture/Discussion

This course covers a broad array of topics that analyze and explain the dynamics of many different social problems. The student will examine the American system of government, the quality of education, the modern family, the rich and the poor, patterns of ethnic relations, health and illness, gender inequality, sexual behavior, drugs and drug addiction, causes and distribution of crime, personal violence, urbanization, population dynamics, the environmental crisis, and the causes and consequences of warfare. Formerly SOC 1B. (CAN-SOC 4)

Recommended Prerequisite: English 1

SOC 126 MARRIAGE AND FAMILY LIFE 3 UNITS

Hours: 3 Lecture/Discussion

CROSS REF: CFS 126

An introductory course to marriage and family life. This course will emphasize the following topics: dating, marriage, changing roles, communication skills, family planning, human sexuality, parenting, divorce and remarriage. Formerly SOC 26. (CAN-HEC 12)

SOCIAL SCIENCE

SOC SCI AMERICA 276 3 UNITS

Hours: 3 Lecture/Discussion

A course in which films and discussions emphasize the inter-relationship in the students' life of social, cultural, political, and economic forces in an evolutionary setting. Designed to fulfill the Social Science AA/AS degree requirement for students in the two year program. This course covers the time period from 1000 A.D. until the present. Formerly SOC SCI 76.

SPANISH

SPANISH 1 ELEMENTARY SPANISH 1 4 UNITS

Hours: 4 Lecture/Discussion

Spanish 1 is an introductory course in understanding, speaking, reading and writing Spanish. This course is designed for students who are transferring to four-year universities with foreign language requirements. It is also useful for students interested in bilingual education or any field which involves Spanish.

SPANISH 2 ELEMENTARY SPANISH 2 4 UNITS

Hours: 4 Lecture/Discussion

Spanish 2 is the second course in a four-course series. It teaches students to communicate at a basic level in Spanish. Students build on the skills they have learned in Spanish 1 while continuing to study the culture and language of the Hispanic world.

Prerequisites: A grade of C or better in Spanish 1 or successful completion of the first year of high school Spanish.

SPANISH

SPANISH 3 INTERMEDIATE SPANISH 3 4 UNITS

Hours: 4 Lecture/Discussion

Spanish 3 is an intermediate course in a four-course series. It teaches students to communicate at a sophisticated level, both orally and in writing. It builds on concepts learned in Spanish 1 and 2. It also improves student's reading ability and provides dialogue on cultural topics.

Recommended Prerequisites: A grade of "C" or better in Spanish 2 or successful completion of two years of high school Spanish.

SPANISH 4 INTERMEDIATE SPANISH 4 4 UNITS

Hours: 4 Lecture/Discussion

Spanish 4 is the most advanced course in this four-course series. It teaches students to communicate fluently in Spanish. Fluency is achieved through review of Spanish 1, 2 and 3 and the added study of advanced grammar (including accents and punctuation). Conversation is an important component of this class and centers around current events in Hispanic countries.

Prerequisite: A grade of C or better in Spanish 3 or successful completion of three years of high school Spanish.

SPANISH 12 HISPANIC LITERATURE 3 UNITS

Hours: 3 Lecture/Discussion

An interpretive analysis of Hispanic literature since the turn of the 20th Century. Through directed readings, discussions and writing, the students critique and analyze so as to interpret the prominent themes among Hispanic writers. This course analyzes the relationships between the genres which reflect the expression of Hispanic culture.

Recommended Prerequisites: A grade of "C" or better in Spanish 4, or permission from the department.

SPANISH 22 SPANISH 2 FOR BILINGUAL STUDENTS 4 UNITS

Hours: 4 Lecture/Discussion

This course is designed to improve the written and oral communication skills of Spanish-speaking students. It is equivalent to Spanish 2, although more emphasis is placed on reading and writing for the native speaker.

Prerequisite: Student would have a bilingual background as well as meet the prerequisites for Spanish 2.

SPANISH 23 SPANISH 3 FOR BILINGUAL STUDENTS 4 UNITS

Hours: 4 Lecture/Discussion

A continuation of Spanish 22. This course is for native speakers who wish to improve their written and oral communication skills. It is equivalent to Spanish 3.

Prerequisite: Completion of Spanish 22 with a grade of "C" or better or permission of the Spanish Department.

COURSE DESCRIPTIONS

SPANISH

SPANISH CONVERSATIONAL SPANISH I 3 UNITS
350

Hours: 3 Lecture/Discussion

This is the first conversational Spanish course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Very basic grammar points will be touched upon. Formerly SPANISH 50.

