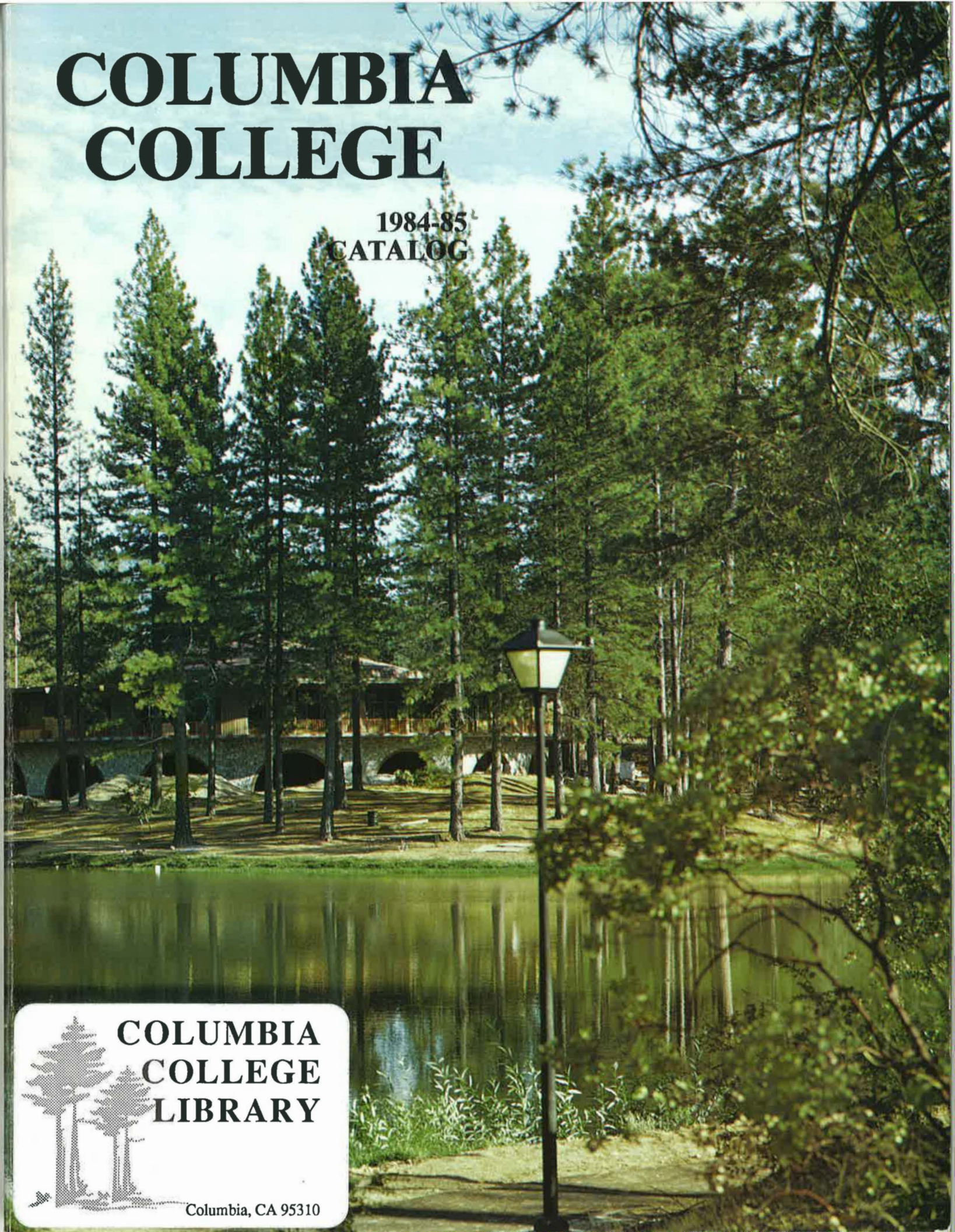
COLUMBIA COLLEGE

1984-85
CATALOG



COLUMBIA COLLEGE

P.O. Box 1849
Columbia, California
95310
(209) 533-5100

1984-85

YOSEMITE COMMUNITY
COLLEGE DISTRICT

PRICE $2.00

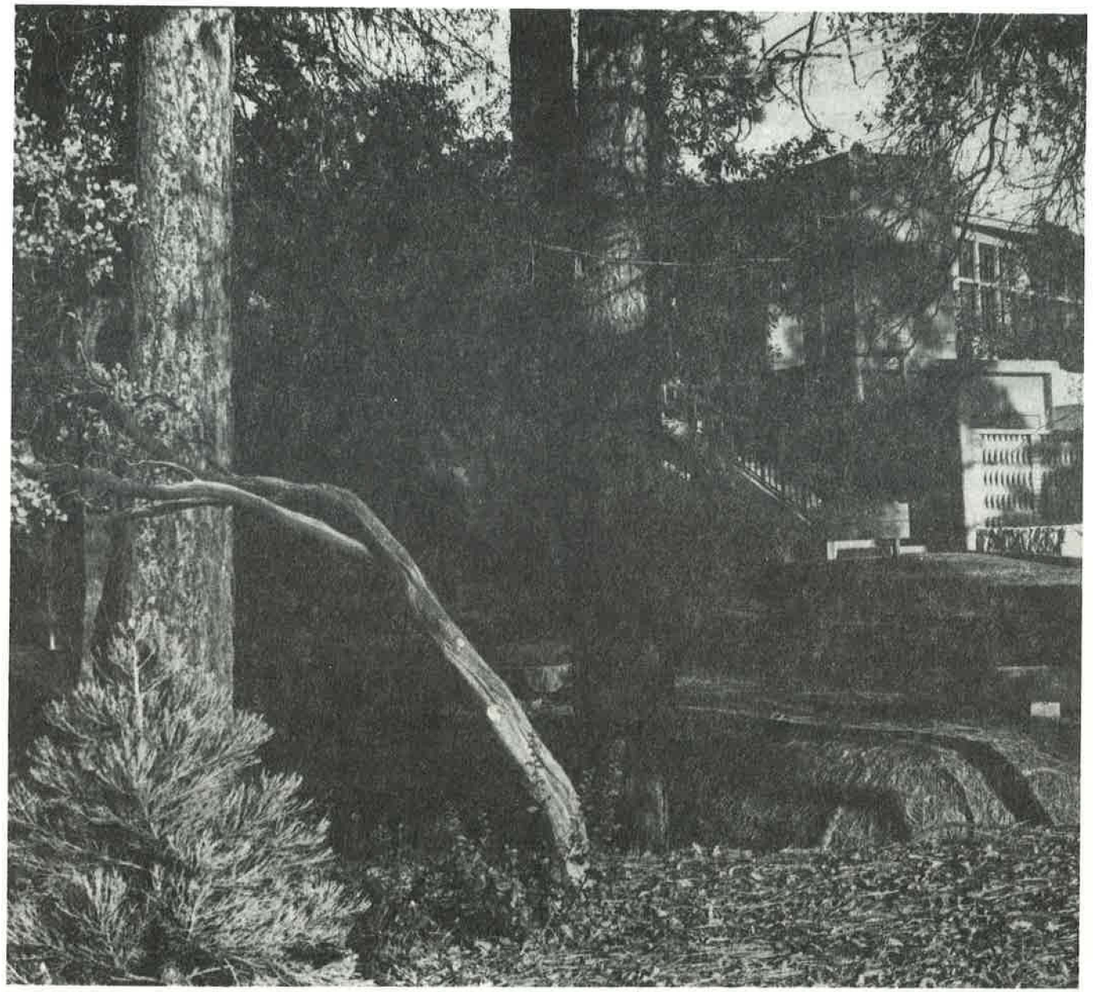


PHOTO BY CAROLYN POPKE

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FALL SEMESTER, 1984

May 30	Beginning advisement and registration for continuing students for Fall Semester
July 2	Applications for admission and transcripts for day students should be on file
August 1	Beginning advisement and registration for Fall Semester for former students
August 3	Beginning advisement and registration for Fall Semester for new students
August 20	Instruction begins
August 31	Last day to enter a class
September 3	Labor Day Holiday
September 28	Last day to elect for CR/NC or letter grade
October 5	Deadline for filing for graduation or certificate for Fall Semester
November 12	Veterans Day Holiday
November 21	Last day to withdraw from course without penalty
November 22-23	Thanksgiving Holiday
December 18-21	Final examinations
December 22	Fall Semester ends
Dec. 24-Jan. 8	Winter Recess

SPRING SEMESTER, 1985

November 26	Application for admission and transcripts for day students should be on file
November 26	Beginning advisement and registration for Spring Semester for continuing students
November 29	Beginning advisement and registration for Spring Semester for former students
December 3	Beginning advisement and registration for Spring Semester for new students
January 9	Instruction begins
January 22	Last day to enter a class
February 11	Lincoln Day holiday
February 15	Last day to elect for CR/NC or letter grade
February 18	Washington Day holiday
March 22	Deadline for filing for graduation or certificate for Spring Semester
March 29-April 7	Spring Recess
April 24	Last day to withdraw from course without penalty
May 20-23	Final examinations
May 23	Spring Semester ends
May 24	Graduation

SUMMER INTERSESSION, 1985

June 3	Instruction begins
July 4 & 5	Independence Day Holiday
July 11	Six Week Summer Intersession Ends

Additional information pertaining to advisement, registration, final examinations, as well as other dates will be listed in the Schedule of Classes.

1984

JULY

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

AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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1985

JANUARY

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MARCH

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MAY

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JUNE

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30						

BOARD OF TRUSTEES
YOSEMITE COMMUNITY COLLEGE DISTRICT

* Allister A. Allen
Area 2, Patterson

* Glenda Alpers
Area 3, Riverbank

*† Grant E. Bare, M.D.
Area 3, Modesto

*Robert Cardoza
Area 3, Modesto

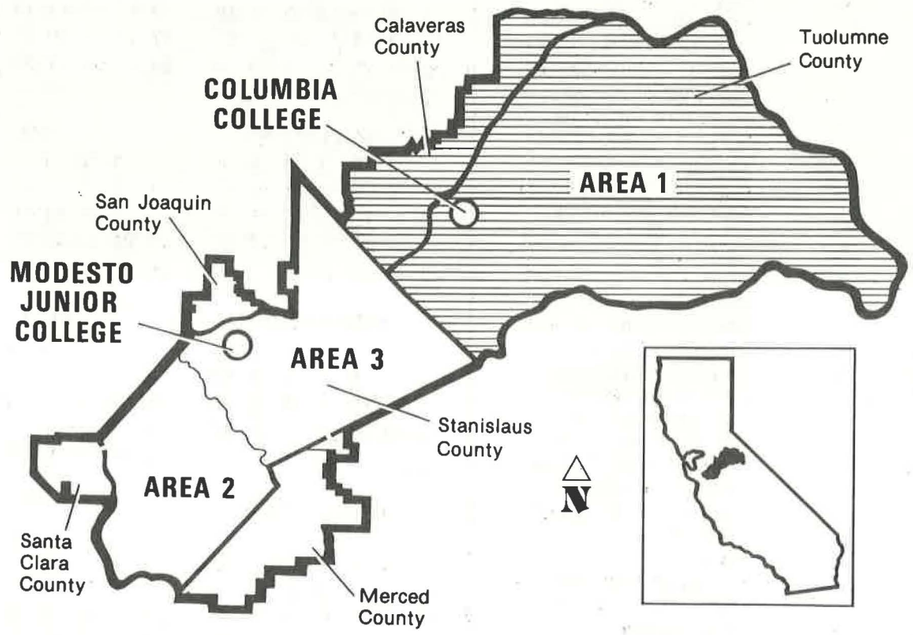
*† Ian Hardie
Area 3, Modesto

* Carmen Jackson
Area 3, Turlock

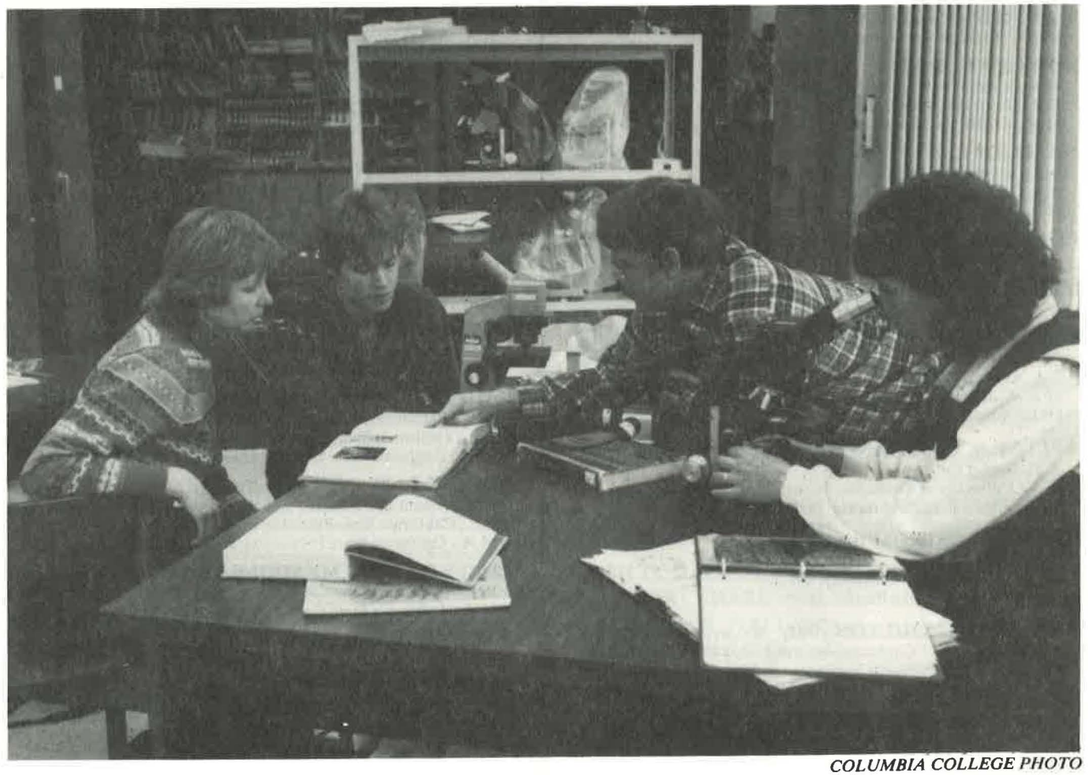
* Nancy Rosasco
Area 1, Sonora

Dr. Tom Van Groningen
Superintendent,
Secretary to
Board of Trustees

*** Past President**
† Charter Board Member



COLLEGE STAFF



COLUMBIA COLLEGE PHOTO

CERTIFICATED STAFF

(Date of District appointment follows name.)

JOEL C. BARBER (1967) — **Art, Art History (Sabbatical Spring, 1985)**
B.A., Willamette University
M.A., University of Oregon

PAUL K. BECKER (1971) — *Dean of Student Services*
A.B., Western State College of Colorado
M.A., Stanford University

JOSHUA E. BIGELOW (1981) — **Physical Education**
A.A., Columbia College
A.B., University of California, Berkeley
M.A., University of California, Berkeley

ELSIE M. BRUNO (1980) — *Counselor*
B.S., University of California, Los Angeles
M.S., California State University, Los Angeles

DALE L. BUNSE (1975) — **Art**
B.A., Willamette University
M.F.A., Arizona State University

ROSS A. CARKEET, JR. (1968) — **Natural Resources**
A.A., Modesto Junior College
B.S., University of California, Berkeley
M.S., California State University, Humboldt

DEAN C. COLLI (1975) — *Assistant Dean of Instruction, Voc. Ed.*
B.S., California State University, Fresno
M.A., University of California, Santa Barbara
Ed.D., University of the Pacific

W. DEAN CUNNINGHAM (1979) — *President*
B.A., Doane College
M.A., Illinois Wesleyan University
Ed.D., Arizona State University

EDWARD C. DOELL, JR. (1973) — **English, Photography**
A.A., Foothill Junior College
B.A., California State University, San Francisco
M.A., California State University, San Francisco

RICHARD L. DYER (1966) — **History, Political Science**
A.A., Mount San Antonio College
B.A., LaVerne College
M.A., California State University, Los Angeles

RONALD L. ERICKSON (1981) — *Coordinator of Hospitality Management*

McKINLEY FROST (1970) — **Welding Technology**
A.A., Columbia College

ROBERT H. GIBSON (1970) — **Physical Education**
A.A., Graceland College
B.A., Central College
M.A., California State University, San Jose
Ed.D., University of Central Arizona

ARLENE S. GIORDANO (1976) — **Psychology**
A.B., Hunter College
M.A., University of California, Berkeley
Ph.D., University of California, Berkeley

JON M. HAGSTROM (1962) — **English**
A.A., Shasta College
B.A., California State University, Chico
M.A., University of the Pacific

ROBERT H. HAMILTON (1968) — **History, Political Science, Humanities, Philosophy**
A.B., University of California, Berkeley
Th.M., Dallas Theological Seminary
M.A., University of California, Berkeley

PATRICIA HARRELSON (1982) — *Learning Disabilities Specialist*
B.S., California State College, Stanislaus

ROD D. HARRIS (1979) — **Music**
A.A., Fort Steilacoom Community College
B.A.E., Pacific Lutheran University
M.M., Pacific Lutheran University

TERRY J. HARRISON (1974) — **Physical Education**
B.A., University of California, Berkeley
M.A., Mills College

JAMES R. HASTINGS (1973) — **Anthropology, Psychology**
A.A., American River College
B.A., California State University, Sacramento
M.A., California State University, Sacramento

FRANCES V. HEGWEIN (1974) — **Health Occupations**
R.N., South Shore Hospital

JOHN L. HOLLOWAY (1981) — **Business**
A.A., Orange Coast Junior College
B.A., California State University, San Francisco
M.B.A., California State University, San Francisco

TOM G. HOLST (1974) — **Earth Science, Computer Science**
A.B., Augustana College
M.N.S., University of South Dakota
Ed.D., University of Northern Colorado

FLOYD L. HOPPER (1976) — *Counselor*
B.A., University of Nevada
M.A., California State University, Long Beach

NANCY T. HORNBERGER (1974) — **Sociology**
B.A., University of Rochester
M.A., University of the Pacific

GLORIA L. JACOBSON (1979) — **Health Occupations**
B.S., Loma Linda University

DONALD A. JONES (1968) — **Biological Science**
A.A., San Francisco City College
A.B., California State University, San Francisco
M.A., California State University, San Francisco

JAMES R. KINDLE (1974) — *Coordinator of Learning Skills*
B.S., Wisconsin State College
M.A., Rockford College
M.A., Colorado Springs College

DOUGLAS E. KOTAREK (1974) — **Business, Economics**
B.S., Northern Illinois University
M.B.A., Northern Illinois University

WALTER L. LEINEKE (1968) — *Assistant Dean of Instruction, Gen. Ed.*
B.A., California State University, Sacramento
M.A., California State University, San Francisco

RAYMOND D. LIEDLICH (1981) — *Dean of Instruction*
B.S., Bowling Green State University
M.A., California State University, Los Angeles

PAUL W. LOCKMAN (1981) — *Director of EOPS and Disabled Student Programs*
A.A., Fresno City College
B.A., California State University, Fresno
M.A., California State University, Fresno

ROBERT L. McDONALD (1969) — **Mathematics, Physics (On Leave 1984-1985)**
A.A., Mount San Antonio College
B.S., California State Polytechnic University, Pomona
M.A., California State Polytechnic University, Pomona

JAMES ROBERT MENDONSA (1981) — **Search and Rescue**
B.A., California State College, Stanislaus
M.A., California State College, Stanislaus

JOHN C. MINOR (1970) — **English**
B.A., Linfield College
M.A., University of Washington

CHESTER H. PALMER (1976) — **English, Speech**
B.A., University of Arizona
M.A., University of Arizona

FRED J. PETERSEN (1981) — **Computer Science**
B.A., California State University, San Jose
M.A., University of Washington

DAVID G. PURDY (1971) — **Drama**
B.A., California State University, San Jose
M.A., California State University, Fresno

BLAINE D. ROGERS (1972) — **Biological Science**
A.A., Bakersfield College
B.A., California State University, Humboldt
M.A., California State University, Humboldt

JOHN R. ROSS (1970) — **Health Education, Health Occupation, Search and Rescue**
B.A., University of the Pacific

MELBORN N. SIMMONS (1969) — **Mathematics**
B.S.E., Henderson State College
M.S., University of Arkansas

TERRY L. SMITH (1981) — **Fire Science**
A.S., Miramar Community College

RAYMOND L. STEUBEN (1976) — *Director of Library Services/ I.M.C.*
B.A., University of California, Santa Barbara
M.L.S., University of California, Los Angeles

V. PETER SULLIVAN (1961) — **Physical Education (Sabbatical Leave 1984-85)**
A.A., Modesto Junior College
B.A., Pepperdine University
M.A., California State University, Sacramento

ROBERT THOMASON (1981) — **Physical Education Basketball Coach**
B.A., University of the Pacific

CANDACE L. WILLIAMSON (1979) — **Business**
B.A., California State University, Humboldt
M.A., California State University, Humboldt

DAVID I. WILLSON (1975) — **Automotive Technology Heavy Equipment**
B.S. California Polytechnic State University, San Luis Obispo
M.A., California Polytechnic State University, San Luis Obispo

WILLIAM H. WILSON, JR. (1974) — *Counselor*
A.A., Solano College
B.A., San Jose State College
M.S., California State University, Hayward

CLARENCE O. WOLGAMOTT, JR. (1971) — **Chemistry**
B.S., Tennessee Technological University
M.A., Tennessee Technological University

FACULTY EMERITI

D. IRVING COBB (1971) — **Natural Resources Technology (1971-1983)**
B.S., University of California, Berkeley

L. FRANCIS CULLEN (1971) — *Psychology, Counselor, Student Activities*
B.S., University of California, Los Angeles
M.S., University of Southern California
Ed.D., University of Southern California

MARION C. EVANS (1955) — *Health Occupations (1968-1983)*
R.N., St. Therese School of Nursing
B.V.E., California State University, Sacramento

THELMA A. JENSON (1968) — *Health Occupations (1968-1984)*
R.N., Highland School of Nursing
A.A., Columbia College

MATILD M. KAMBER (1976) — **Philosophy (1976-1982)**
B.A., American College for Girls, Istanbul, Turkey
M.A., University of Istanbul

JERRY D. LYON (1971) — **Business (1971-1984)**
A.A., Edinburg Junior College
B.B.A., University of Texas
M.A., Abilene Christian College

BARBARA C. PAINTER (1969) — **Counselor (1969-1980)**
A.A., Modesto Junior College
A.B., California State University, San Jose
M.A., University of the Pacific
Ed.D., University of the Pacific

HARVEY B. RHODES (1947) — **President 1967-1979**
A.B., California State University, San Jose
M.S., University of Southern California
Ed.D., University of California, Berkeley

RICHARD H. ROGERS (1968) — **Business 1968-1982**
A.B., California State University, Fresno
M.A., California State University, Fresno

CLASSIFIED STAFF

(Date of District appointment follows name.)

KATHLEEN L. ABBOTT (1976) — Account Clerk, Business Services

ROSS L. ALDRICH (1975) — Performing Arts Production Technician

SHIRLEY M. APPLING (1967) — Evaluation Technician, Admissions and Records

DORYENE M. BENTLEY (1975) — Secretary, Instructional Materials Center

PRESTON BIRDWELL (1982) — Instructional Aide, Physics

ARTHUR BUSALACCHI (1982) — Lead Safety Patrolperson

D. LARUE BUSALACCHI (1969) — Business Office and Budget Manager

CLARENCE E. CLARK (1971) — Maintenance

SUZANNE K. COTE (1980) — Typist Clerk, Disabled Student Center

L. C. CRAIN (1976) — Custodian

DOROTHY A. DANZ (1965) — Secretary, Dean of Student Services

DENISE F. DEATSCH (1978) — Secretary, Assistant Dean of Instruction

TERRILL O. DEATSCH (1975) — Bus Driver/ Groundskeeper

SALLY K. DIETSCHAK (1981) — Assistant, Financial Aids and Veterans' Affairs

HELEN C. ERNEST (1969) — Clerk, Admissions and Records

KAREN M. ETHIER (1973) — Secretary, Instruction Office

WILLIAM J. GAISER (1970) — Equipment Mechanic

HAZEL GARAVENTA (1984) — Instructional Aide, Business

DORIS I. GOLDSON (1970) — Secretary/ Media Assistant, Library

LINNETT C. GRANIS (1975) — Media Assistant, Library

LAUREL M. GRINDY (1981) — Instructional Aide, Mathematics

RUTH O. HAGSTROM (1970) — College Nurse

DOLORES C. HALL (1971) — Manager, Bookstore

JOSEPHINE N. HALL (1974) — Food Services

NORINE D. HOLMES (1978) — Clerk, Admissions and Records

DWAIN JACK (1974) — Skilled Maintenance Worker

RONALD D. JACKSON (1976) — Custodian

JANICE M. JORN (1975) — Public Information Writer

LINDA J. KALEND (1976)	Tutorial Coordinator, Learning Skills
FRANCES K. LEONE (1983)	Instructional Aide, Computer Science, Earth Science, Psychology
KENNETH R. LUCAS (1967)	Supervisor, Transportation/Grounds
WILLIAM L. LUCE (1976)	Custodian
DOROTHY A. MAECHLER (1981)	Accompanist/ Instructional Aide, Music
TIMOTHY MANN (1983)	Athletic Equipment Attendant
ARDIS MARTINEZ (1984)	Typist Clerk, Student Services
PAULA A. MAUCERE (1979)	Instructional Aide, Learning Disabilities Center
ANDREW B. MAURER (1974)	Graphic Artist, Instructional Materials Center
JOHN H. MILLER (1972)	Supervisor, Buildings and Maintenance
NANCY M. MYERS (1982)	Program Aide, Career Center
LUIS C. RAMIREZ (1970)	Supervising Custodian
DAVID A. RICHMOND (1975)	Electronics Technician, Instructional Materials Center
RONALD R. ROACH (1970)	Media Assistant, Library
MARGARET A. SCIARONI (1975)	Coordinator, College Re-entry and Student Placement Clerk, Admissions and Records
WILLIAM M. SHANKEY (1982)	Safety Patrolperson
KATHLEEN SMITH (1984)	Account Clerk, Bookstore
JILL L. SOUTHARD (1982)	Instructional Aide, Physical Education
PATRICIA C. THOMAS (1972)	Account Clerk, Business Services
CAROL A. VAUGHN (1974)	Typist Clerk, Instructional Materials Center
BERNICE A. WADDELOW (1970)	Secretary, Dean of Instruction
CHRISTINE M. WALKER (1978)	Instructional Aide, Learning Skills
ARLENE F. WALLACE (1968)	Secretary, President
JAMES B. WOOD, SR. (1977)	Custodian
MELINDA G. WRIGHT (1975)	Instructional Aide, Learning Skills

—NOTES—

GENERAL INFORMATION

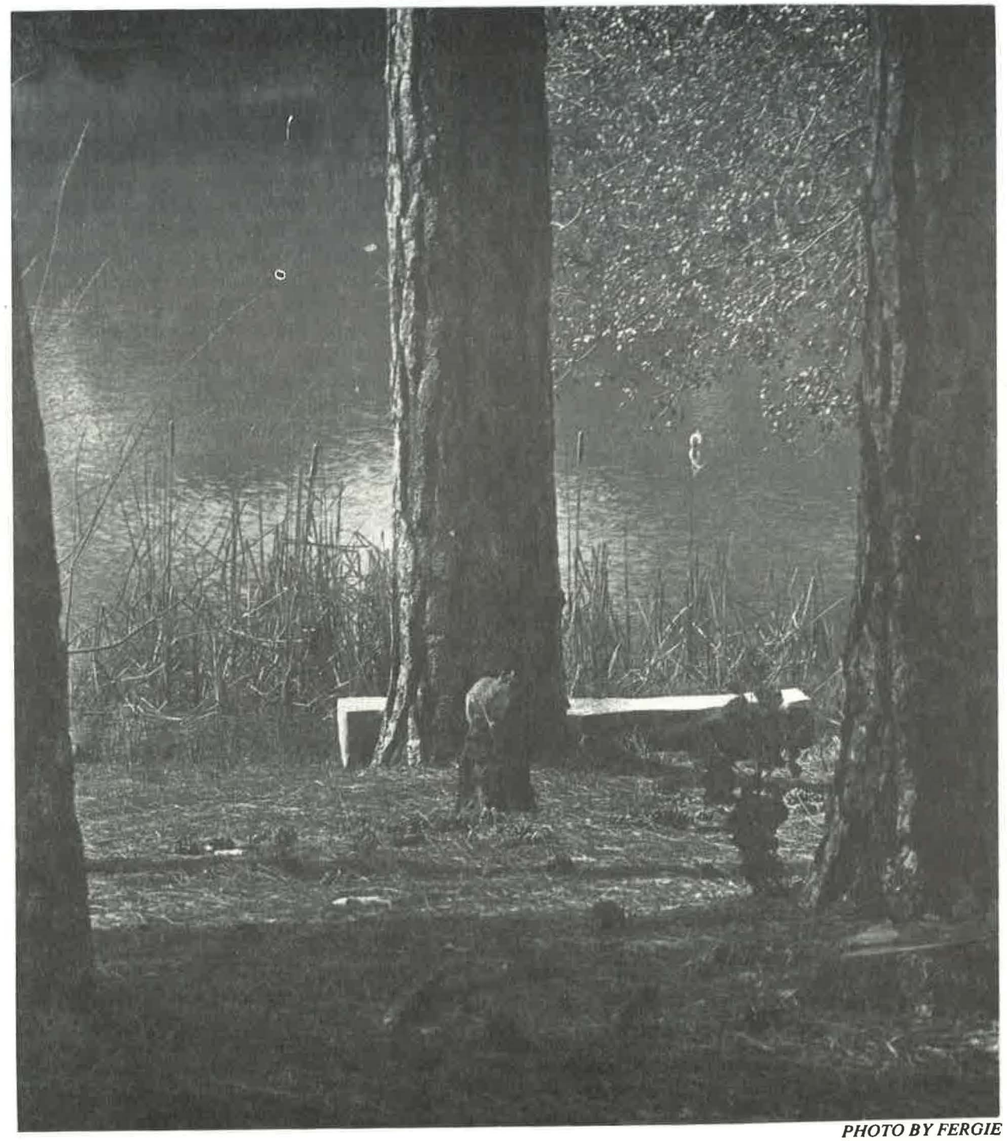


PHOTO BY FERGIE

COLUMBIA COLLEGE

History

Columbia College and Modesto Junior College are the two community colleges located in the Yosemite Community College District. The former Modesto Junior College District was expanded into the larger Yosemite Community College District in 1964 by action of the district electorate. The district is geographically one of the largest in the State and transects more than 100 miles of the fertile San Joaquin Valley from the Coast Range on the west to the Sierra Nevada on the east. The boundaries include nearly 4,000 square miles encompassing all of Tuolumne and Stanislaus Counties and parts of San Joaquin, Merced, Calaveras and Santa Clara Counties.

Because of an increase in student enrollment, the need for greater educational opportunities in the mountain counties, and the great distance involved in travel for students to attend Modesto Junior College, the Yosemite Community College District Board of Trustees authorized the formation of Columbia Junior College and scheduled its opening for September, 1968. The word "Junior" was dropped from the College name in 1978. Starting on the quarter system, Columbia College changed to the semester system on July 1, 1984.

Campus and Facilities

Campus buildings are planned around San Diego Reservoir from which wooded foothills join the rugged majesty of the Sierra Nevada. In keeping with the historic atmosphere of the Mother Lode Region, the design concept of the campus is in the architectural style of early California during the Gold Rush Days. In this unusual and picturesque setting, the College is committed to a comprehensive program of academic and occupational education which focuses on the worth and dignity of each student.

More than 200 acres of forest and land adjacent to Columbia State Historic Park in Tuolumne County were acquired from the U.S. Department of Interior, Bureau of Land Management, as the site for the Columbia College.

Accreditation

Columbia College is accredited by the Accrediting Commission for Junior Colleges, Western Association of Schools and Colleges.

The College is listed in directories of the United States office of Education, the American Council on Education, and the Western Association of Schools and Colleges.

Appropriate lower division courses completed at Columbia College will be accepted with full credit upon transfer to California State Universities and other four-year colleges.

Philosophy

This community college is dedicated to the worth and dignity of each student. Its primary responsibility is to the goals of the student, his/her needs, desires, and aspirations.

We believe an effective education teaches that one has a life to live as well as a living to earn. Columbia College will, therefore, involve each student in opportunities for developing his/her capabilities to become a useful and contributing member of society. This objective will be accomplished through a living, dynamic and continuing experience in which each individual can confront opportunities to participate actively in the learning process. In effect, education will not happen to him/her, but with him/her and by him/her.

Guiding Principles

Each student is a separate and unique individual who shall be accepted as such. It shall be the responsibility of each student and staff member to accept and perpetuate the philosophy of this College.

This College shall provide a focus on learning as an individual process that can best be accomplished through active involvement in a setting of reality. It shall be recognized that learning is a logical outgrowth of experiences that are meaningful to each student and not the rote acquisition of a specific body of knowledge.

The College shall be characterized by its flexibility in meeting student needs. Every facet of the institution shall expect and promote this quality.

This College shall serve the total community. It will provide educational opportunities for all people of post high school age, regardless of socioeconomic class, level of aspiration, or previous performance. Thus, this College shall adhere strictly to the open-door policy.

The College shall combine the strengths of the various disciplines, so that each will contribute to and support the bases used by students to reach their goals. No single instructional area or individual will be self-sustaining, but only as a component of the student's educational progress.

This College shall perceive achievement as a function of individual growth and not of time alone. Progress will not terminate at an artificial barrier, but continue on through the student's goal.

This College shall focus on student success. This will be accomplished by preserving an environment where each individual will have maximum freedom of choice. It will afford each student an opportunity to profit from education to the fullest extent of his capabilities.

This College shall be responsive to the needs and desires of the total community. Moreover, this responsibility will transgress the artificial boundaries of town, county, or region in providing a meaningful expression of the occupational, intellectual, sociological, and cultural needs of this community.

The personnel, functions, and services provided at this College shall be distinguished by their specific ability to meet the needs of students in reaching their particular goals. None shall base its existence upon the sole fact that it is a usual occurrence at a community college.

This College shall enable each student to acquire the trait of learning as a lifelong pattern. Learning will be considered a continuous process and not an isolated incident in given time or place.

This College shall require that each member of the faculty assume the dual roles of academic advisor in general and specific academic counselor in his/her discipline. This responsibility shall be apparent in student-faculty relationships and will not be the sole responsibility of Student Services personnel.

This College shall be committed to continuous planning, development, and evaluation. It shall seek and expect constant reexamination as a natural process for making appropriate modifications in every phase of its activities.

There shall be change with a purpose. Toward this end the College shall seek innovation, support creativity and imagination, while conformity for its own sake will be ignored. It shall consider technological and methodical advances which appear to have promise.

The natural and human resources adjacent to and beyond the campus shall be an integral part of the educational program.

The College shall encourage student involvement in responsible citizenship.

College Functions

Implementation of the philosophy and guiding principles of this College shall be carried out through a variety of functions. These functions may be described as the actions the College will perform in meeting the defined needs of its students.

I. **General Education Function**
Provide a broad program of knowledge and skill acquisition in humanities, arts, and sciences for personal development.

II. **Transfer Education Function**
Provide a comprehensive program that meets the lower division requirements for acceptance at designated institutions.

III. **Occupational Education Function**
Provide specialized training programs needed to develop skills, knowledge, attitudes, and other occupational competencies.

IV. **Remedial Education Function**
Assist the student to acquire those basic competencies needed for effective participation in programs leading to his/her goal.

V. **Occupational and Educational Planning Function**
Provide an opportunity for students to attain personal goals through a program of realistic planning and direction.

VI. **Continuing Education Function**
Provide continuing educational and vocational activities for adults.

ADULT AND CONTINUING EDUCATION

Columbia College is committed to meeting the educational needs of adults in our community. Through the Continuing Education program a variety of credit and non-credit classes are offered which fulfill requirements leading to an A.A. or A.S. Degree, a high school diploma, or an assortment of vocational certificates. Most of these courses are offered during the evening at locations both on and off campus. Continuing Education courses are designed to provide opportunities to resume interrupted education, to investigate new fields of interest, and for general education for self-improvement and enriched living.

HIGH SCHOOL CREDIT COURSES

A high school student may be admitted to the college if he/she:

(1) Is 18 years of age or older.

(2) Is married and less than 18 years of age.

(3) Is less than 18 years of age, but he/she is required to obtain a signed release from the superintendent of his/her high school district of residence, stating the classes he/she is allowed to attend.

The College will certify completion of courses which fulfill high school graduation requirements as determined by the high school of residence. The high school of residence will officially award the diploma.

College units used toward the High School diploma are not applicable toward the Associate degree.

High School Equivalency Diploma (G.E.D.)
Columbia College serves as an official General Educational Development Testing Center and provides the opportunity to obtain the High School Equivalency (G.E.D.) Diploma.

COMMUNITY SERVICES

Community Services sponsors many programs including public lectures, forums, concerts, art exhibits, and film series; a speakers' bureau which offers speakers without charge; campus tours; short courses; community recreation; and a public information program. A citizen's committee advises the College of needs and evaluates proposals and programs.

The College is a center for community functions of various kinds. College facilities are available for use by recognized community groups when such use does not interfere with the regular educational program.