SPANISH CONVERSATIONAL SPANISH II 3 UNITS
351

Hours: 3 Lecture/Discussion

This is the second conversational Spanish course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Very basic grammar points will be touched upon. Formerly SPANISH 51.

SPANISH CONVERSATIONAL SPANISH III 3 UNITS
352

Hours: 3 Lecture/Discussion

This is the third conversational Spanish course in a series of three for the student interested in speaking the language at a rudimentary level with an emphasis on survival and consumer skills. Very basic grammar points will be touched upon. Formerly SPANISH 52.

Prerequisites: Conversational Level II recommended, or permission of department.

SPANISH CONVERSATIONAL SPANISH IV 3 UNITS
353

Hours: 3 Lecture/Discussion

This is the fourth conversational Spanish course in a series of four for the student interested in speaking the language at a fluent level with an emphasis on survival and consumer skills. Basic grammar points will be introduced as necessary for clear communication. Formerly SPANISH 53.

Prerequisites: Conversational Level III or permission of department recommended.

SPANISH COURT INTERPRETING 3 UNITS
360a-b

Hours: 3 Lecture/Discussion
1 Activity

Spanish language equivalents to American legal terminology is presented in an overview of procedures, common misdemeanors and common felonies. Familiarization with the Rules of Court and the role of the interpreter is covered as well as the implementation of the various techniques of interpreting within role playing. Formerly SPANISH 61a-b.

SPECIAL TOPICS

SPEC SPECIAL TOPICS 1-4 UNITS
TOPICS 199

Hours: Variable

Special topics are specialized studies or projects that are especially designed by instructors and students to enrich the learning experience in a discipline. Credits may be earned in 199 transfer level.

SPEC SPECIAL TOPICS 1-4 UNITS
TOPICS 299

Hours: Variable

Special topics are specialized studies or projects that are especially designed by instructors and students to enrich the learning experience in a discipline. Credit in Special Topics 299 is non-transferable.

SPEECH

SPEECH 1 FUNDAMENTALS OF PUBLIC SPEAKING 3 UNITS

Hours: 3 Lecture/Discussion

Speech 1 is an introductory course in Public Speaking. This course covers a variety of formal Public Address styles and formats. This course offers students an opportunity to learn and practice specific skills needed for effective public speaking. (CAN-SPCH 4)

Recommended Prerequisite: Eligibility for English 1.

SPEECH 3 ORAL INTERPRETATION 3 UNITS

Hours: 3 Lecture/Discussion

Speech 3 is designed to introduce students to the techniques of understanding and interpreting prose, poetry and dramatic selections, as well as criticism and appreciation of oral literature.

Recommended Prerequisite: Eligibility for English 1.

SPEECH 4 INTERPERSONAL COMMUNICATIONS 3 UNITS

Hours: 3 Lecture/Discussion

Introduction to the basic concepts of Interpersonal Communication by providing students with insights into their own effectiveness as a communicator and deal with the application of effective interpersonal communication behavior in personal and professional life. Specific skills in active listening, Conflict resolution perceptions, non-verbal communication and self concept will be addressed.

Recommended Prerequisite: Eligibility for English 1.

COURSE DESCRIPTIONS

SPEECH

SPEECH 301 BASIC FUNDAMENTALS OF COMMUNICATION 3 UNITS
Hours: 3 Lecture/Discussion

This is one of a series of courses designed to help students develop competence and confidence necessary for successful college study in both academic and vocational courses. This course involves the study and practice of everyday life. It provides communication skills in the specific areas of public speaking, group discussion, oral interpretation, and interpersonal relationships. This course will help students prepare for all collegiate disciplines. This course is an elective course in the SUCCESS program. Formerly SPEECH 50.

Prerequisite: Must be enrolled in SUCCESS program.

SUPERVISED PRACTICE

190a-d SUPERVISED PRACTICE 1-3 UNITS
Hours: 3-9 Lab

Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling and other employment or volunteer situations where the student is expected to take a leadership role.

Prerequisite: Permission of the department.

T

THEATER ARTS

THTR ART 1 INTRODUCTION TO THE THEATRE 3 UNITS
Hours: 3 Lecture/Discussion

This course is intended as a critical analysis of theatre from an audience perspective. Elements of play production from the dramatic structure, style and historical perspective of the script to the final presentation before an audience will be explored. Attendance at College Theatre Arts productions is required. Scheduled field trips to other Theatre productions. Formerly THTR ART 35.