NON-DISCRIMINATION

In compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, Columbia College does not discriminate on the basis of race, color, national origin, sex, handicap or age in its educational programs or employment.

Inquiries concerning the application of the above Federal laws to programs or activities of the College may be directed to the following persons at Columbia College, P.O. Box 1849, Columbia, CA 95310:

Title IX: Candace Williamson
(209) 533-5216

Section 504: Mr. Paul Lockman, Director
Handicapped Students Program
(209) 533-5132

OPEN CLASS POLICY

Unless specifically exempted from statute, every course, course section, or class, the average daily attendance of which is to be reported for state aid, is open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established.

Exception to this policy will be made where health, safety, legal requirements or the facility is a limiting factor in the conduct of the course. Students denied enrollment by this policy may appeal to the Dean of Student Services.

STATEMENT OF INTENT

The Yosemite Community College District and Columbia College have made every reasonable effort to determine that everything 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 Yosemite Community College District or Columbia College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the College further reserve the right to add, amend, or repeal any of their rules, regulations, policies and procedures.

—NOTES—

ADMISSIONS

COLUMBIA COLLEGE PHOTO

ADMISSIONS

Eligibility

Graduates of accredited high schools, persons holding a high school Certificate of Proficiency, or those persons 18 years of age or older who are able to profit from instruction and who meet the residence requirement are eligible for admission to Columbia College. Admission with previously earned credits will be granted upon evidence of official transcripts showing satisfactory scholarship and an unqualified honorable dismissal from an accredited college. The students must request the previous colleges of attendance to mail transcripts directly to Columbia College.

Residence Requirements

Persons 18 years of age and older have the legal right to establish their own residence for purposes of admission.

A statement verifying legal residence is required to be filed with the College prior to initial registration. A student is qualified to attend Columbia College if he/she meets one of the following residence requirements:

(1) Is a legal resident of the Yosemite Community College District with a local address.

(2) Is a legal resident of a California high school district not affiliated with a community college district.

(3) Is a student whose legal residence is in another state and pays the out-of-state fee.

(4) Is an international student who complies with special admission requirements and pays the non-resident fee.

Admission of Non-resident Students

Columbia College accepts students who are residents of other states if they meet all admission requirements. A minor's residence is the same as that of his/her parents or legal guardian.

Residency determination dates for 1984-85 are August 20, 1984, for Fall Semester; January 9, 1985, for Spring Semester.

Nonresidents of California, including international students, are required to pay an out-of-state tuition fee of $81.00 per unit. Tuition refunds are based on the following schedule: during week in which instruction begins, 90 percent; second week of instruction, 50 percent. No refund permitted after the second week of instruction. Questions regarding determination of residency should be referred to the Admissions and Records Office.

Interdistrict Attendance Permits

Yosemite Community College maintains a free exchange of students with all community college districts in the State of California. Interdistrict permits are not required. For further information contact the Admissions and Records Office.

Admission Procedures

Students who desire admission to Columbia College are to complete and return application forms to the College Admissions and Records Office. Application forms are available from Columbia College, high school counselors in the Yosemite Community College District or may be obtained by writing to the College.

Before admittance, official transcripts for all previous college work must be received by the College. If no transcript is available due to withdrawal, an official letter stating this fact is required.

It is the student's responsibility to furnish the College with official documentation for previous college work or training to be evaluated for credit. These documents become the property of Columbia College.

Applications should be submitted as early as possible in order to allow for processing. A local address must be submitted before completion of registration.

Readmission

A student who plans to return to Columbia College after an absence of one calendar year or more must file an application for readmission. Transcripts are required if the student has attended another college since last attending Columbia College.

Notice of Acceptance

New and former students will be notified officially of their acceptance and advisement appointment after all application forms and documents have been received. This notice is mailed approximately four weeks prior to the first day of the semester. Early advisement is desirable to allow the student a maximum choice of classes.

Schedule of Classes

A Schedule of Classes is the official listing of courses. It is published each semester of the academic year.

The Schedule of Classes contains information regarding registration dates and special instructions for registering in classes.

The College reserves the right to make additions or deletions to the Schedule of Classes. Any class in which the enrollment is too small to justify continuance may be cancelled.

Admission of International Students

In the belief that students from foreign countries make significant contributions to the college community while preparing for leadership roles in their home countries, Columbia College accepts a limited number of international students each year.

The College may restrict the number of international students from a foreign country so that many nations of the world may be represented on the Columbia campus. Students are required to submit the following information by May 1 for admission to the following Fall Semester.

(1) Complete the COLUMBIA COLLEGE INTERNATIONAL STUDENT SUPPLEMENTAL APPLICATION FOR ADMISSION.

(2) Submit the following credentials translated into English and certified:

(a) Complete secondary or school leaving records listing courses taken and examination results (rank in class if available).

(b) Other diplomas or certificates (rank in class if available)

(c) All national examination results

(d) University entrance examination results (rank in class if available)

(e) Complete record of any college, university or other postsecondary records listing courses taken and examination results. Specify any course not completed (rank in class if available)

(3) Submit official results of the Test of English as a Foreign Language (TOEFL) if your native language is other than English. (Citizens of Canada, Great Britain, Ireland, Australia and New Zealand whose native language is English are exempt from taking the TOEFL.)

(4) Furnish evidence of satisfactory financial support by completing the form and providing a written guarantee from the bank of a parent, relative or sponsor in the United States.

(5) Furnish two letters of recommendation, one of which must be from a teacher with whom you recently studied, attesting to your ability to do college work.

(6) Have a physician complete the PHYSICIAN'S CERTIFICATE OF HEALTH. The certificate must be completed and show immunization clearance examination. Applicant completes the STUDENT CERTIFICATE OF HEALTH. Both certificates must be completed in English.

(7) Furnish evidence of a sickness and accident insurance policy (if proof is not provided, applicant if accepted must purchase Columbia College International Student Sickness and Accident Insurance prior to registration).

(8) Applicants selected for admission are responsible for making arrangements for their own housing and notifying the College of their local address. The College does not have student resident housing. However, the College may be of assistance in providing information for short-term housing upon arrival in the area.

Upon completion of all application requirements listed, by the deadline date, application for admission will be given equal consideration along with all other qualified applicants. If selected, the I-20 form and information requesting travel plans will be mailed. The I-20 form must be presented to the appropriate officials in order to obtain an F-1 (Student) Visa and enter the United States.

A college counselor serves as advisor to international students.

Admission of High School Students

High school students in their junior or senior year, upon written authorization of their principal and approval of the College, or those holding a Certificate of Proficiency, may take community college courses.

This opportunity is designed to introduce high school students to a college environment when, in the judgment of their principal and the College, the student can profit from the experience.

Units earned will apply toward the requirements of a college degree if not used for high school graduation.

STUDENT SERVICES

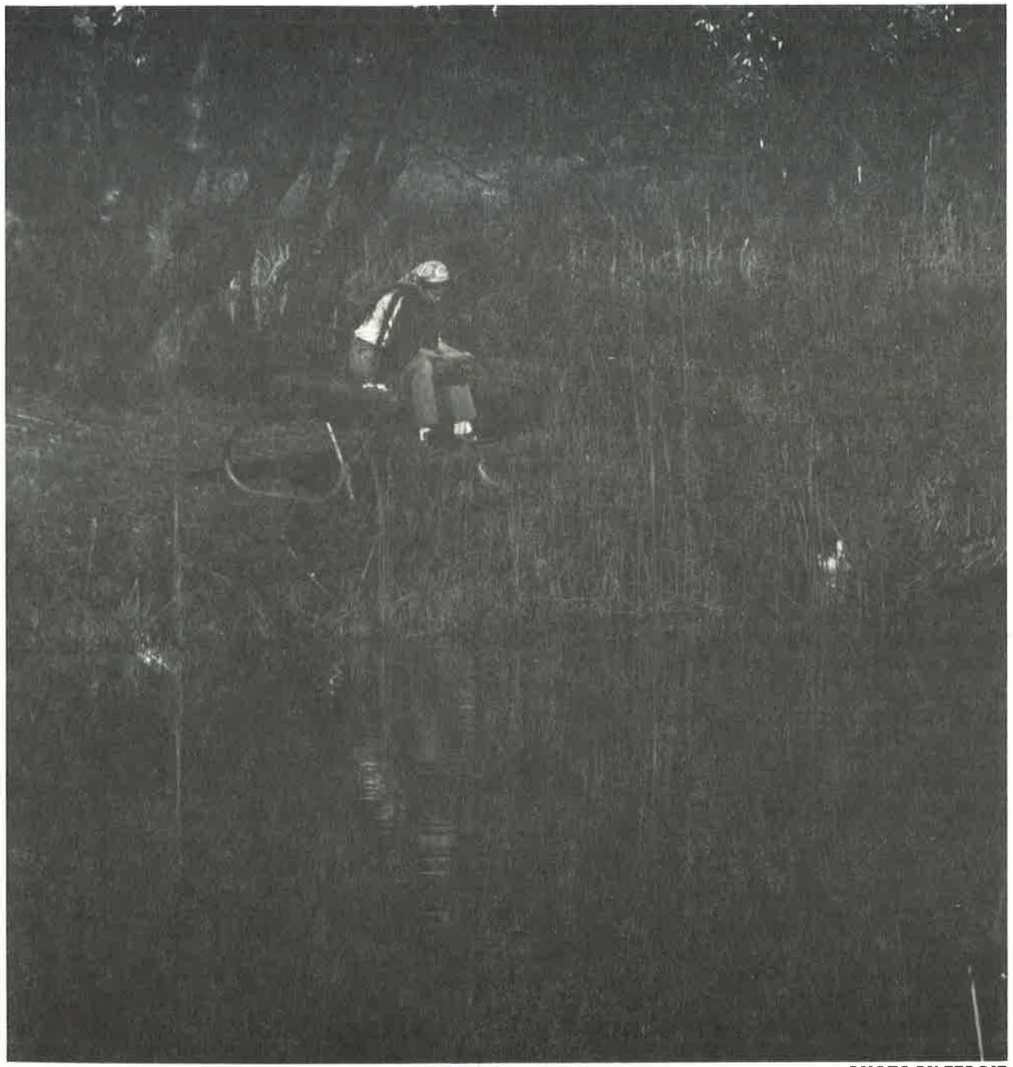


PHOTO BY FERGIE

STUDENT SERVICES

Student Orientation

An introduction to the College is provided for new incoming students at the time of their initial advisement appointment. Since this is a group orientation, students are encouraged to use this service to gain information concerning the College's responsibility to the student, the student's responsibility to the College, as well as to learn what student services are available. Academic procedures are discussed and the arrangement of the student's first program of classes with the assignment of an advisor takes place at this orientation.

Counseling Services

Counselors are available to all students during the day by appointment or drop-in basis. Counseling is available on selected evenings by appointment or drop-in basis. Professional counselors are available to assist students with academic planning, determining vocational goals and resolving personal and social problems. Counselors also function in the advisement process. When appropriate, testing services to evaluate occupational interests or aptitude are provided by counselors. Counselors may refer students to other services provided by the College or other agencies.

Faculty Advisement Program

Advisement is an on-going service whereby students meet with faculty to discuss educational objectives, plan an academic/vocational program, gain assistance in registration procedures, evaluate academic progress or gain referral to counselors and other sources concerning personal or academic problems related to the college experience. Counselors assign advisors on the basis of the student's educational/vocational objectives. Students are encouraged to confer with their advisor at any time.

Financial Aid

The College Financial Aid Office administers the following Federal and State assistance programs: Pell Grants, Supplemental Educational Opportunity Grants, College Work Study Programs, National Direct Student Loans, Cal Grants, Educational Opportunity Programs and Services, California Board of Governors Grants, waivers and fee credit, and California Guaranteed Student Loans.

Students who need assistance to defray college expenses may obtain applications from the Financial Aid Office. Eligibility is based on financial need and aid is distributed on a first-come, first-serve basis, contingent upon availability of funds.

In compliance with Federal regulations, a detailed financial aid publication is available in the College Financial Aid Office, Admissions and Records Office and College Library.

Student Records Regulations

A student's records are open to the student, employees of the College acting in the course of their duties and State and Federal officials as defined in Section 54618 of the California Administrative Code.

The College may grant access to individual student records for educational or emergency purposes and for court orders as permitted in Sections 54620 and 54622 of the California Administrative Code.

Student's Rights and Procedures for Grievance

Information pertaining to students' rights, conduct and grievance procedure is available in the Student Handbook. Student Handbooks are issued to each student at the time of registration.

Transcripts

Upon written request to the Admissions and Records Office, two transcripts will be issued without charge for each student in good standing. Additional transcripts are $2 each. No transcripts will be issued for students who have outstanding financial obligations to the College. To comply with the Buckley Amendment, Family Educational Rights and Privacy Act of 1974, transcripts cannot be sent in response to a telephone request. Transcripts from other colleges may not be released to students, other colleges, or agencies.

Privacy Rights of Students

All student records of Columbia College are kept in accordance with the provisions of the "Buckley Amendment" also known as the Family Educational Rights and Privacy Act of 1974.

All students, including former students, have the right to review their records and the right to challenge the content of their records if, in their opinion, the records contain material that is incorrect, inaccurate or otherwise inappropriate. The Dean of Student Services is the official to be contacted by any student desiring to exercise his/her rights to access and challenge.

Written student consent is needed for release or review of student records to all parties or officials except for those specifically authorized access under the Act.

Copies of the Family Educational Rights and Privacy Act of 1974, as amended, are available for inspection in the Admissions and Records Office.

Disabled Student Services

The Disabled Student Services Program is designed to provide access to educational programs and activities for students with disabilities. The College has made changes in campus design to allow the disabled student access to the College campus.

Services offered:

Physical Disabilities

Disabled parking, on-campus transportation, mobility assistance, academic tutoring, assistance in locating notetakers, readers, and test taking assistance.

Communication Disabilities

Sign language interpreters, speech therapy, notetakers, and academic tutoring.

Learning Disabilities

Individualized educational assessment; followed by the development of an Individual Education Plan designed to teach learning strategies and skills development appropriate to the student's needs.

Additional Services

Personal and vocational counseling, academic advising, special equipment loan, and liaison with campus and community resources.

Special Instruction

Adaptive physical education, written language development, and diagnostic learning.

Scholarships and Awards Program

Columbia College has an extensive number of scholarships and awards provided by various organizations and individuals from the community and other sources. Scholarships and awards are generally based on grade point average, financial need, units completed, and/or participation in extracurricular activities including employment and/or homemaking. Special awards are available for students majoring in Fire Technology, Conservation, Forestry Technology, History, Natural Resources, Hospitality Management, Vocational Nursing, Business, Music, Education, other vocational majors, and Sonora or Summerville High School graduates.

Scholarships and awards are available to Columbia College students who are new, continuing, returning and/or transferring to another college or university.

When a student applies for a specific scholarship or award at the beginning of the semester, the application is considered for all other scholarships and awards for which the student qualifies that semester. Most awards are granted during the Spring Semester for the following academic year; others are awarded throughout the school year. The MONEYBOOK brochure, containing detailed information about the Scholarship Program, is available in the Student Services Office and the Admissions and Records Office. The MONEYBOARD bulletin board, located near the Office of Admissions and Records, lists the criteria for scholarships and awards as they become available throughout the year.

Veterans Affairs

Veterans and dependents of deceased, disabled, or retired veterans wishing to use their educational benefits should apply through the Financial Aid/Veterans Office as early as possible after they have decided to enroll in college.

All applicants must file transcripts of any previous college work and original or certified copy of DD Form 214 in order to be eligible for veteran benefits. If appropriate, a marriage certificate and birth certificate of dependent children may be required.

Those veterans who are eligible and wish to apply for advance payment should contact the above office at least six to eight weeks prior to the beginning of the term. Veteran students are required to notify the Veteran Affairs Office of any changes in their program during the semester.

Health Services

A variety of health services are available to students registered at the College. Students having chronic health problems, however, are advised to inform the College Nurse so that the best possible help may be rendered in case of an emergency. Illness or accidents should be reported immediately to the College Nurse or any administrator.

Student Insurance

Student accident insurance is provided by the student health fee. Students who desire additional accident or health insurance information may contact the College Business Office.

Student Identification Cards

Student Identification Cards are required for checking out library books and audio visual equipment and materials. Students may obtain Identification Cards in the College Library at the beginning of the semester.

Student Activities

College life fosters an attitude and a pattern for social and college-community involvement. Student activities are offered to widen horizons of students and develop an awareness of social and public responsibility. The framework of social events, publications, clubs, intramural activities, community projects, musical programs, dramas, campus involvement, and cultural events is developed through student-faculty interaction.

A program must meet the needs of students to be meaningful. Students interested in planning and developing an activity are encouraged to discuss their ideas with any faculty member or person involved in student activities. Faculty members may serve as advisors to foster and help the student.

All students are members of the Associated Students of Columbia College and they in turn develop a student government. Student Government is a representative group of students which is responsible for the conduct of student affairs, coordinates the social activities of campus organizations, and serves as spokesman for the student body. The government is developed to fit the needs of the students at that particular time.

Inter-Collegiate Athletics

The College is a member of the Central Valley Conference. To be eligible to participate in intercollegiate athletics, a student must be enrolled in an least 12 units of credit.

Career Center

The Career Center, located adjacent to the Library, offers materials and services to assist students with career planning. The Center maintains a variety of resources including occupational publications, newsletters, college catalogs and Eureka, a computerized vocational/educational information system.

Student Employment

Students seeking employment should register with the Career Center and update their availability each semester. Employers are encouraged to list job openings, full or part-time, with the Center which maintains a referral service for off-campus employment.

College Bookstore

The Manzanita Bookstore, located in the Learning Resources Center, carries textbooks, materials and supplies required for classes. The bookstore also sells paperbacks, greeting cards, sundries, snacks, and many other items.

Costs of textbooks and educational supplies vary with the type of program the student is pursuing. Costs normally range from $100 to $125 each semester depending on the program.

Library

The Columbia College Library is a center for study, class research, and leisure reading, and welcomes use by students, staff and community members. The Library's collections include nearly 30,000 books, current subscriptions to 300 magazines and six newspapers, pamphlets, maps and art prints. Available in the Audio-Visual Department are more than 5,000 cassette tapes of popular, folk, and classical music, local oral history, shorthand, and a wide variety of other topics, as well as cassette players and slide-tape kits. A typing room with electric and manual typewriters is open for use during Library hours. Photocopying can be done on a coin-operated machine near the Library.

The Library can locate and borrow on Interlibrary Loan materials not in the College Library. As a member of the Central Association of Libraries, the Library has quick access to the collections of more than 50 libraries. This service is available to students, community residents, and college staff.

The Library is open when college is in session Monday through Thursday, 8:00 a.m. to 9:00 p.m., and Friday, 8:00 a.m. to 4:30 p.m. It is closed weekends and school holidays.