THTR ART 2 FUNDAMENTALS OF ACTING I 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab

Intensive application of acting techniques through study and performance and the learning of basic exercises for the actor; study and development of characters in performance from the contemporary theatre and recent internationally representative plays and musicals. Formerly THTR ART 10A.

THEATER ARTS

THTR ART 3 FUNDAMENTALS OF ACTING II 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab

This course is designed to exercise the separate parts of the composite art of acting which includes thought, emotion, and specific movement and vocal techniques. Emphasis is placed on the appraisal and analysis of stage techniques, acting theories, and practices in performance from experimental dramas and the theater of the absurd. The ultimate goal is to develop a firm foundation in basic acting techniques. Formerly THTR ART 10B.

THTR ART 4 INTERMEDIATE ACTING I 3 UNITS
Hours: 4 Lecture/Discussion

This course is designed as an advanced level of study of acting proficiency and technique begun in Theater Arts 2 and 3. Class lecture, discussion, and scene work focus on text and character analysis, clarity of characterization, vocal and physical expressiveness and emotional release. Acting scene material is taken from the plays of the classical Greek Theater, William Shakespeare and the Restoration comedies of the 18th Century. Formerly THTR ART 10C.

Recommended Prerequisites: Theater Arts 2 and 3 or permission of department.

THTR ART 5 INTERMEDIATE ACTING I 3 UNITS
Hours: 4 Lecture/Discussion

Continuation of Theatre Arts 4 in which play texts are studied and presented with concentration on in-depth analysis of subject material, intensity of action, freedom of emotional release, and clarity of expression. Acting scenes are chosen from European and American play of the late nineteenth century through the social dramas of the 1930's. Formerly THTR ART 10D.

Recommended Prerequisites: Theatre Arts 2 and 3 or permission of department.

THTR ART 11a-d REHEARSAL AND PERFORMANCE 3 UNITS
Hours: 15 Activity
(6 week course)

Rehearsal and performance in COS Summer Repertory Theater. This course provides study and exploration in all aspects of play production involving the actor and technician in order to develop acting capabilities and technical skills and disciplines. Productions will be presented for public performance. Enrollment is for the duration of the audition, preparation, and presentation phases of production.

COURSE DESCRIPTIONS

THEATER ARTS

THTR BEGINNING 3 UNITS

ART 13a-b STAGECRAFT
Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$5.00

A survey is made through lecture, demonstration and laboratory experience of all technical phases of scene production including construction, painting, rigging, placement, and manipulation of stage scenery and properties. Additional hours required for crew work on college production. Formerly THTR ART 14a-b.

THTR INTERMEDIATE 3 UNITS

ART 14a-b STAGECRAFT
Hours: 2 Lecture/Discussion
2 Lab

Materials Fee: \$5.00

Course is designed as an intermediate class for the student who has completed Theatre Arts 13a-b. The student will continue the study of Stagecraft by being assigned the added responsibilities of construction crew and production staff leadership. Individual design, construction, and organizational problems as well as scene shop and theatre maintenance techniques will be assigned. Additional hours required for crew work on college productions. Formerly THTR ART 14c-d.

THTR BEGINNING 3 UNITS

ART 15a-b STAGE LIGHTING
Hours: 2 Lecture/Discussion
2 Lab

This course introduces the student to the basic concepts of theatre lighting. Study includes the operation of stage lighting, the planning and rigging. Additional hours are required for crew work on college productions.

THTR INTERMEDIATE 3 UNITS

ART 16a-b STAGE LIGHTING
Hours: 2 Lecture/Discussion
2 Lab

The student will continue the study of Stage Lighting by being assigned the added responsibilities of lighting crew and production staff leadership. Individual design rigging and organizational problems, as well as lighting instrument and control system maintenance and operation techniques, will be assigned. Additional hours required. Formerly THTR ART 15c-d.
Prerequisites: Theatre Art 15a-b.

THEATER ARTS

THTR ADVANCED 3 UNITS

ART 18a-b THEATRE CRAFTS
Hours: 2 Lecture/Discussion
2 Lab

This course studies the function and application of design principles in the theatre crafts: Stagecraft, stage lighting, costuming and makeup. Additional lab hours are required: work in leadership roles as production crew leaders on college Theatre Arts and Dance productions. Formerly THTR ART 16a-b.

Recommended Prerequisites: Theatre Art 13a-b, 15a-b, 112a-b and 117a-b.