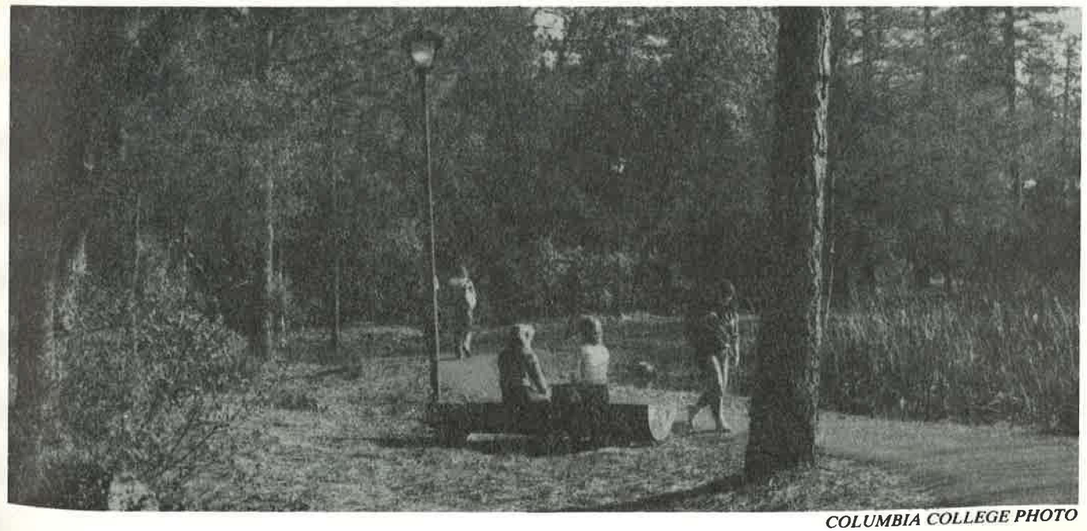
Living Accommodations

There are no facilities for on-campus housing at Columbia College. Information regarding off-campus housing is available at the Career Center and is posted on College bulletin boards. The College does not supervise, recommend or assume responsibility for any off-campus housing facility.

Security/Parking

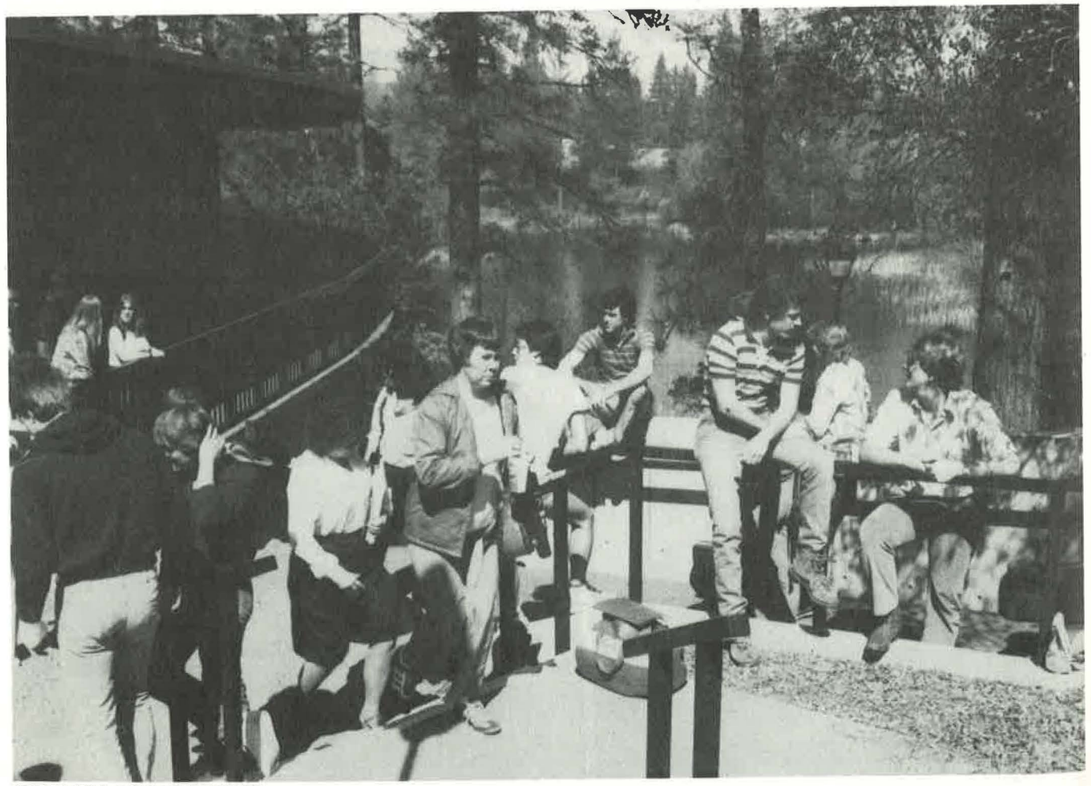
Campus Security is available to assist students, staff and visitors as needed. Security may be contacted through the Dean of Student Services' Office or the Campus Fire Department.

The College maintains parking areas for students, staff, disabled persons and visitors. Parking regulations are strictly enforced by Campus Security. A fee is charged for parking.



COLUMBIA COLLEGE PHOTO

ACADEMIC POLICIES AND PROCEDURES



COLUMBIA COLLEGE PHOTO

Academic Policies And Procedures

Unit of Credit

A "unit of credit" is earned on the basis of one hour of lecture-recitation per week or three hours of laboratory per week during a semester. In some physical education, art, drama, and music courses, a unit of credit is earned for each two hours of class time. It is common to find courses composed of learning activities resulting in combinations of lecture-recitation, independent and tutorial study, or directed and individual laboratory experiences. In all cases these are to be equated with the unit of credit.

The following terms are synonymous in expressing a unit of credit: semester unit, semester hour, class hour, credit and credit hour.

Conversion of Units

To convert quarter and semester units of credit, the following methods of computation are used:

(1) Quarter units of credit are converted to semester units of credit by multiplying the number of quarter units by two-thirds.

(2) Semester units of credit are converted to quarter units of credit by multiplying the number of semester units by one and one-half.

Prerequisites

Course prerequisites are intended to ensure that the student will have sufficient preparation before entering a course and to assure a reasonable chance for his/her success. **Knowledge of course prerequisites is the student's responsibility.**

Where no prerequisite is stated as part of the course description, none is required.

Prerequisites may be waived when in the instructor's judgment the student has adequate preparation to satisfy the course objectives. An instructor has the prerogative to refuse admission to class or officially drop a student from class who has not satisfied the course prerequisites as published in the College catalog.

Grading System

Evaluation of student achievement is made in relation to the attainment of specific course objectives. At the beginning of a course the instructor will explain the course objectives and the basis upon which grades will be determined by one of the following symbols:

A - Excellent
B - Good
C - Satisfactory
D - Passing, Less Than Satisfactory
F - Failure
W - Withdrawal From Course
I - Incomplete
CR - Credit (At Least Satisfactory)
NC - No Credit (Less Than Satisfactory)
IP - In Progress (Did not meet course objectives; recommend re-enrollment in class.)
RD - Report Delayed
O - Ungraded Class

Grading Scale

Columbia College uses the following system of grade points appraising the student's level of achievement:

A - 4 grade points per unit
B - 3 grade points per unit
C - 2 grade points per unit
D - 1 grade point per unit
F - 0 grade points per unit

W, I, CR, NC, IP, O, RD — Not included in computing grade point average.

Grade Point Average

The Grade Point Average — GPA — is determined by the following formula:

$$GPA = \frac{\text{Total grade points earned}}{\text{Total semester units attempted}}$$

For example, a student who earns 5 units of "A", 4 units of "B", 3 units of "C", 2 units of "D", and 2 units of "F" would compute his GPA as follows:

5 units A x 4 = 20 grade points
4 units B x 3 = 12 grade points
3 units C x 2 = 6 grade points
2 units D x 1 = 2 grade points
2 units F x 0 = 0 grade points
16 units 40 grade points

$$GPA = \frac{40 \text{ grade points}}{16 \text{ units attempted}}$$

The result in this example is a GPA of 2.50.

Units for which a grade of "W," "I," "CR," "NC," or "IP" has been assigned are not counted in computing the Grade Point Average.

Adding A Course

Adding a course or adding units to a course in which a student is already enrolled is permitted during the first five days of instruction each semester. Entrance into a class in days six through ten requires the instructor's written approval. After the tenth day, students may be admitted to

certain classes with the written consent of the instructor. Refer to the Schedule of Classes for designation of those classes. **Students who are not eligible for self-programming must obtain their advisor's written approval before adding a course.**

Dropping A Course

A student may drop a course or reduce the number of units in a course during the first two weeks of instruction. The course or units will be removed from the student's program of attendance without a grade being recorded. From the third week to the last day to drop without penalty, a student may drop a course and a grade of "W" will be recorded on the student's transcript of record providing the student has officially withdrawn from the course and paid the drop fee if appropriate.

The last day to withdraw without penalty for all full-time credit courses shall be the last day of 75 percent of the semester as noted in the College Calendar of Schedule of Classes. For courses less than full term, an equivalent withdrawal period will be in effect. **WHEN DROPPING COURSES, IT IS THE STUDENT'S RESPONSIBILITY TO FILE ALL WITHDRAWALS FROM THE COURSES.**

Auditing A Course

Enrollment on an auditing basis is not permitted.

Repetition of Courses

Courses may be repeated only to improve a grade of D, F, IP, CR, or NC except as otherwise noted in the College catalog.

When repeating a course in which a "D" grade was earned, the new grade and grade points will be recorded, but no additional units for the course will be allowed. When repeating a course in which "F", "IP", or "NC" grades were earned, the new grade, grade points, and units for the course will be recorded.

Incomplete Grades

An incomplete grade ("I") may be given for an unforeseeable emergency and justifiable reason if a student does not complete all requirements. Responsibility for removal of incomplete grades within the time granted by the instructor rests with the student. Incomplete grades must be made up within one semester or will automatically revert to the alternate grade assigned by the instructor on the Incomplete Grade Removal Contract.

Forgiveness of "F" Grades

For graduation purposes only, "F" grades recorded on the transcript for the first 30 semester units of college work attempted will not be included in computing the Grade Point Average. An "F" grade earned after the semester in which 30 semester units of college work are completed will be computed in the Grade Point Average for graduation.

99./199. Independent Study Courses

Independent study courses are intended to give students an opportunity to independently research specialized areas not available as regular course offerings of the College.

Independent Study courses do not appear in the catalog as such since these courses are designed to meet specific student interests. Independent study courses may be made available in any subject matter area. Consult your advisor for specific procedures.

CONDITIONS

To be admitted to independent study, a student shall:

(1) have completed one semester (12 units) in residence and have a Grade Point Average of 2.5 either cumulative or for the previous semester as a full-time student.

(2) have written approval of the instructor directing the student's Independent Study, and written verification by the Admissions and Records Office that the maximum credit limitation for Independent Study will not be exceeded. Maximum unit value for any Independent Study course for any one semester will be 3 units of credit.

LIMITATIONS

The following limitations apply to Independent Study courses:

(1) Registration is restricted to one Independent Study course per semester and registration must be completed prior to the fourth week of the semester.

(2) An overall maximum of 7 units of credit completed will be allowed for Independent Study.

Students who intend to transfer are advised that Independent Study credit may not fulfill either major or General Education Breadth Requirements. Independent Study credit earned by students not transferring may be evaluated in partial fulfillment of major requirements.

Credit/No Credit

Each student may choose to take one course per semester for a grade of Credit or No Credit instead of the usual letter grades, subject to the following limitations: (1) Time of choice: Students have only the first 30 per cent of the length of the term to choose Credit/No Credit evaluation, although the instructor may grant the student that option any time during the term if extenuating circumstances warrant it. (2) Limit of one per semester: Each student is limited to only one course per semester for Credit/No Credit evaluation. (3) Exceptions: Courses which are offered with only Credit/No Credit evaluation (such as Work Experience) are not subject to the above limitations, and may be taken in addition to the other course chosen for Credit/No Credit. (4) Total units: No more than 14 total units of CR (credit) grade may be counted toward graduation. CR/NC units are not computed in determining the student's grade point average, nor can they be applied toward the major required for graduation. Forms are available in the Admissions and Records Office to request this grade option.

Credit by Examination

A student may challenge a course by examination and obtain credit. Grades and grade points are entered on the student's transcript of record in the same manner as for regular courses of instruction. The intent of this provision is to:

(1) enable students to pursue courses of study at an accelerated rate and to encourage independent study, and

(2) recognize training or experience for which credit or advanced standing was not previously granted.

CONDITIONS

Only Columbia College courses may be challenged by examination. A maximum of 20 units may be earned by Credit by Examination. Credit granted by examination at accredited colleges will be accepted; such credit will be included in the maximum allowed by examination.

In order to challenge a course for credit, a student must:

(1) be registered in Columbia College and enrolled in the course which is being challenged.

(2) have completed at least 12 units of work in residence.

(3) have a cumulative Grade Point Average of 2.0 ("C" average).

PROCEDURE

The student must make arrangements for credit by examination with the individual instructor, who, on approval, will outline the challenge requirements and schedule the examination. Whatever grade the student earns will be entered on his/her record at the end of the term.

PREVIOUSLY EARNED CREDITS

College Credit

Previously earned lower division college or university units will be accepted if the institution was accredited by a recognized accrediting association when the student was in attendance. A maximum of 15 semester units will be allowed for courses taken by correspondence from accredited institutions.

Credit for Military Service

Armed forces personnel or veterans with a minimum of one year of satisfactory service may receive:

(1) Two semester units and waive P.E. requirement for graduation.

(2) Credit for military service schools in accordance with credit recommendations published by the American Council on Education.

(3) Credit for certain USAFI lower division college-level courses. Provisions for granting credit to armed forces personnel and veterans are subject to the following conditions:

At least 15 units of work must be completed at Columbia College before a student may receive credit.

Credit will not be granted for military service or military service schools where comparable units have been earned in courses previously taken.

The maximum credit allowable is 20 ungraded units.

Credit granted to armed forces personnel and veterans by another institution is subject to re-evaluation by Columbia College.

Student Load

A student who desires to carry more than 18 units must secure approval from his/her advisor or the Dean of Student Services. Students on academic probation will be limited to a unit load recommended by their advisor.

Classification of Students

While the minimum full-time program that will qualify a student for graduation in two years is 15 units per semester, the following classifications have been established:

Full-time — registered for 12 or more units.
Freshman — fewer than 30 units completed.
Sophomore — 30 or more units completed.

Attendance

Students are responsible for making arrangements with their instructors to complete all course work missed.

An instructor has the prerogative to lower a student's grade or drop a student from class because of excessive absence.

Absence from the first class meeting may cancel registration in the course.

Final Examinations

Students are responsible for taking final examinations at the time scheduled unless prior arrangements are made with the instructor.

Final grades are considered permanent and may be changed by the instructor only in case of error.

Scholastic Honors

Graduating students who have earned a cumulative Grade Point Average of 3.75 or better in all college work are awarded the Associate Degree With Distinction.

Students whose cumulative Grade Point Average is between 3.50 and 3.74 are awarded the Associate Degree With Honors.

Each semester a list of student names is published to recognize scholarship in at least 12 attempted units of work. **Classes taken for CR/NC are not included in attempted units.** Students whose Grade Point Average is between 3.3 and 3.74 are acknowleged on the Deans' list.

Students whose Grade Point Average is between 3.75 and 4.0 are recognized as Scholars of Distinction by the President and are acknowledged on the President's list.

Grade Reports

Final Grade Reports are compiled at the end of each semester. Students may request a current progress report prior to the end of the term by completing a form which is available in the Admissions and Records Office.

Satisfactory Scholarship

A student whose cumulative Grade Point Average is 2.0 ("C" average) is scholastically in "good standing."

All units and grade points are counted on a cumulative basis. The method of computing the Grade Point Average is illustrated on page 21.

A student with a Grade Point Average less than 2.0 is doing unsatisfactory work, will be placed on academic probation, and is subject to disqualification.

Academic Probation

The purpose of academic probation at Columbia College is to ensure that students who are deficient in scholastic achievement will receive special advisement. Self-programmed students who are on probation will be assigned an advisor by a counselor. A student who has attempted a minimum of 12 semester units as shown by the official academic record shall be placed on probation if either of the following occur:

(1) The student has earned a Grade Point Average below 2.0 in all units which were graded on the basis of the grading scale described in the section entitled "Grading System."

(2) When the percentage of cumulative units in which a student has enrolled and for which entries of "W," "I," and "NC" are recorded reaches or exceeds 50 percent.

Status While on Probation

Probationary students will be limited to a unit load recommended by their advisor.

Students on probation are subject to disqualification at any time their academic work shows neglect of studies.

Removal From Probationary Status

Clear status will be granted to a student on academic probation when:

(1) In the case of probation based on Grade Point Average, the student's cumulative Grade Point Average is 2.0 or better.

(2) In the case of probation based on percentage of "W," "I," or "NC" grades, the percentage of units in this category drops below 50 percent.

If a student has been placed on academic probation and feels he/she has extenuating circumstances worthy of consideration, he/she may request the Dean of Student Services to waive such a status.

Disqualification

A student on academic probation may be disqualified under any of the following conditions:

(1) Completion of a second semester on probation with a cumulative Grade Point Average below 1.75.

(2) Completion of a third semester on probation with a cumulative Grade Point Average below 2.0.

(3) Where a student who has been placed on probation for two consecutive semesters enrolled and who would remain on probation for a third consecutive semester enrolled because of an accumulation of "W," "I," or "NC" grades.

A student who earns a Grade Point Average of less than 1.0 in any semester may be disqualified without a period of probation.

A disqualified student may not be reinstated under the admissions provisions until one semester from the date of disqualification. If the Grade Point Average of a student readmitted after disqualification falls below 2.0 for a semester's work, the student may be permanently disqualified.

In the event a student is disqualified, he/she may petition for readmission on the basis of the following circumstances that might warrant an exception:

(a) Evidence of consistent improvement in the student's record.

(b) A change from one major to a field of study more appropriate to the student.

(c) Circumstances in the personal life of the student which the advisor of the student believes may have been of sufficient gravity to affect adversely the performance of the student.

(d) The recommendation of the student's physician that the continuance in college would be of sufficient therapeutic benefit to the student to warrant the granting of an additional opportunity.

If a student has been disqualified and feels he/she has extenuating circumstances worthy of consideration, he/she may request in writing to the Dean of Student Services that the one semester period of disqualification be waived.

Conduct

A Code of Student Conduct has been adopted by the Yosemite Community College District Board of Trustees.

Withdrawal From College

If a student wishes to withdraw from the College, it is his/her responsibility to notify the Admissions and Records Office.

Educational Expenses

Students enrolling in six or more units must pay a $50 semester fee. Students enrolling in less than six units must pay a $5 per unit per semester fee. Students who verify they are receiving public assistance are exempt from paying the fee. Financial aid is available for low-income students who are unable to pay the fee. Qualified students may contact the Financial Aid Office.