THTR THEATRE 2 UNITS

ART 19a-d WORKSHOP
Hours: 120 hour course

This course provides study and laboratory exploration in all aspects of play production involving the theatre technician in order to develop technical capabilities, skills and disciplines for the COS Summer Repertory Theatre. The audition, preparation and presentational phases of the process will be explored under the supervision and guidance of a faculty director. Productions will be presented for public performance. Enrollment is for the duration of the audition, preparation, and presentation phases of production. Formerly THTR ART 55a-d.

THTR MUSICAL THEATRE 2 UNITS

ART 20a-d PERFORMANCE
Hours: 120 hour course

CROSS REF: Music 97a-d, Dance 41a-d

Experience in drama and theatre through active participation in major musical and dramatic productions. Including training and experience in all facets of the theatre. Formerly THTR ART 41a-d.

THTR COSTUMING 3 UNITS

ART 112 a-b
Hours: 2 Lecture/Discussion
4 Lab

CROSS REF: Fashion 112a-b

Materials Fee: \$5.00

A study of the principles and practice of costume construction from pattern to completed garments. Construction techniques, fabrics, basic patterns, wardrobe plotting, and historical styles. Additional hours required to work on crews for college productions.

COURSE DESCRIPTIONS

THEATER ARTS

THTR MAKEUP 3 UNITS

ART 117a-b

**Hours: 2 Lecture/Discussion
4 Lab**

CROSS REF: Fash 117a-b

Materials Fee: \$10.00

This course is designed to introduce the student to the basic techniques and materials of theatrical makeup: theatrical, TV, photos, special occasions, business and evening. Topics include facial shape, hair arrangement, skin care and makeup for various races and skin types. Additional hours required to work on crews for college Theatre Arts and Dance productions. Formerly THTR ART 17a-b.

THTR MODELING 3 UNITS

ART 170

Hours: 3 Lecture/Discussion

CROSS REF: Fashion 170

An introduction to the modelling industry and the roles of models and agencies. Instruction will include experience in basic fashion and photographic techniques; portfolio preparation; stage and photographic makeup; runway techniques; posture, gesture and movement and participation in a fashion production. Students will also analyze and evaluate personal diet, nutrition and exercise, skin care and makeup.

W

WELDING

WELDING OXY-ACETYLENE WELDING 4 UNITS

161

**Hours: 3 Lecture/Discussion
3 Lab**

Introduction in oxy-acetylene welding, braze welding, brazing, soldering, flame spraying, and flame cutting of common ferrous and non-ferrous sheet, plate, and pipe. The safe use of apparatus and personal safety in the welding environment is taught. Properties of ferrous materials and destructive testing of welding materials complete the program. Formerly WELDING 6A.

WELDING SHIELDED 4 UNITS

162

**Hours: 3 Lecture/Discussion
3 Lab**

Instruction in machine flame cutting, shielded metal arc welding using E6010, E6011, E6013, E7014, and E7024 electrodes, air carbon arc cutting, weld testing, properties and identification of ferrous metals. It is recommended that you have prior course work or knowledge of the safe operation of the oxy-fuel gas cutting and welding apparatus. Formerly WELDING 6B.
Prerequisites: Welding 161.

WELDING

WELDING ADVANCED WELDING 4 UNITS

171

**Hours: 3 Lecture/Discussion
3 Lab**

Instruction in flame cutting (alternative fuel gases), shielded metal arc welding (low hydrogen electrodes), gas tungsten arc welding, gas metal arc welding (short circuit and spray transfer), plasma cutting, destructive testing of ferrous metals. It is recommended that you have prior coursework or knowledge of the safe operation of the oxy-fuel gas cutting and welding apparatus. Formerly WELDING 7A.

Prerequisites: Welding 161 and 162.

WELDING ADVANCED WELDING 4 UNITS

172

**Hours: 3 Lecture/Discussion
3 Lab**

Instruction in advanced gas tungsten arc welding, flux cord arc welding (gas shielded and self-shielded wires), modern shielding gas technology, non-ferrous filler metals, submerged arc welding, resistance spot welding, introduction to ferrous metallurgy and destructive testing of welded materials. It is recommended that you have prior coursework or knowledge of the safe operation of the oxy-fuel gas cutting and welding apparatus. Formerly WELDING 7B.

Prerequisites: Welding 171.

WELDING BLUEPRINT READING 3 UNITS

181

AND FERROUS METALLURGY

Hours: 3 Lecture/Discussion

The fundamentals of blueprint reading relating to welded components and assemblies utilizing the American Welding Society weld symbol designations. Shop drawings and free hand sketches are interpreted. Ferrous metal properties, characteristics and identification groups are determined through destructive and non-destructive testing methods. Formerly WELDING 17.

WELDING WELDING TOPICS 1-3 UNITS

364a-d

**Hours: 8 Lecture/ Discussion
16 Lab**

A year round open entry and open exit course in a specific metals and plastics joining process. Within the lecture, various fusion processes will be demonstrated using laboratory training to develop a proficient skill level.

Recommended Prerequisites: Basic welding skills test to be given by the department in accordance with the subject topics covered. Qualify the student in safety procedures both personal and shop rules.

COURSE DESCRIPTIONS

WORK EXPERIENCE

WRK EXP 191 GENERAL WORK EXPERIENCE 1-3 UNITS

Hours: 5-15 Lab

Student employed on a job that is not directly related to their college major can earn up to three units each semester for two semesters, or a maximum of six units. The student must have the approval of the Coordinator of Cooperative Education or his designee and the employer must agree to evaluate the student's performance. Formerly WRK EXP 122a.

Prerequisite: Must take Leadership Training 1 concurrently.

WRK EXP 192 GENERAL WORK EXPERIENCE 1-3 UNITS

Hours: 5-15 Lab

Students employed on a job that is not directly related to their college major may earn up to three units each semester for two semesters, or a maximum of six units. The student must have the approval of the Coordinator of Cooperative Education or his designee and the employer must provide expanded learning opportunities which add to the student's job skills/knowledge. Formerly WORK EXP 122b.

Recommended Prerequisite: Must take Leadership Training 2 concurrently.

WRK EXP 193 OCCUPATIONAL COOPERATIVE EDUCATION/INTERNSHIP 1-4 UNITS

Hours: 5-20 Lab

This course is conducted to give the student occupational learning opportunities and career awareness. This is accomplished through employment (paid or volunteer) providing learning related to the student's educational or occupational goal. Student must contact the Office of Cooperative Education to register. Formerly WORK EXP 121A.

Recommended Prerequisites: Must take Leadership Training 1 concurrently or perform a designated coordinating activity.

WRK EXP 194 OCCUPATIONAL EDUCATION/INTERNSHIP 1-4 UNITS

**Hours: 1 Lecture/Discussion
5-20 Lab per week**

This second semester class, like Work Exp 193, allows students employed on a job directly related to their college major or career goal to earn up to four units. The student must contact the Office of Cooperative Education and the employer must agree to provide new/expanded learning opportunities. Formerly WORK EXP 121B.

Prerequisite: Must take Leadership Training 2 concurrently or perform a designated coordinating activity.

WORK EXPERIENCE

WRK EXP 195 OCCUPATIONAL COOPERATIVE EDUCATION/INTERNSHIP 1-4 UNITS

Hours: 5-20 Lab

This third semester offering is designed for student who have opportunities to gain expanded learning beyond that experienced in Occupational Cooperative Education 193 and 194. The learning opportunities must be directly related to their college major or career goal. Students must receive permission of the Office of Cooperative Education.

Recommended Prerequisites: Must complete Occupational Cooperative Education 193 and 194.