Certain classes may require special clothing such as some of the physical education classes.

Parking permits may be purchased each semester from the Business Office. Students who do not wish to purchase a permit may pay on a per-entry basis. These fees are indicated in the class schedule for each semester.

The following cost breakdown for 9 months is used as a guide for single students:

	Dependent	Independent
Books/Supplies/ Tuition	$ 400	$ 400
Meals/Housing	1,100	2,700
Personal	665	665
Transportation	535	535
	$2,700	$4,300

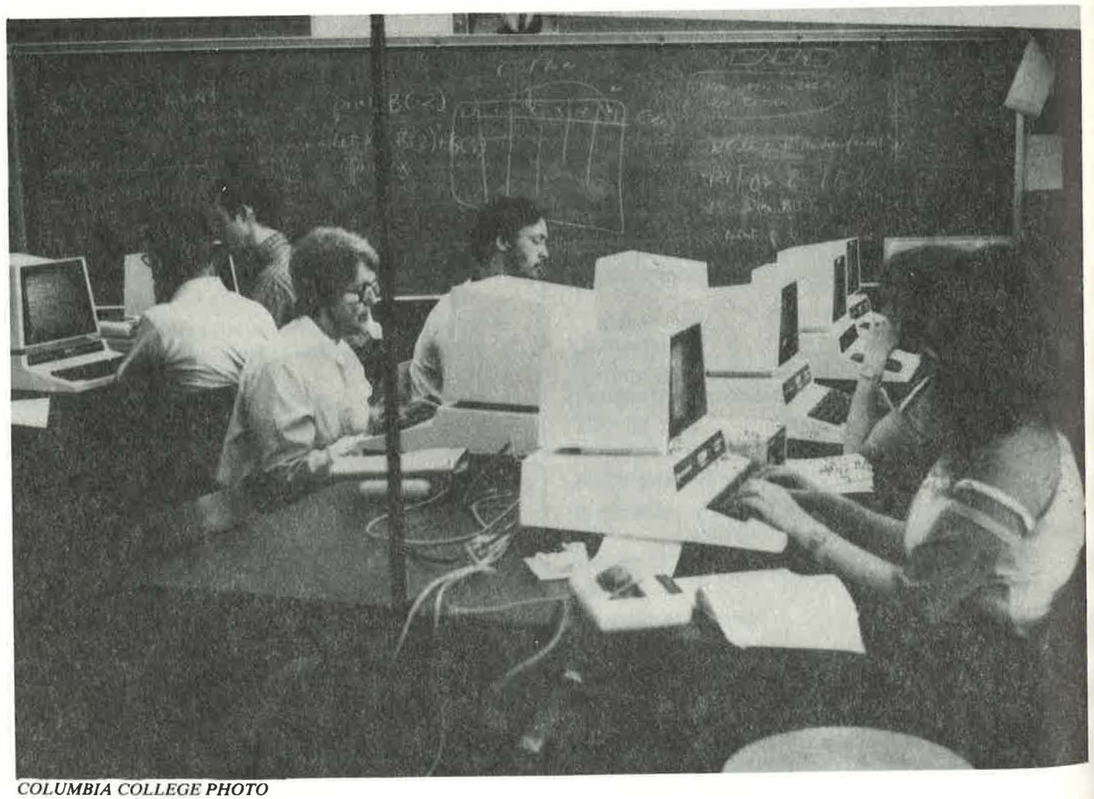
The above costs are only approximate and are subject to change.

Refund Policy

Columbia College has not established a refund policy because of pending legislative regulations. As soon as these are established, the refund policy will be available to students in either the Admissions and Records Office or the Student Handbook.

—NOTES—

CERTIFICATES



COLUMBIA COLLEGE PHOTO

CERTIFICATES

The College offers many programs of study leading to certificates. Certificate programs are designed to prepare the vocational students for employment. Requirements of each such certificate have been determined by the department offering the program with the help of its advisory committee.

For students entering Columbia College for the first time in Fall, 1984, the following certificate requirements are valid through the 1987-88 academic year. A student taking more than four (4) years to complete may only use certificate requirements in effect up to four (4) years prior to the date of completion.

In order to qualify for a certificate, a student must complete required and elective courses with at least a Grade Point Average of 2.0 ("C"). No more than 30 percent of the courses required for the certificate may be fulfilled with parallel courses completed at other accredited institutions.

Units earned in obtaining a certificate may be applied toward the 60 units required for an Associate degree.

Certificates of achievement are offered in the following disciplines:

- Automotive Technology
- Business Administration
  - Management
  - Retailing
- Computer Science
- Fire Technology
- Forestry Technology
- Hospitality Management
  - Food Service Technology
  - Hotel Management
- Human Services
  - Disabled
  - Gerontology
  - Social Welfare
- Natural Resources
  - Interpretation
- Natural Resources Technology
- Office Occupations
  - Clerk Typist
  - General Clerk
  - Legal Secretarial
  - Medical Receptionist
  - Medical Transcription
  - Secretarial
- Search and Rescue
- Teacher Aide
- Vocational Nursing
- Welding Technology

Following are the specific requirements for the certificate programs listed above. **Completion of certain certificate programs may necessitate attending classes during evening only or a combination of both day and evening classes.**

COMPLETION OF CERTIFICATE

Students must complete a certificate application in the Admissions and Records Office during the semester in which they are fulfilling the certificate requirements.

AUTOMOTIVE TECHNOLOGY

REQUIRED COURSES:		UNITS
Auto. Tech. 101	Intro. to Auto Technology	1
Auto. Tech. 103	Preventive Maintenance	1
Auto. Tech. 112	Pulling and Installing Engines	1
Auto. Tech. 114	Machine Shop Procedures	1
Auto. Tech. 116	Engine Rebuilding	4
Auto. Tech. 117a	Fuel Systems	1
Auto. Tech. 117b	Emission Control	1
Auto. Tech. 119	Gasoline Engine Tune-up	1
Auto. Tech. 130	Manual Transmission Rebuilding	1
Auto. Tech. 134	Axles and Drive Lines	1
Auto. Tech. 136	Automatic Transmission - GM	1
Auto. Tech. 138	Automatic Transmission - Ford	1
Auto. Tech. 140a	Brakes - Drum	1
Auto. Tech. 140b	Brakes - Disc	1
Auto. Tech. 144a	Front End and Suspension	2
Auto. Tech. 144b	Front End and Suspension	1
Auto. Tech. 150a	Electrical Theory	1
Auto. Tech. 150b	Charging Systems	2
Auto. Tech. 150c	Starting and Ignition Systems	2
Auto. Tech. 150d	Lighting and Chassis Electrics	1
Auto. Tech. 170a	Practical Laboratory	2
Auto. Tech. 170b	Practical Laboratory	2

TOTAL REQUIRED UNITS 30

BUSINESS ADMINISTRATION
MANAGEMENT

REQUIRED COURSES:		UNITS
Bus. Ad. 101	Principles of Business	3
Bus. Ad. 115a	Commercial Law	3
Bus. Ad. 115b	Commercial Law	3
Bus. Ad. 120	Principles of Marketing	3
Bus. Ad. 130a	Principles of Accounting and	4
Bus. Ad. 130b	Principles of Accounting	4
	or	
Bus. Ad. 61	Small Business Accounting	4
Bus. Ad. 140	Principles of Management	3
Bus. Ad. 150	Small Business Management	3
Econ. 101a	Principles of Economics	4
Econ. 101b	Principles of Economics	4
Off. Oc. 68	Business Correspondence	3

TOTAL REQUIRED UNITS 33-37

PROVEN COMPETENCY REQUIREMENT:
Business Mathematics Examination or
Bus. Ad. 63 Business Mathematics 3

RECOMMENDED OPTIONAL COURSES:

Bus. Ad. 145	Retail Business Management	3
Work Exp. 175, 176, or 177	Occupational Work Experience	Min. 4

BUSINESS ADMINISTRATION
RETAILING

REQUIRED COURSES		UNITS
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Accounting	4
Bus. Ad. 101	Principles of Business	3
Bus. Ad. 115a	Commercial Law	3
Bus. Ad. 120	Principles of Marketing	3
Bus. Ad. 123	Sales	3
Bus. Ad. 125	Advertising & Display Promotion	3
Bus. Ad. 145	Retail Business Management	3
Econ. 101a	Principles of Economics	4
Econ. 101b	Principles of Economics	4
Off. Oc. 68	Business Correspondence	3

TOTAL REQUIRED UNITS 33-35

PROVEN COMPETENCY REQUIREMENT:
Business Mathematics Examination **or**
Bus. Ad. 63 Business Mathematics 3

RECOMMENDED OPTIONAL COURSES:

Bus. Ad. 140	Principles of Management	3
Work Exp. 175, 176, or 177	Occupational Work Experience	Min. 4

COMPUTER SCIENCE

REQUIRED COURSES:		UNITS
Comp. Sc. 101	Intro. to Microcomputers	1
Comp. Sc. 103	Computer Operating Systems	1
Comp. Sc. 121	Data File Programming with BASIC	3
Comp. Sc. 125	PASCAL Programming	3
Computer Sc. 127	FORTRAN Programming	3
	or	
Computer Sc. 129	COBOL Programming	3
	or	
Computer Sc. 132	RPG II Programming	3
Comp. Sc. 140	Assembly Language Programming	3
Comp. Sc. 155	Data Base Management	3
English 101a	Reading and Composition	3
Mathematics 104	Logic	3
	or	
Philosophy 104	Logic	3
Mathematics 110	Finite Mathematics	4

TOTAL REQUIRED UNITS: 27

FIRE TECHNOLOGY

REQUIRED COURSES		UNITS
Fire Tech. 61	Organization and Fire Control	2
Fire Tech. 62	Equipment Operation	2
Fire Tech. 63	Extinguishers and Protective Equipment	2
Fire Tech. 64	Hose, Nozzles and Fittings	2
Fire Tech. 65	Hose Evolutions	2
Fire Tech. 66	Fire Service Ladders	2
Fire Tech. 67	Salvage and Overhaul Procedures	2
Fire Tech. 101	Introduction to Fire Technology	2
Fire Tech. 102	Fund. of Personal Fire Safety and Emergency Action	2
Fire Tech. 103	Fundamentals of Fire Protection	2
Fire Tech. 104	Fundamentals of Fire Behavior and Control	2
Fire Tech. 105	Fundamentals of Fire Prevention	3
Fire Tech. 130	Fire Protection Equipment and Systems	2

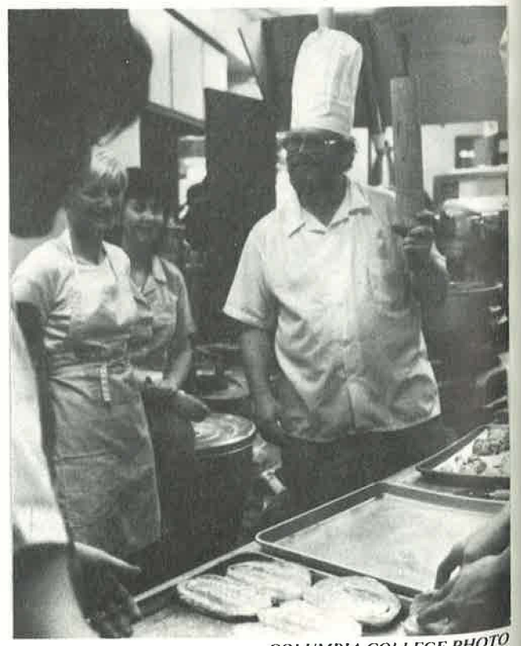
TOTAL REQUIRED UNITS 27

FORESTRY TECHNOLOGY

REQUIRED COURSES:		UNITS
Fire Tech. 117	Wildland Fire Control	2
Forest Tech. 50	Intro. to Technical Forestry	2
	or	
Forestry 101	Introduction to Professional Forestry	3
Forestry Tech. 53	Forest Surveying Techniques	3
Forestry Tech. 56	Tree & Plant Identification	3
	or	
Forestry 110	Dendrology	3
Forestry Tech. 62	Applied Forest Inventory and Management	4
Nat. Res. Tech. 50	Natural History and Ecology	2
Nat. Res. Tech. 52	Applied Wildlands Management	3
Nat. Res. Tech. 60	Aerial Photog. & Map Interpretation	2
Nat. Res. Tech. 81	California Wildlife	4
Nat. Res. 100	Environmental Conservation	3
Nat. Res. 109	Parks & Forests Law Enforcement	2

TOTAL REQUIRED UNITS 30-31

PROVEN COMPETENCY REQUIREMENT:
Mathematics Examination **or**
Mathematics 50 Basic Mathematics (or higher) 2
Reading Examination **or**
English 51 or 101a 3
Typing Examination **or**
Off. Oc. 101a Keyboarding **or**
Off. Oc 101b Basic Typing Applications 1-2
Writing Examination **or**
English 51 or 101a 3
ADDITIONAL REQUIREMENT:
Appropriate Summer Employment Approved by Forestry Staff.



COLUMBIA COLLEGE PHOTO

HOSPITALITY MANAGEMENT
FOOD SERVICE TECHNOLOGY

REQUIRED COURSES:		UNITS
Hosp. Mgmt. 101	Introduction to Hospitality Industry	3
Hosp. Mgmt. 103	Marketing of Hospitality Services	3
Hosp. Mgmt. 130	Food Service Management	2
Hosp. Mgmt. 131	Dining Room Service	2
Hosp. Mgmt. 133a	Intro. to Commercial Food Preparation	3
Hosp. Mgmt. 133b	Intro. to Commercial Food Preparation	3
Hosp. Mgmt. 135	Commercial Baking	3
Hosp. Mgmt. 139	Food Science and Nutrition	3
Hosp. Mgmt. 140a	Classical Cuisine: Beginning	3
Hosp. Mgmt. 140b	Classical Cuisine: Intermediate	3
Hosp. Mgmt. 144	Meat Analysis	2

TOTAL REQUIRED UNITS 30

HOSPITALITY MANAGEMENT
HOTEL MANAGEMENT

REQUIRED COURSES:		UNITS
Hosp. Mgmt. 101	Introduction to Hospitality Industry	3
Hosp. Mgmt. 103	Marketing of Hospitality Services	3
Hosp. Mgmt. 112	Front Office Management/Hotel Catering	3
Hosp. Mgmt. 114	Intro. to Maintenance and Housekeeping	2
Hosp. Mgmt. 130	Food Service Management	2
Hosp. Mgmt. 160	Intro. to Travel-Tourism Industry/Tours	3
Bus. Ad. 63	Business Mathematics	3

TOTAL REQUIRED UNITS 19

RECOMMENDED OPTIONAL COURSES:

Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Off. Oc. 136	Electronic Printing Calculators	1

HUMAN SERVICES
DISABLED

REQUIRED COURSES:		UNITS
Physical Ed. 105	Personal Fitness Concepts/Evaluation	2.5
Physical Ed. 106	Theory & Practice of Adaptive P.E.	2.5
Physical Ed. 107	Corrective Rehab. P.E. Assisting	1-2
Physical Ed. 173a	Adult Fitness Program	1-3
Psychology 101	General Psychology	3
Psychology 103	Social Psychology	3
Psychology 125	Biofeedback and Self-Control	3
Psychology 130	Personal and Social Adjustment	3
Sociology 101	Introduction to Sociology	3
Sociology 110	Deviance and Conflict	3
Sociology 140	Human Services	3
Sociology 141	Human Services Laboratory	1

TOTAL REQUIRED UNITS 29-32

HUMAN SERVICES
GERONTOLOGY

REQUIRED COURSES:		UNITS
Health Ed. 50	Cardiopulmonary Resuscitation	.5
Health Ed. 105	Consumer Health	2
Physical Ed. 171	Introduction to Adult Fitness	1.5
Physical Ed. 172	Multiphasic Fitness Testing Program	1
Physical Ed. 173a	Adult Fitness Program	1-3
Psychology 101	General Psychology	3
Psychology 130	Personal and Social Adjustment	3
Sociology 101	Introduction to Sociology	3
Sociology 112	Family, Marriage, and the Individual	3
Sociology 127	Aging	3
Sociology 128	Death and Dying	3
Sociology 140	Human Services	3
Sociology 141	Human Services Laboratory	1

TOTAL REQUIRED UNITS 28-30

HUMAN SERVICES
SOCIAL WELFARE

REQUIRED COURSES:		UNITS
Psychology 101	General Psychology	3
Psychology 130	Personal and Social Adjustment	3
Psychology 145a	Developmental Psychology	3
Psychology 145b	Developmental Psychology	3
Sociology 101	Introduction to Sociology	3
Sociology 110	Deviance and Conflict	3
Sociology 112	Family, Marriage and the Individual	3
Sociology 128	Death and Dying	3
Sociology 140	Human Services	3
Sociology 141	Human Services Laboratory	1
Speech 135	Interpersonal Communication	3

TOTAL REQUIRED UNITS 31

NATURAL RESOURCES
INTERPRETATION

REQUIRED COURSES:		UNITS
Art 145	Field Photography	2
Biology 58	Birds of the Mother Lode	1
Biology 59	Wildflowers of the Mother Lode	2
Earth Sci. 59	Geology of the Mother Lode	2
Earth Sci. 125	Geology of the National Parks	3
For. Tech. 56	Tree and Plant Identification	3
	or	
Forestry 110	Dendrology	3
Health Ed. 113	Adv. First Aid and Emergency Care	3
History 149	The Mother Lode	2
	or	
History 155	The American Frontier	3
Nat. Res. 100	Environmental Conservation	3
Nat. Res. 109	Parks and Forests Law Enforcement	2
Nat. Res. 130	Wild Edible and Useful Plants	3
Nat. Res. Tech. 50	Natural History and Ecology	2
Nat. Res. Tech. 52	Applied Wildlands Management	3
Nat. Res. Tech. 55	Interpretive Guided Tours	2
Nat. Res. Tech. 81	California Wildlife	4

TOTAL REQUIRED UNITS 37-38

NATURAL RESOURCES TECHNOLOGY

REQUIRED COURSES:		UNITS
Earth Sci. 125	Geology of National Parks	3
Fire Sci. 117	Wildland Fire Control	2
For. Tech. 50	Intro. to Technical Forestry	2
	or	
Forestry 101	Introduction to Professional Forestry	3
For. Tech. 53	Forest Surveying Techniques	3
For. Tech. 56	Tree & Plant Identification	3
	or	
Forestry 110	Dendrology	3
Nat. Res. Tech. 50	Natural History and Ecology	2
Nat. Res. Tech. 52	Applied Wildlands Management	3
Nat. Res. Tech. 55	Interpretive Guided Tours	2
Nat. Res. Tech. 60	Aerial Photog. & Map Interpretation	2
Nat. Res. Tech. 81	California Wildlife	4
Nat. Res. 100	Environmental Conservation	3
Nat. Res. 109	Parks & Forests Law Enforcement	2

TOTAL REQUIRED UNITS 31-32

PROVEN COMPETENCY REQUIREMENTS:
Mathematics Examination **or**
Math 50 Basic Mathematics (or higher) 2
Reading Examination **or**
English 51 or 101a 3
Typing Examination **or**
Off. Oc. 101a Keyboarding **or**
Off. Oc. 101b Basic Typing Applications 1-2
Writing Examination **or**
English 51 or 101a 3

OFFICE OCCUPATIONS
CLERK TYPIST

REQUIRED COURSES:		UNITS
Bus. Ad. 63	Business Mathematics	3
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Accounting	4
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Comp. Sci. 103	Computer Operating Systems	1
Office Oc. 65	Business English	3
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 108	Word Processing: Electronic Typewriter	1
	or	
Office Oc. 109	Word Processing: Display System	2
Office Oc. 130	Filing Systems and Records Management	2
Office Oc. 132	Machine Transcription	2
Office Oc. 136	Electronic Printing Calculators	1
Office Oc. 138	Office Procedures	3

TOTAL REQUIRED UNITS 26-31

OFFICE OCCUPATIONS
GENERAL CLERK

REQUIRED COURSES:		UNITS
Bus. Ad. 63	Business Mathematics	3
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Accounting	4
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Comp. Sci. 103	Computer Operating Systems	1
Office Oc. 65	Business English	3
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 130	Filing Systems and Records Management	2
Office Oc. 136	Electronic Printing Calculators	1

TOTAL REQUIRED UNITS 20-24

OFFICE OCCUPATIONS
LEGAL SECRETARIAL

REQUIRED COURSES:		UNITS
Bus. Ad. 58	Pegboard Payroll	1
Bus. Ad. 115a	Commercial Law	3
Bus. Ad. 115b	Commercial Law	3
Computer Sci. 103	Computer Operating Systems	1
Office Oc. 65	Business English	3
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 108	Word Processing: Electronic Typewriter	1
Office Oc. 109	Word Processing: Display System	2
Office Oc. 112	Intermediate Shorthand	4
Office Oc. 130	Filing Systems/Records Management	2
*Office Oc. 132	Machine Transcription	2
*Office Oc. 154	Legal Transcription/Terminology	2
Office Oc. 157	Legal Office Procedures	3

TOTAL REQUIRED UNITS 33

* Must earn at least a letter grade of "B" in Office Oc. 132 before enrolling in Office Oc. 154.