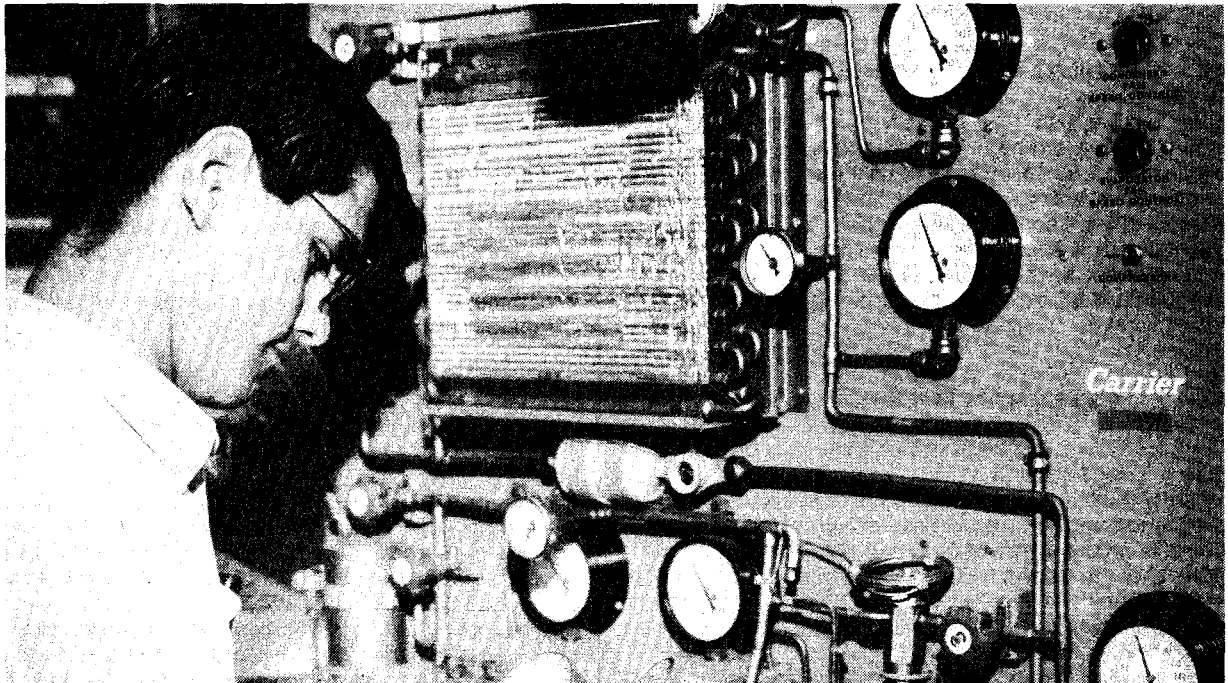
WRK EXP 196 OCCUPATIONAL COOPERATIVE EDUCATION/INTERNSHIP 1-4 UNITS

Hours: 5-20 Hours

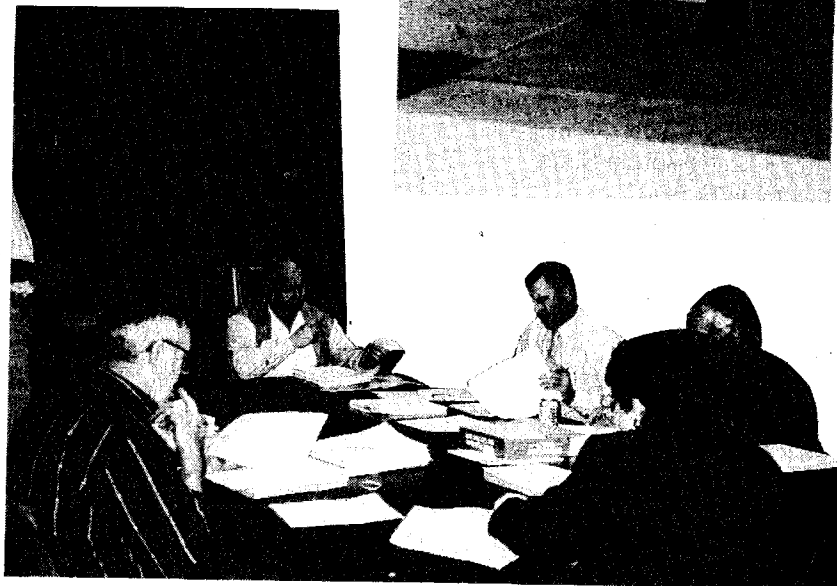
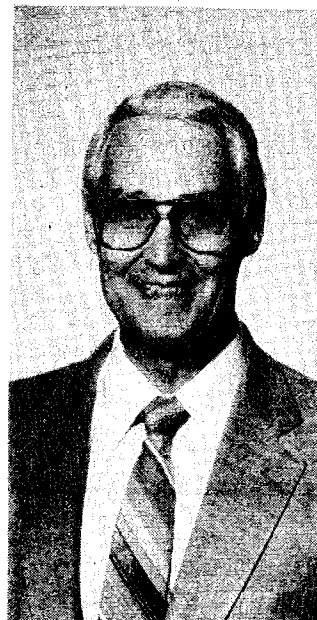
The fourth semester of Occupational Cooperative Work Experience Education is limited to those who are able to establish new/expanded Measurable Learning Objectives beyond those experienced in Occupational Cooperative Work Experience Education 193, 194, and 195 on a job related to their major or career goal. Students enrolling in this class must have the permission of the Coordinator of Cooperative Education or his designee. Formerly WORK EXP 121D.

Recommended Prerequisite: Must complete Occupational Cooperative Education 193, 194, and 195.

COURSE DESCRIPTIONS



Faculty



Faculty

Division Chairpersons

Bill M. Downes
Division of Agriculture

Marcy Hall
Division of Consumer/Family Studies

Jenny Root
Division of Business

Marlene Taber
Division of Fine Arts

Ken Broyles
Division of Industry and Technology

Candace Matzke
Division of Language Arts and
Communications

Norma Freeborn
Division of Nursing and Health Science

Tracy Myers
Division of Physical Education,
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Division of Science Mathematics, and
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Waino Peterson
Division of Social Sciences

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1977

HALL, ROBERT
English, 1963-1991

HALL, LINCOLN H.
Superintendent/President,
Vice President, Instruction,
1957-1981 and 1984-1991

HAMILTON, DICK
English/Journalism, 1963-1990

HOLT, BERT
Physical Education, 1965-1988

HOWARD, KENYON
Physical Science, 1972-1984

JACOBSON, RICHARD
Vice-President, Business, 1957-
1984

JENSEN, BRUCE
Agriculture, 1949-1984

KLEINFELTER, DALE
Chemistry, 1963-1990

MC CORMICK, ANNE
Home Economics, 1966-1984

MARCELLUS, BOB
Fine Arts, 1967-1990

MARTIN, NOEL
History, 1959-1984

MORSE, GEORGE
English, 1965-1984

OTTO, JOHN
Counselor, 1953-1983

PAPPAS, GEORGE
Speech/Drama, 1955-1984

PIETROFORTE, AL
Speech/Art, 1957-1984

ROBINS, FRED
Mathematics, 1953-1984

ROUTEN, WILLIAM
Agriculture, 1953-1984

SCOFIELD, JIM
Geography/Meteorology, 1967-
1988

SHEWEY, JEAN
Physical Education, 19599-1984

SINDLINGER, AL
Metals Technology, 1961-1990

SWEENEY, ALBERT
English, 1963-1984
SWISHER, JAMES
Mathematics, 1959-1984

TAYLOR, ROY
Physical Education, 1950-1984

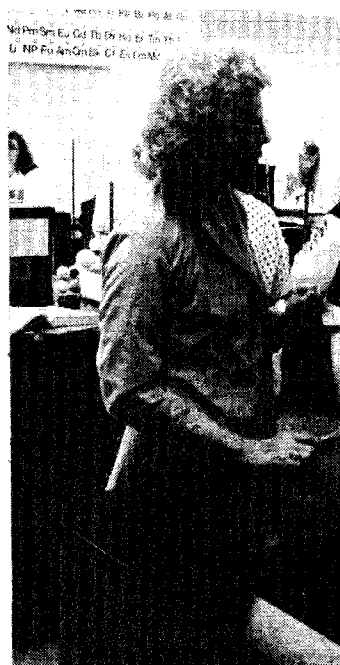
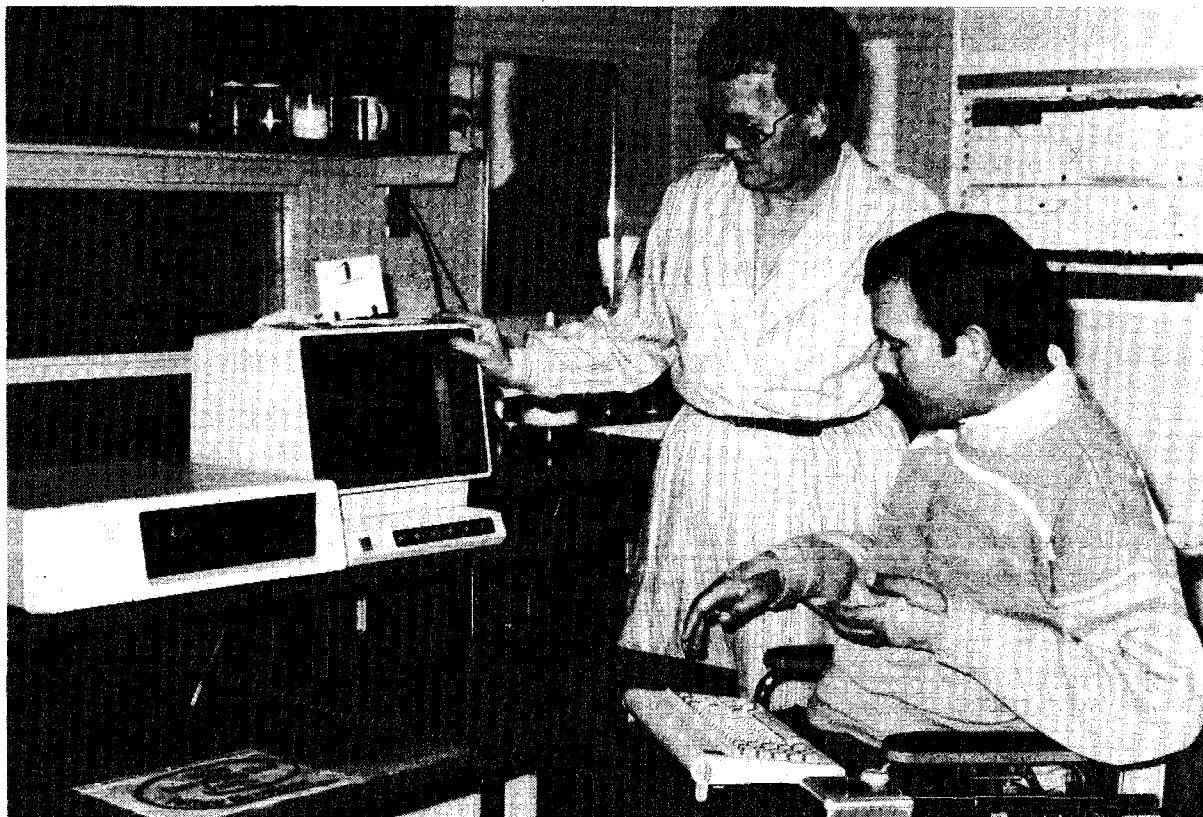
THEIGE, JACK
Information Services, 1960-1989