OFFICE OCCUPATIONS
MEDICAL RECEPTIONIST

REQUIRED COURSES:		UNITS
Bus. Ad. 58	Pegboard Payroll	1
Bus. Ad. 63	Business Math	3
Computer Sci. 103	Computer Operating Systems	1
Office Oc. 65	Business English	3
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 108	Word Processing: Electronic Typewriter	1
Office Oc. 109	Word Processing: Display System	2
Office Oc. 132	Machine Transcription	2
Office Oc. 136	Electronic Printing Calculators	1
Office Oc. 138	Office Procedures	3
Office Oc. 140	Medical Terminology	4
Office Oc. 142a	Medical Transcription	2
Office Oc. 144	Medical Insurance	2

TOTAL REQUIRED UNITS 31

OFFICE OCCUPATIONS
MEDICAL TRANSCRIPTION

REQUIRED COURSES:		UNITS
Computer Sci. 103	Computer Operating Systems	1
Office Oc. 65	Business English	3
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
*Office Oc. 132	Machine Transcription	2
Office Oc. 140	Medical Terminology	4
*Office Oc. 142a	Medical Transcription	2
*Office Oc. 142b	Medical Transcription	2

TOTAL REQUIRED UNITS 20

*Must earn at least a letter grade of "B" in Office Oc. 132 before enrolling in Office Oc. 142ab.

OFFICE OCCUPATIONS
SECRETARIAL

REQUIRED COURSES		UNITS
Bus. Ad. 63	Business Mathematics	3
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Accounting	4
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Computer Sci. 103	Computer Operating Systems	1
Office Oc. 65	Business English	3
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 108	Word Processing: Electronic Typewriter	1
Office Oc. 109	Word Processing: Display System	2
Office Oc. 130	Filing Systems and Records Management	2
Office Oc. 132	Machine Transcription	2
Office Oc. 136	Electronic Printing Calculators	1
Office Oc. 138	Office Procedures	3

TOTAL REQUIRED UNITS 28-32

SEARCH AND RESCUE

REQUIRED COURSES		UNITS
Health Oc. 103	Emergency Med. Tech. Training	6
S.A.R. 103	Environmental Injuries	1
S.A.R. 107	Basic Survival	1
S.A.R. 110	Introduction to Search Theory	2
	or	
S.A.R. 112	Organization/Direction of Search	2
S.A.R. 114	Tracking and Signcutting	1
S.A.R. 122	Wilderness Navigation	2
S.A.R. 126	Grid Search Techniques	1
S.A.R. 130	Introduction to Rescue Techniques	2
S.A.R. 132	Ascending and Descending Techniques	2
S.A.R. 134	Helicopter Operations	1
S.A.R. 136	Swiftwater Rescue	2
S.A.R. 150	Rope Rescue	1.5

TOTAL 22.5

PLUS 2 UNITS FROM ANY OTHER COURSES IN THE SEARCH AND RESCUE CURRICULUM 2

TOTAL REQUIRED UNITS 24.5

TEACHER AIDE

REQUIRED COURSES:		UNITS
Teacher Aide 55a	Teacher Aide Training: Beg	3
Teacher Aide 55b	Teacher Aide Training: Int	3
Teacher Aide 65	Reading Fundamentals for Teacher Aides	2
English 101a	Reading and Composition	3
Health Ed. 110	Safety and First Aid Education	2
History 117a	United States History	3
	or	
Pol. Science 101	Constitutional Government	3
Psychology 101	General Psychology	3

TOTAL REQUIRED UNITS 19

VOCATIONAL NURSING

REQUIRED COURSES:		UNITS
Health Oc. 110	Intro. to Vocational Nursing	3
Health Oc. 113	Anatomy and Physiology for Voc. Nurses	3
Health Oc. 115	Maternity Nursing	3
Health Oc. 120a	Effects of Medication	2
Health Oc. 120b	Effects of Medication	2
Health Oc. 123	Pediatrics	2
Health Oc. 125a	Medical-Surgical Nursing	2
Health Oc. 125b	Medical-Surgical Nursing	5
Health Oc. 125c	Medical-Surgical Nursing	5
Health Oc. 128	Community Health	3
Health Oc. 140a	Clinic	8
Health Oc. 140b	Clinic	7
Health Oc. 140c	Clinic	7

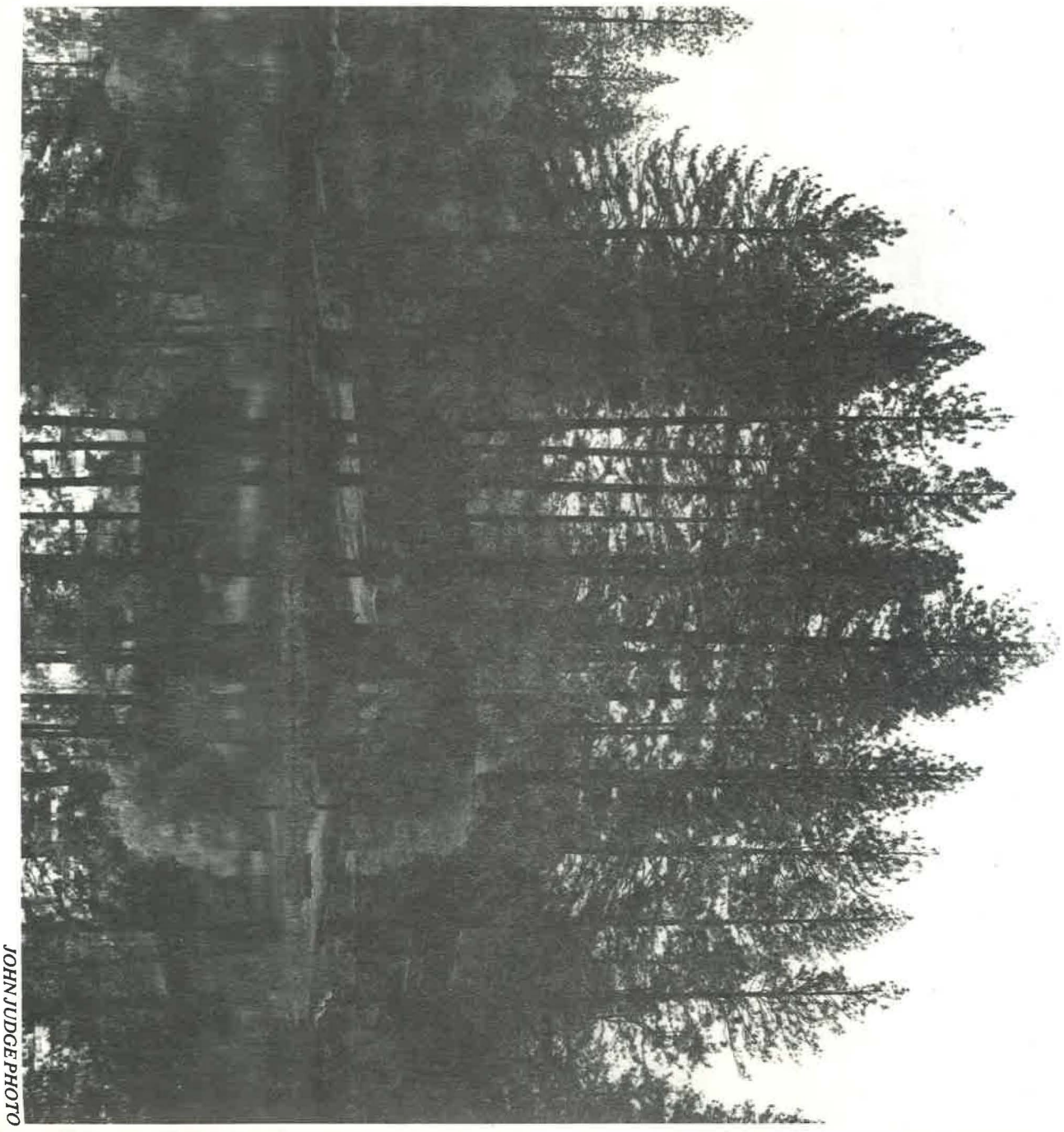
TOTAL REQUIRED UNITS 52

WELDING TECHNOLOGY

REQUIRED COURSES:		UNITS
Mathematics 50	Basic Mathematics	2
	or	
Demonstrated	Competency	
Weld. Tech. 101	Introduction to Welding	3
Weld. Tech. 103	Adv. Arc Welding Techniques	3
Weld. Tech. 110	Blueprint Reading	2
Weld. Tech. 130	Maintenance Welding	2
Weld. Tech. 145	Metal Fabrication	3
Weld. Tech. 160	Practical Laboratory	1

TOTAL REQUIRED UNITS 14-16

GRADUATION AND TRANSFER REQUIREMENTS



JOHN JUDGE PHOTO

GRADUATION REQUIREMENTS AT COLUMBIA COLLEGE:

Columbia College will confer the Associate in Arts or the Associate in Science Degree upon completion of the following requirements. (The Associate in Science Degree is awarded for majors in physical or biological sciences or in occupational programs; the Associate in Arts Degree is awarded for all other majors.)

1. TOTAL UNITS: Satisfactory completion of 60 or more semester units, of which the last 12 required units must be taken in residence at Columbia College.

2. SCHOLARSHIP: A cumulative Grade Point Average of not less than 2.0 ("C" average).

3. MAJOR: Satisfactory completion of any AA/AS Major listed in the Columbia College Catalog. (Course listing for each major is available in the Admissions and Records Office.) More than one Associate Degree may be awarded to a student who completes all applicable requirements plus 12 extra units in residence (72 or more total semester units). No courses of the first major may be counted in the major for the second degree.

TRANSFER REQUIREMENTS TO A CALIFORNIA STATE UNIVERSITY:

Columbia College will send certification of General Education Breadth Requirements to the California State University campus to which the student transfers. Full certification consists of not less than 39 semester units from Areas "A" through "E" below. In addition, the following transfer requirements apply:

1. TOTAL UNITS: Satisfactory completion of 56 to 70 transferrable semester units. If you wish to transfer with less than 56 transferrable units, you must submit satisfactory test scores from either the Scholastic Aptitude Test (SAT) or American College Testing Program (ACT). For possible exemption from ACT and SAT tests, see catalog of college to which student plans to transfer. (At San Luis Obispo, test scores are required of all transfer students.)

2. SCHOLARSHIP: A cumulative Grade Point Average of not less than 2.0 ("C" average).

3. MAJOR: Satisfactory completion of lower division prerequisites for the BA/BS Major listed in the catalog of the California State University transfer campus.

4. GENERAL EDUCATION BREADTH REQUIREMENTS: Satisfactory completion of each Area of General Education "A" through"E"below, by choosing suitable courses from those listed under each Area. Students wishing to transfer to California State Universities should follow the requirements listed in the right-hand column. Students who do not expect to transfer, but wish to graduate from Columbia College with the AA or AS Degree, should follow the requirements listed in the left-hand column. The list of courses suitable to satisfy BOTH patterns are listed in the center column. Transfer students are encouraged to satisfy both patterns at the same time by careful selection of courses, in order to graduate with the AA/AS Degree as well as transferring to a C.S.U. campus.

FOR AA/AS GRADUATION:	SUITABLE COURSES FOR EACH AREA OF GENERAL EDUCATION:	FOR TRANSFER:
Two courses required: one from A.2, and one from either A.1 or A.3.	**AREA A.: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING:** **A.1 Oral Communication** Speech 101, Fundamentals of Speech (3). **A.2 Written Communication** English 101a, Reading and Composition: Beginning (3). English 101b, Reading and Composition: Advanced (3). **A.3 Critical Thinking** Mathematics 104, Introduction to Logic (3). or Philosophy 104, Introduction to Logic (3). Computer Science 120, BASIC Programming (3).	Three courses required, including one from A.2.

FOR AA/AS GRADUATION:

Three courses required: one each from B.1, B.2, and B.3, including one laboratory course from either B.1 or B.2. **Also acceptable in B.3: Business Administration 63,** Business Mathematics (3), and **Mathematics 60,** Geometry (4).

SUITABLE COURSES FOR EACH AREA OF GENERAL EDUCATION:

AREA B. THE PHYSICAL UNIVERSE, ITS LIFE FORMS AND MATHEMATICAL CONCEPTS:

B.1 Physical Sciences:
Chemistry 100, Fundamentals of Chemistry (4), (lab course).
Chemistry 101a, General Chemistry (5), (lab course).
Earth Science 114, Physical Geology (4), (lab course).
Earth Science 142, Descriptive Astronomy (3).
Earth Science 144, General Astronomy (4), (lab course).
Earth Science 161, Fundamentals of Meteorology (3), (lab course).
Earth Science 171, Fundamentals of Oceanography (3), (lab course).
Physics 100, Modern Physics (2).
Physics 120a, General Physics (5), (lab course).

B.2 Biological Sciences:
Biology 108, Fundamentals of Biology (3).
Biology 109, Fundamentals of Biology Laboratory (1).
Biology 111, Principles of Biology (4), (lab course).
Biology 120, Fundamentals of Plant Biology (2), (lab course).

B.3 Quantitative Reasoning and Mathematics:
Math. 101, Intermediate Algebra (4).
Math. 102, Trigonometry (4).
Math. 103, College Algebra (4).
Math. 105, Elements of Statistics (4).
Math. 110, Finite Mathematics (4).
Math. 115, Matrix Mathematics for Computers (2).
Math. 120a, Calculus with Analytic Geometry (4).

FOR TRANSFER:

Three courses required: one each from B.1, B.2, and B.3, including one laboratory course from either B.1 or B.2, and not less than nine units total from AREA B.

FOR AA/AS GRADUATION:

Two courses required: one each from C.1 and C.2. **Also acceptable in C.1: Music 110a or 110b.** Survey of Music History and Literature (3,3). **Also acceptable in C.2: English 101b,** Reading and Composition: Advanced (3).

SUITABLE COURSES FOR EACH AREA OF GENERAL EDUCATION:

AREA C. ARTS, LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGE:

C.1 Arts (Art, Dance, Drama, Music):
Art 111a, History of Art: Ancient and Medieval (3).
Art 111b, History of Art: Renaissance, Baroque, Modern (3).
Drama 102, Oral Expression and Interpretation (3).
Music 102, Introduction to Music (3).

C.2 Literature, Philosophy, Foreign Language:
English 117a, Literature of the United States (3).
English 117b, Literature of the United States (3).
English 146a, Survey of English Literature (3).
English 146b, Survey of English Literature (3).
Humanities 101, Old World Culture (3).
Humanities 102, Modern Culture (3).
Philosophy 101, Introduction to Philosophy (3).
Philosophy 125, Twentieth Century Philosophy (3).

FOR TRANSFER:

Three courses required, including one each from C.1 and C.2.

FOR AA/AS GRADUATION:

Two courses required: one from either D.1 or D.2, and one from D.3. **Also acceptable in D.2: Anthropology 115,** Indians of North America (3).

SUITABLE COURSES FOR EACH AREA OF GENERAL EDUCATION:

AREA D. SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR:

D.1 General Social Sciences:
Anthropology 101, Introduction to Anthropology: Physical (3).
Economics 101a, Principles of Economics: Macro-Economics (4).
Psychology 101, General Psychology (3).
Sociology 101, Introduction to Sociology (3).

D.2 Civilization and Cultures:
Geography 102, Introduction to Cultural Geography (3).
History 104a, World Civilizations: to 1650 (4).

D.3 United States History and Government:
History 117a, United States: to 1865 (3).
Political Science 101, Constitutional Government (3).

FOR TRANSFER:

Four courses required: one each from D.1 and D.2, and two from D.3. **Also acceptable in D.2: Anthropology 102,** Introduction to Anthropology: Cultural (3), and **History 104b,** World Civiliations: 1650 to Present (4), and **History 111:** Asian Civilizations (3). **Also acceptable in D.3: History 117b,** United States: 1865 to Present (3). (Refer to Note 2 below for more information about D.3.)

FOR AA/AS GRADUATION:

Required: Three units in E. **Also acceptable in E: Any two Physical Education activity courses.**

SUITABLE COURSES FOR EACH AREA OF GENERAL EDUCATION:

AREA E. LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT:
Health Education 101, Health and Fitness Education (3).

FOR TRANSFER:

Required: Three units in E. **Also acceptable in E: Physical Education 171,** Introduction to Adult Fitness (1.5), and **Physical Education 173a,** Adult Fitness Program (1-3).

NOTICE OF INTENT TO GRADUATE: The student must file a Notice of Intent to Graduate from Columbia College in the Admissions and Records Office no later than the seventh week of the semester in which completion of the graduation requirements is expected. Graduation requirements may be completed during any college term, but degrees are conferred only at graduation exercises at the close of the Spring Semester.

SUPPLEMENTARY NOTES:

1. These requirements for graduation and General Education apply to Associate Degree and transfer students entering Columbia College for the first time in Fall semester 1984, and are valid through the 1987-88 academic year. Students previously enrolled may continue to follow their older catalog, but those taking more than four years to graduate must use graduation requirements not older than four years.

2. California law includes a requirement in U.S. History and Government for the BA/BS Degree. Completion of two courses from D.3 will meet the requirement, but only three units will be credited toward the 39 certified General Education units. (Units above 39 will count instead for elective credit.) Some California State University campuses place the U.S. History and Government requirement outside the General Education requirement, while others include it within. Consult the catalog of the California State University campus to which you will transfer, or see your advisor for clarification.

3. **Double-counting units:** Courses used to satisfy General Education Breadth Requirements may also be used to satisfy major requirements in both patterns above, except for the Columbia College Liberal Studies major. For the A.A. Liberal Studies major, the same courses may not be used for both the **Major and the General Education Breadth Requirements.**

—NOTES—

COLUMBIA COLLEGE MAJORS

Students are required to complete an academic major to fulfill the Associate Degree requirements of Columbia College. Following are the course requirements for each major currently offered.

ART

REQUIRED COURSES:		UNITS
Art 101	Freehand Drawing	3
Art 102	Basic Color & Design	3
Art 109a	Life Drawing: Beginning	1.5
Art 111a	History of Art: Ancient and Medieval	3
Art 111b	History of Art: Ren., Baroque, Modern	3
Art 121a	Painting: Beginning	3
Art 123a	Watercolor: Beginning	3
Art 131a	Ceramics: Introductory	3
	TOTAL	22.5

ART
PHOTOGRAPHY

REQUIRED COURSES:		UNITS
Art 102	Basic Color & Design	3
Art 141a	Photography: Beginning	3
Art 141b	Photography: Intermediate	3
Art 141c	Photography: Advanced	3
Art 142a	Color Photo.: Slidemaking	3
Art 148	Special Topics in Photography	3
	TOTAL	18

AUTOMOTIVE TECHNOLOGY

REQUIRED COURSES:		UNITS
Auto. Tech. 101	Intro. to Auto. Tech.	1
Auto. Tech. 114	Machine Shop Procedures	1
Auto. Tech. 116	Engine Rebuilding	4
Auto. Tech. 117a	Fuel Systems	1
Auto. Tech. 117b	Emission Control	1
Auto. Tech. 119	Gasoline Engine Tune-up	1
Auto. Tech. 130	Manual Trans. Rebuilding	1
Auto. Tech. 134	Axles and Drive Lines	1
Auto. Tech. 136	Auto. Transmission (GM)	1
Auto. Tech. 140a	Brakes (Drum)	1
Auto. Tech. 144a	Front-end and Suspension	2
Auto. Tech. 150a	Electrical Theory	1
Auto. Tech. 150b	Charging Systems	2
Auto. Tech. 150c	Starting & Ignition Systems	2
Auto. Tech. 150d	Lighting & Chassis Elec.	1
	TOTAL REQUIRED UNITS	21

BIOLOGY

REQUIRED COURSES:		UNITS
AT LEAST 12 UNITS FROM:		
Biology 111	Principles of Biology	4
Biology 121	Principles of Plant Biology	4
Biology 131	Principles of Animal Biology	5
Biology 140	Introductory Human Anatomy	4
Biology 160	Introduction to Human Physiology	4
Biology 165	Microbiology	4
	TOTAL	12
AND AT LEAST 8 UNITS FROM:		
Any Biology course 100 or above not counted in the above list		1-4
Chemistry 100 or higher		4-5
Earth Science 139	Field Geology	1-3
Health Ed. 120	Nutrition	3
Natural Res. 100	Environmental Conservation	3
Physics 100 or higher		2-5
	TOTAL	20

BUSINESS
CLERICAL

REQUIRED COURSES:		UNITS
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Acctng.	4
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Office Oc. 65	Business English	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 108	Word Process: Electronic Typewriter	1
Office Oc. 130	Filing Systems & Records Mgmt.	2
Office Oc. 132	Machine Transcription	2
	TOTAL	15-19
AND 1-5 UNITS FROM:		
Bus. Ad. 63	Business Mathematics	3
Computer Sci. 103	Computer Operating Systems	1
Office Oc. 68	Business Correspondence	3
Office Oc. 136	Electronic Printing Calculators	1
	TOTAL REQUIRED UNITS	20

BUSINESS
SECRETARIAL

REQUIRED COURSES:		UNITS
Office Oc. 68	Business Correspondence	3
Office Oc. 103	Intermediate Typing	3
Office Oc. 112	Intermediate Shorthand	4
Office Oc. 130	Filing Systems & Records Mgmt	2
Office Oc. 132	Machine Transcription	2
	TOTAL	14

AND 6 UNITS FROM:

Office Oc. 65	Business English	3
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Accounting	4
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Computer Sci. 103	Computer Operating Systems	1

TOTAL REQUIRED UNITS 20

BUSINESS
BUSINESS ADMINISTRATION (PROFESSIONAL)

REQUIRED COURSES:		UNITS
Bus. Ad. 115a	Commercial Law	3
Bus. Ad. 115b	Commercial Law	3
Bus. Ad. 130a	Accounting	4
Bus. Ad. 130b	Accounting	4
Computer Sci. 103	Computer Operating Systems	1
Economics 101a	Principles of Economics	4
Economics 101b	Principles of Economics	4

TOTAL REQUIRED UNITS 23

BUSINESS
BUSINESS ADMINISTRATION (OCCUPATIONAL)

REQUIRED COURSES:		UNITS
Bus. Ad. 63	Business Mathematics	3
Bus. Ad. 101	Principles of Business	3
Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 61	Small Business Accounting	4
Computer Sci. 103	Computer Operating Systems	1
Office Oc. 68	Business Correspondence	3

TOTAL 14-16

AND 6 UNITS FROM:

Bus. Ad. 104	Human Relations in Business	3
Bus. Ad. 115a	Commercial Law	3
Bus. Ad. 115b	Commercial Law	3
Bus. Ad. 120	Principles of Marketing	3
Bus. Ad. 123	Sales	3
Bus. Ad. 125	Advertising & Display Promotion	3
Bus. Ad. 140	Principles of Management	3
Bus. Ad. 145	Retail Business Management	3
Bus. Ad. 150	Small Business Management	3

TOTAL REQUIRED UNITS 20-22

CHEMISTRY

REQUIRED COURSES:		UNITS
Chemistry 101a	General Chemistry	5
Chemistry 101b	General Chemistry	5
Chemistry 108	Organic Chemistry	4
	TOTAL	14

AND A MINIMUM OF 8 UNITS FROM:

Math 120a	Calculus w/Analytic Geometry	4
Math 120b	Calculus w/Analytic Geometry	4
Physics 120a	General Physics	5
Physics 120b	General Physics	5

TOTAL REQUIRED UNITS 22

COMPUTER SCIENCE

REQUIRED COURSES:		UNITS
Computer Sci. 101	Intro. to Microcomputers	1
Computer Sci. 103	Computer Operating Systems	1
Computer Sci. 121	Data File Programming with BASIC	3
Computer Sci. 125	PASCAL Programming	3
Computer Sci. 127	FORTRAN Programming	3
	or	
Computer Sci. 129	COBOL Programming	3
	or	
Computer Sci. 132	RPG II Programming	3
Computer Sci. 140	Assembly Language Programming	3
Computer Sci. 155	Data Base Management	3
Mathematics 110	Finite Mathematics	4

TOTAL REQUIRED UNITS 21

EARTH SCIENCE

REQUIRED COURSES:		UNITS
Earth Science 114	Physical Geology	4
Earth Science 133	Global Tectonic Geology	3
Earth Science 139	Field Geology	1-3
Earth Science 142	Descriptive Astronomy	3
	or	
Earth Science 144	General Astronomy	4
Earth Science 161	Fundamentals of Meteorology	3
	or	
Earth Science 171	Fundamentals of Oceanography	3

TOTAL 14-17

MINIMUM OF 5 UNITS FROM:

Earth Science 125	Geology of National Parks	3
Chemistry 100	Fundamentals of Chemistry	4
Computer Sci. 120	BASIC Programming	3
Nat. Res. Tech. 60	Aerial Photography and Map Interpretation	2

TOTAL REQUIRED UNITS 19-22

RECOMMENDED COURSES:
Chemistry 101ab, Physics 120ab, and Mathematics to include College Algebra and Calculus.

ENGLISH

REQUIRED COURSES:		UNITS
English 101a	Reading and Composition: Beginning	3
English 101b	Reading and Composition: Advanced	3
	TOTAL	6

AND AT LEAST 15 UNITS FROM:

English 110	Creative Writing	3
English 117a	Literature of the U.S.	3
English 117b	Literature of the U.S.	3
English 146a	Survey of English Literature	3
English 146b	Survey of English Literature	3
English 149	California Literature	3
English 150	Introduction to Shakespeare	3

TOTAL REQUIRED UNITS 21

FIRE TECHNOLOGY

REQUIRED COURSES:		UNITS
Fire Tech. 101	Introduction to Fire Technology	2
Fire Tech. 102	Fund. of Personal Fire Safety and Emergency Action	2
Fire Tech. 103	Fundamentals of Fire Protection	2
Fire Tech. 104	Fund. of Fire Behavior and Control	2
Fire Tech. 105	Fundamentals of Fire Prevention	3
Fire Tech. 108	Firefighting Strategy & Tactics	2
Fire Tech. 114	Fire Apparatus & Equipment	2
Fire Tech. 117	Wildland Fire Control	2
Fire Tech. 123	Fire Hydraulics	3
Fire Tech. 130	Fire Protection Equip. and Sys	2

TOTAL REQUIRED UNITS 22

FORESTRY TECHNOLOGY

REQUIRED COURSES:		UNITS
For. Tech. 50	Intro. to Technical Forestry	2
	or	
Forestry 101	Intro. to Professional Forestry	3
For. Tech. 53	Forest Surveying Techniques	3
For. Tech. 56	Tree & Plant Identification	3
	or	
Forestry 110	Dendrology	3
Nat. Res. Tech. 60	Aerial Photography and Map Interpretation	2

TOTAL 10-11

AND 9-10 UNITS FROM:

Fire Tech. 117	Wildland Fire Control	2
Forestry Tech. 62	Applied Forest Inventroy and Management	4
Nat. Res. Tech. 50	Natural History and Ecology	2
Nat. Res. Tech. 52	Applied Wildlands Management	3
Nat. Res. Tech. 81	California Wildlife	4
Natural Res. 100	Environmental Conservation	3
Natural Res. 109	Parks and Forests Law Enforcement	2

TOTAL REQUIRED UNITS 20

HEALTH OCCUPATIONS
VOCATIONAL NURSING

REQUIRED COURSES:		UNITS
Health Oc. 110	Intro. to Vocational Nursing	3
Health Oc. 113	Anatomy & Physiology for Voc. Nurses	3
Health Oc. 115	Maternity Nursing	3
Health Oc. 120a	Effects of Medication	2
Health Oc. 120b	Effects of Medication	2
Health Oc. 123	Pediatrics	2
Health Oc. 125a	Medical-Surgical Nursing	2
Health Oc. 125b	Medical-Surgical Nursing	5
Health Oc. 125c	Medical-Surgical Nursing	5
Health Oc. 128	Community Health	3
Health Oc. 140a	Clinic	8
Health Oc. 140b	Clinic	7
Health Oc. 140c	Clinic	7

TOTAL REQUIRED UNITS 52

HISTORY

REQUIRED COURSES:		UNITS
History 104a	World Civilization: to 1650	4
History 104b	World Civilization: 1650 to Present	4
History 117a	United States: to 1865	3
History 117b	United States: 1865 to Present	3
	TOTAL	14

AND AT LEAST 4 UNITS FROM:
Any other History course or
Any Political Science course or

Anthro. 101	Intro. to Anthro: Physical	3
	or	
Anthro. 102	Intro. to Anthro: Cultural	3
Economics 101a	Prin. of Econ.: Macro-Economics	4
	or	
Economics 101b	Prin. of Econ.: Micro-Economics	4
Geography 102	Cultural Geography	3
Sociology 101	Introduction to Sociology	3
	or	
Sociology 102	American Social Patterns	3

TOTAL REQUIRED UNITS 18

HOSPITALITY MANAGEMENT
FOOD SERVICE TECHNOLOGY

REQUIRED COURSES:		UNITS
Hosp. Mgmt. 101	Introduction to Hospitality Industry	3
Hosp. Mgmt. 103	Marketing of Hospitality Services	3
Hosp. Mgmt. 130	Food Service Management	2
Hosp. Mgmt. 131	Dining Room Service	2
Hosp. Mgmt. 133a	Intro. to Commercial Food Preparation	3
Hosp. Mgmt. 133b	Intro. to Commercial Food Preparation	3
Hosp. Mgmt. 139	Food Science and Nutrition	3
Hosp. Mgmt. 140a	Classical Cuisine: Beginning	3
Hosp. Mgmt. 140b	Classical Cuisine: Intermediate	3

TOTAL REQUIRED UNITS 25

HOSPITALITY MANAGEMENT
HOTEL MANAGEMENT

REQUIRED COURSES:		UNITS
Hosp. Mgmt. 101	Introduction to Hospitality Industry	3
Hosp. Mgmt. 103	Marketing of Hospitality Services	3
Hosp. Mgmt. 112	Front Office Management/ Hotel Catering	3
Hosp. Mgmt. 114	Intro. to Maintenance and Housekeeping	2
Hosp. Mgmt. 130	Food Service Management	2
Hosp. Mgmt. 160	Intro. to Travel-Tourism Industry/Tours	3
Bus. Ad. 63	Business Mathematics	3

TOTAL REQUIRED UNITS 19

RECOMMENDED OPTIONAL COURSES:

Bus. Ad. 60a	Bookkeeping and	3
Bus. Ad. 60b	Bookkeeping	3
	or	
Bus. Ad. 130a	Accounting and	4
Bus. Ad. 130b	Accounting	4
Off. Oc. 136	Electronic Printing Calculators	1

HUMANITIES

REQUIRED COURSES:		UNITS
Humanities 101	Old World Culture	3
Humanities 102	Modern Culture	3
AND ONE COURSE IN ART HISTORY FROM:		
Art 111a	History ofArt: Ancient and Medieval	3
Art 111b	History of Art: Ren., Baroque, Modern	3
AND ONE COURSE IN MUSIC FROM:		
Music 102	Introduction to Music	3
Music 110a	Survey of Music History and Literature	3
Music 110b	Survey of Music History and Literature	3
AND ONE COURSE IN LITERATURE FROM:		
English 117a	Literature of the United States	3
English 117b	Literature of the United States	3
English 146a	Survey of English Literature	3
English 146b	Survey of English Literature	3
AND ONE COURSE IN HISTORY OR PHILOSOPHY FROM:		
History 104a	World Civilizations: to 1650	4
History 104b	World Civilizations: 1650 to Present	4
History 111	Asian Civilizations	3
Philosophy 101	Introduction to Philosophy	3
Philosophy 115	World Religions	3
Philosophy 125	Twentieth Century Philosophy	3

TOTAL REQUIRED UNITS 18-19

LIBERAL STUDIES

A minimum of six (6) semester units must be completed in each of the three areas. A minimum of eighteen (18) semester units total must be completed from the three areas combined. (Courses used to fulfill the Liberal Studies Major requirements may not be used to fulfill the General Education requirements for the AA or AS Degree.)

HUMANITIES (Minimum of 6 Units):		
Art 111a	History of Art: Ancient and Medieval	3
Art 111b	History of Art: Ren., Baroque, Modern	3
Drama 102	Oral Expression and Interpretation	3
English 117a	Literature of the United States	3
English 117b	Literature of the United States	3
English 146a	Survey of English Literature	3
English 146b	Survey of English Literature	3
Humanities 101	Old World Culture	3
Humanities 102	Modern Culture	3
Music 110a	Survey of Music History and Literature	3
Music 110b	Survey of Music History and Literature	3
Music 112	Survey of Jazz and Popular Music	3
Philosophy 101	Introduction to Philosophy	3
Philosophy 115	World Religions	3
NATURAL SCIENCES AND MATHEMATICS (Minimum of 6 Units):		
Biology 108	Fundamentals of Biology	3
Biology 111	Principles of Biology	4
Chemistry 100	Fundamentals of Chemistry	4
Chemistry 101a	General Chemistry	5
Comp. Sci. 101	Introduction to Microcomputers	1
Comp. Sci. 103	and Computer Operating Systems	1
Comp. Sci. 120	BASIC Programming	3
Earth Sci. 114	Physical Geology	4
Earth Sci. 142	Descriptive Astronomy	3
Earth Sci. 161	Fundamentals of Meteorology	3
Earth Sci. 171	Fundamentals of Oceanography	3
Math 101	Intermediate Algebra (or higher)	4
Math 104	Introduction to Logic	3
Natural Res. 100	Environmental Conservation	3
Philosophy 104	Introduction to Logic	3
Physics 100	Modern Physics	2
Physics 120a	General Physics	5
SOCIAL SCIENCES (Minimum of 6 Units):		
Anthro. 101	Intro. to Anthropology: Physical	3
Anthro. 102	Intro. to Anthropology: Cultural	3
Anthro. 115	Indians of North America	3
Bus. Ad. 101	Principles of Business	3
Economics 55	Understanding American Economy	3
Economics 101a	Principles of Economics	4
Economics 101b	Principles of Economics	4
Geography 102	Intro. to Cultural Geography	3
History 104a	World Civilization: to 1650	4
History 104b	World Civilization: 1650 to Present	4
History 117a	United States History	3
History 117b	Unites States History	3
Pol. Sci. 101	Constitutional Government	3
Pol. Sci. 125	Comparative Political Systems	3
Psychology 101	General Psychology	3
Psychology 103	Social Psychology	3
Sociology 101	Introduction to Sociology	3
Sociology 102	American Social Patterns	3
Sociology 112	Family, Marriage, Individual	3

MATHEMATICS

REQUIRED COURSES:		UNITS
Math. 103	College Algebra	4
	or	
Math. 105	Elements of Statistics	4
Math. 120a	Calculus w/Analytic Geometry	4
Math. 120b	Calculus w/Analytic Geometry	4

TOTAL 12

AND 10 UNITS FROM:		
Comp. Sci. 120	BASIC Programming	3
Comp. Sci. 121	Data File Programming with BASIC	3
Math 103	College Algebra	4
Math 105	Elements of Statistics	4
Math 110	Finite Mathematics	4
Physics 120a	General Physics	5
Physics 120b	General Physics	5

TOTAL REQUIRED UNITS 22

MUSIC

REQUIRED COURSES:		UNITS
Music 120a	Music Theory	5
Music 120b	Music Theory	5
Music 150	Applied Music (Major Instrument)	1