TOMASEVICH, ROBERT
Agriculture, 1971-1984

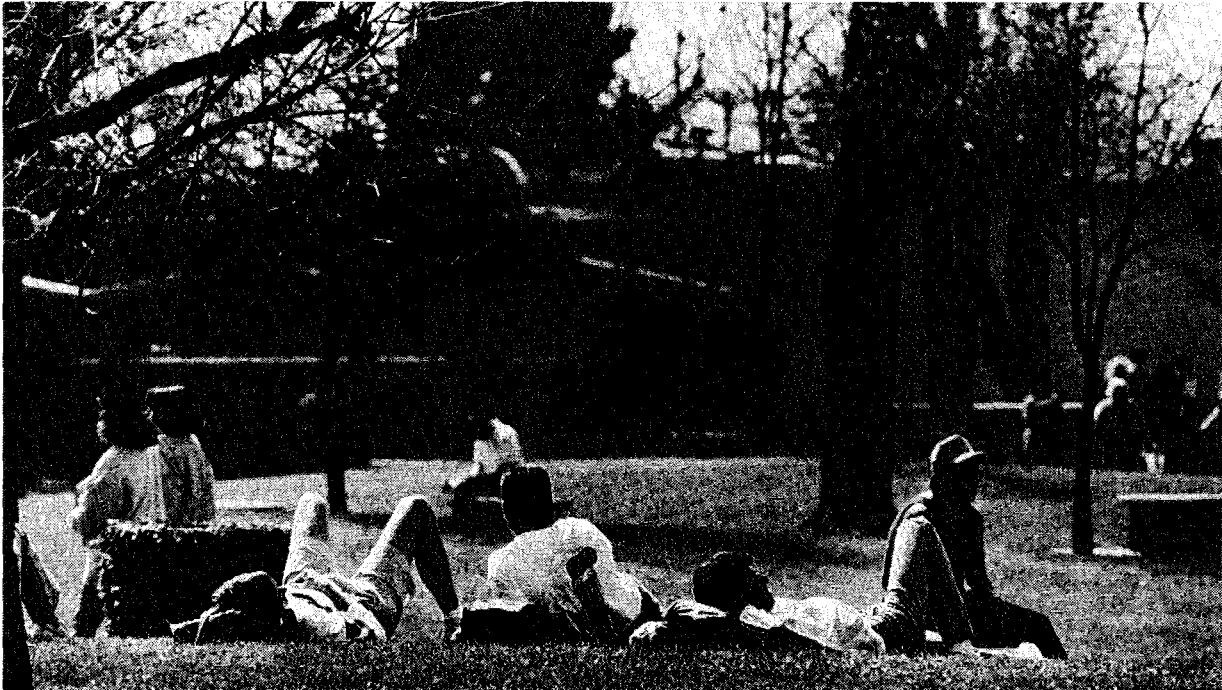
WALKER, LEWIS
Librarian, 1965-1984

WEAVER, ARLENE
Nursing, 1979-1988

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