TOTAL 11

MINIMUM OF 4 UNITS FROM:		
Music 131a	Elementary Class Piano	2
Music 131b	Elementary Class Piano	2
Music 141a	Intermediate Class Piano	2
Music 141b	Intermediate Class Piano	2

Piano majors may substitute additional units from courses in Music 150 - 179 series. TOTAL 15

AND A MINIMUM OF 4 UNITS FROM:		
Music 160	Choir	1-2
Music 164	Jazz Choir	1-3
Music 165	Theatre Production: Music Emphasis	1-3
Music 166	Community Chorus	1.5
Music 169	Madrigal Ensemble	1.5
Music 170	Wind Ensemble	1-2
Music 172	Jazz Ensemble	1-2
Music 176	Orchestra	1-2
Music 179	Ensemble: Instrumental Emphasis	1

TOTAL REQUIRED UNITS 19

RECOMMENDED 3 UNITS FROM:		
Music 102	Introduction to Music	3
Music 110a	Survey of Music History and Literature	3
Music 110b	Survey of Music History and Literature	3
Music 112	Survey of Jazz and Popular Music	3

NATURAL RESOURCES TECHNOLOGY

REQUIRED COURSES:		UNITS
Nat. Res. Tech. 50	Natural History and Ecology	2
Nat. Res. Tech. 52	Applied Wildlands Management	3
Nat. Res. Tech. 55	Interp. Guided Tours	2
Nat. Res. Tech. 60	Aerial Photo. and Map Interp.	2
Nat. Res. 100	Environmental Conservation	3

TOTAL 12

AND 8 UNITS FROM:		
Fire Sci. 117	Wildland Fire Control	2
For. Tech. 50	Introduction to Technical Forestry	2
	or	
Forestry 101	Introduction to Professional Forestry	3
For. Tech. 53	Forest Surveying Techniques	3
For. Tech. 56	Tree and Plant Identification	3
	or	
Forestry 110	Dendrology	3
For. Tech. 62	Applied Forest Inventory and Management	4
Nat. Res. Tech. 81	California Wildlife	4
Nat. Res. 109	Parks and Forests Law Enforcement	2
Nat. Res. 130	Wild Edible and Useful Plants	3

TOTAL REQUIRED UNITS 20

PHILOSOPHY

REQUIRED COURSES:		UNITS
Philosophy 101	Introduction to Philosophy	3
Philosophy 104	Introduction to Logic	3
	or	
Math 104	Introduction to Logic	3
Philosophy 115	World Religions	3
Philosophy 125	Twentieth Century Philosophy	3
History 104a	World Civilizations: to 1650	4
	or	
History 104b	World Civilizations: 1650 to Present	4
Psychology 130	Personal and Social Adjustment	3
	or	
Psychology 160	Personality Theory	3
	or	
Social Science 140	Human Sexual Behavior	3
	or	
Sociology 112	Family, Marriage, and the Individual	3

TOTAL REQUIRED UNITS 19

PHYSICAL EDUCATION

REQUIRED COURSES:		UNITS
P.E. 101	Introduction to Physical Education	2
P.E. 105	Personal Fitness Concepts and Evaluation	2.5
Biology 108	Fundamentals of Biology	3
Chemistry 100	Fundamentals of Chemistry	4
Health Ed. 101	Health and Fitness Education	3
Health Ed. 110	Safety and First Aid Education	2
	TOTAL	16.5

MINIMUM OF 4 UNITS FROM:		
P.E. 106	Theory/Practice of Adaptive P.E.	2.5
P.E. 107	Corrective Rehab. P.E. Assisting	1-2
P.E. 112	Theatre Production: Dance Emphasis	1-2
P.E. 116	Dance Production	3
P.E. 117	Choreography and Composition	3
P.E. 171	Introduction to Adult Fitness	1.5
P.E. 177	Introduction to Exercise Stress Testing	2.5
Biology 140	Introductory Human Anatomy	4
Biology 160	Introduction to Human Physiology	4
Health Ed. 105	Consumer Health	2
Health Ed. 113	Advanced First Aid and Emergency Care	3
	TOTAL REQUIRED UNITS	20.5

PSYCHOLOGY

REQUIRED COURSES:		UNITS
Psychology 101	General Psychology	3
Psychology 102	Current Issues in Psychology	3
Psychology 145a	Developmental Psychology	3
Psychology 145b	Developmental Psychology	3
Psychology 160	Personality Theory	3
	TOTAL	15

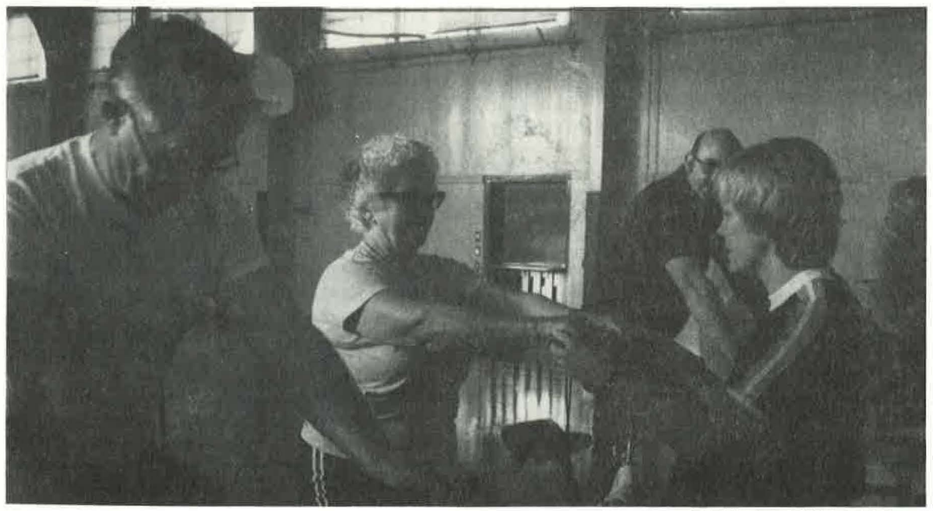
AND AT LEAST 6 UNITS FROM:		
Psychology 125	Biofeedback and Self-Control	3
Psychology 130	Personal/Social Adjustment	3
Soc. Sci. 140	Human Sexual Behavior	3
Sociology 101	Introduction to Sociology	3
Philosophy 101	Introduction to Philosophy	3
	TOTAL REQUIRED UNITS	21

SEARCH AND RESCUE

REQUIRED COURSES:		UNITS
Health Oc. 103	Emergency Med. Tech. Training	6
S.A.R. 103	Environmental Injuries	1
S.A.R. 107	Basic Survival	1
S.A.R. 110	Intro. to Search Theory	2
	or	
S.A.R. 112	Organization/Direction of Search	2
S.A.R. 114	Tracking and Sign Cutting	1
S.A.R. 122	Wilderness Navigation	2
S.A.R. 126	Grid Search Techniques	1
S.A.R. 130	Introduction to Rescue Techniques	2
S.A.R. 132	Ascending & Descending Techniques	2
S.A.R. 134	Helicopter Operations	1
S.A.R. 136	Swiftwater Rescue	2
S.A.R. 150	Rope Rescue	1.5
	TOTAL	22.5

SOCIOLOGY

REQUIRED COURSES:		UNITS
Sociology 101	Introduction to Sociology	3
Sociology 102	American Social Patterns	3
Sociology 110	Deviance and Conflict	3
Sociology 112	Family, Marriage, Individual	3
Sociology 127	Aging	3
Sociology 128	Death and Dying	3
Soc. Sci. 140	Human Sexual Behavior	3
	TOTAL	21



COLUMBIA COLLEGE PHOTO

LOWER DIVISION REQUIREMENTS CALIFORNIA FOUR-YEAR COLLEGES AND UNIVERSITIES

Students should consult the latest catalog of the institution to which they intend to transfer to ensure that all possible required lower division general education courses and prerequisites for the major are included in their Columbia College program of study.

Columbia College advisors will help students select courses that fulfill both major and General Education Breadth Requirements. **The responsibility for fulfilling requirements rests with the student.**

CALIFORNIA STATE UNIVERSITY SYSTEM (C.S.U.) TRANSFER INFORMATION

The California State University system (C.S.U.) has established the following campuses:

California State College, Bakersfield
California State University, Chico
California State University, Dominguez Hills
California State University, Fresno
California State University, Fullerton
California State University, Hayward
Humboldt State University
California State University, Long Beach
California State University, Los Angeles
California State University, Northridge
California State Polytechnic University, Pomona
California State University, Sacramento
California State College, San Bernardino
San Diego State University
San Francisco State University
San Jose State University
California Polytechnic State University, San Luis Obispo
Sonoma State University
California State College, Stanislaus

C.S.U. ADMISSION AS AN UNDERGRADUATE TRANSFER

An applicant for admission as an undergraduate transfer to C.S.U. who is in good standing at the last college attended will be considered for admission under one of the following provisions:

1. You graduated from high school prior to Spring 1984, **and**
   a. were eligible as a freshman* and have a grade point average of 2.0 (C) or better in all transferable college units attempted, **or**
   b. were not eligible as a freshman* **and** have completed at least 56 transferable semester units with a grade point average of 2.0 (C) or better if you are a California resident for tuition purposes.
2. You graduated from high school in the Spring of 1984 or later, **and**
   a. were eligible as a freshman* **and** have a grade point average of 2.0 (C) or better in all transferable college units attempted, **or**
   b. were eligible as a freshman* except for the high school subject requirements in English and mathematics**, have satisfied any deficiencies by equivalent course work, **and** have a grade point average of 2.0 (C) or better in all transferable college units attempted, **or**
   c. were not eligible as freshman*, have completed at least 56 transferable semester units with a grade point average of 2.0 (C) or better if a California resident for tuition purposes **and** have satisfied any high school subject deficiencies in English and mathematics** by equivalent course work.

*Consult the catalog of the institution to which you plan to transfer and your advisor for freshman admission requirements. Beginning Fall 1984, the C.S.U. system has added a subject matter requirement to its standard admission criteria for all new freshmen and undergraduate transfers who graduate from high school beginning Spring 1984. Students will be required to have completed eight high school semesters of college preparatory English and four high school semesters of college preparatory mathematics. New undergraduate transfers who do not meet the high school subject matter requirement must satisfy any deficiency by equivalent course work. Although a portion of the requirement may be waived during the 1984-86 transition period, all new students will be expected to meet the new requirements beginning Fall 1986.

**Consult your advisor for requirements related to makeup of English and mathematics deficiencies with Columbia College coursework.

California residents who are military service personnel or veterans may be considered under special admission requirements. Transferable courses are defined as those officially certified as baccalaureate level by the regionally accredited college at which the courses were taken. Consult your advisor for information on transferability of courses.

A maximum of 70 semester units of community college credit will be accepted by a state university. Units in excess of 70 may be applied toward fulfillment of requirements in General Education Breadth Requirements, the major, or the minor as deemed appropriate by the university.

UNIVERSITY OF CALIFORNIA TRANSFER

The University of California has established campuses at Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santal Barbara, and Santa Cruz.

A student who was not eligible for direct admission to the University from high school may become eligible after making up subject and/or grade deficiencies at Columbia College.

Requirements for students who have attended a community college and who wish to be admitted to the University in advanced standing differ according to high school record and year of high school graduation.

The University will not grant credit toward graduation for work completed in excess of 70 lower division semester units.

Graduation requirements may vary between the different campuses of the University. Prospective transfer students should obtain a catalog from the campus to which they plan to transfer, and in consultation with their advisor, determine courses needed to fulfill requirements. The Career Center maintains University catalogs for student reference.

JOHN JUDGE PHOTO

COURSE DESCRIPTIONS

COLUMBIA COLLEGE PHOTO

COURSE INFORMATION

Numbering of Courses

Courses numbered 1 to 49 are non-credit courses; courses numbered 50 to 99 are not intended for transfer, but may be accepted for transfer credit by agreement with specific four-year colleges and universities.

Courses numbered 100 and above are designated baccalaureate level courses.

Students must understand that some courses designated as baccalaureate level may not meet requirements at the transferring institution; however, they may be used for elective credit.

Course Description

A course description is given for each credit course offered by the College. Students are urged to refer to the course description for information concerning course prerequisites and allocation of class hours for lecture, laboratory, field trips, or other required learning activities.

Courses Not Listed in The Catalog

1. *Credit Free Courses*
   In an effort to meet some of the special interest needs of the populations served by the College, Credit Free Courses are usually offered each semester. These courses are traditionally offered either through Continuing Education or Community Services sponsorship. Credit Free Courses cannot be applied toward fulfilling graduation, transfer, or vocational education programs, but such courses do provide information and/or training on a variety of topical subjects.
2. *80/180 Courses: Special Topics*
   Lecture and/or laboratory hours and units of credit may vary.
   Classes in which a particular topic in a discipline (such as history) is treated with in-depth study. The topic, the number of units and hours, and prerequisites (if any), will be determined in advance and published in the Schedule of Classes. 80/180 Courses may be repeated for credit with different topics only. These courses may transfer for elective credit but will not fill requirements.
3. *85/185 Courses: Interdisciplinary Studies — Special Topics*
   Lecture and/or laboratory hours and units of credit may vary.
   Classes in which a particular topic which crosses interdisciplinary lines is studied in-depth. The topic, the number of units and hours, and prerequisites (if any), will be determined in advance and published in the Schedule of Classes. 85/185 Courses may be repeated for credit with different topics only. These courses may transfer for elective credit but will not fill requirements.
4. *99/199 Courses: Independent Study*
   Independent study courses are intended to give students an opportunity to independently research specialized areas not available as regular course offerings of the college. They are designed to meet specific student interests and may be made available in any subject matter area. Consult your advisor for specific procedures. (See page 22 for conditions, limitation.)

Prerequisites

Prerequisites are intended to ensure that the student will have sufficient preparation before entering a course.

Where no prerequisite is stated for a course, none is required.

A prerequisite may be waived when, in the instructor's judgment, the student has adequate preparation to satisfy the course objectives.

Credit Value

The number after the course indicates the unit credit value of the course. Courses listed in this catalog are described in semester units. One semester unit equals one and one-half quarter units.

Field Trips

Field trips may be required in a number of courses where such a statement is not currently a part of the course description.

ANTHROPOLOGY

101 INTRODUCTION TO ANTHROPOLOGY: Physical — 3 units
Lecture: 3 hours
Man and his evolutionary history with emphasis on recent developments; primatology; the fossil sequence beginning with pre-human through Paleolithic era to the domestication of plants and animals and the dawn of civilization. Race; man's cultural adaptations resulting from his biological and genetic background.

102 INTRODUCTION TO ANTHROPOLOGY: Cultural — 3 Units
Lecture: 3 hours
Primitive man and the concept of culture basic to anthropology. Emphasis on methods of fieldwork, cultural ecology, language, social structure, the psychological perspective, religion, medicine, and cultural change.

103 CURRENT ISSUES IN ANTHROPOLOGY — 3 Units
Prerequisite: Anthropology 101 or 102
Lecture: 3 hours
Intra-specific aggression, territoriality, population control, primate social organization, intra- and inter-species communication, and the present and future trends in social organization, war, religion, and cultural change.

110 INTRODUCTION TO ARCHAEOLOGY — 3 Units
Lecture: 3 hours
Development of archaeology as an anthropological study; a review of archaeological projects in North and South America. Archaeological methods, techniques, and site survey methods.

112 ARCHAEOLOGICAL SURVEY AND SITE IDENTIFICATION — 1 Unit
Prerequisite: Anthropology 110 or concurrent enrollment
Laboratory: 3 hours
Field techniques in identifying, evaluating, and recording archaeological sites. Emphasis on California and Sierra prehistoric and historic period sites.

115 INDIANS OF NORTH AMERICA — 3 Units
Lecture: 3 hours
A survey of the origins, cultures, and customs of peoples indigenous to the North American Continent with a primary emphasis upon folkways dominant prior to interference by foreign cultures; and a secondary emphasis upon the status of the Indians in the USA today.

ART

101 BASIC FREEHAND DRAWING — 1.5-3 Units
Studio: 3-6 hours
Introduction to basic drawing techniques, rendering techniques, linear perspective, composition and various drawing media.

102 BASIC COLOR AND DESIGN — 1.5-3 Units
Studio: 3-6 hours
Introduction to elements and principles of visual design and color theory as applied in a studio setting.

109a LIFE DRAWING: Beginning — 1.5-3 Units
Studio: 3-6 hours
Problems in figure drawing working from the undraped model.
May be repeated one time.

109b LIFE DRAWING: Intermediate — 1.5-3 Units
Studio: 3-6 hours
An extension of Art 109a emphasizing various media and compositional problems.
May be repeated one time.

111a HISTORY OF ART: Ancient and Medieval — 3 Units
Lecture: 3 hours
Survey of art history from the Paleolithic Age through the Late Gothic Era.
Field trips may be required.

111b HISTORY OF ART: Renaissance, Baroque, and Modern — 3 Units
Lecture: 3 hours
Survey of art history from the 15th through the 20th centuries.
Field trips may be required.

121a PAINTING: Beginning — 1.5-3 Units
Studio: 3-6 hours
Basic principles, techniques, and materials of easel painting in a variety of media.
May be repeated one time.

121b PAINTING: Intermediate — 1.5-3 Units
Studio: 3-6 hours
Continuation of Art 121a with emphasis on personal expression.
May be repeated one time.

123a WATERCOLOR: Beginning — 1.5-3 Units
Studio: 3-6 hours
Introduction to the basic techniques and problems of transparent watercolors.
May be repeated one time.

123b WATERCOLOR: Intermediate — 1.5-3 Units
Studio: 3-6 hours
Continuation of Art 123a introducing opaque watercolors and various experimental techniques.
May be repeated one time.

125 MIXED MEDIA PAINTING — 1 Unit
Studio: 2 hours
Introduction to special techniques involving creative mixtures of traditional media: pen and ink over watercolor wash, oil and acrylic in combination.

128 MURAL PAINTING — 2 Units
Studio: 4 hours
Group participation in planning, designing, and executing large-scale wall paintings.

131a CERAMICS: Introductory — 1.5-3 Units
Studio: 3-6 hours
Introduction to basic ceramic methods including hand-building and wheel-thrown forms, and introduction to glazes and decoration.

131b CERAMICS: Advanced — 1.5-3 Units
Studio: 3-6 hours
Continuation of Art 131a with emphasis on glazes, formulation and application with increased opportunity for personal expression and experimentation.

131c CERAMICS: Special Problems — 1.5-3 Units
Studio: 3-6 hours
An extension of Art 131a and Art 131b.
May be repeated one time.

133 PRIMITIVE AND ENVIRONMENTAL CERAMICS 1-3 Units
Studio: 2-6 hours
Discovery and refinement of local native clay deposits; construction and use of primitive kilns and ceramics tools; survey of the styles, techniques, and materials common to primitive potters; study of primitive firing and glazing.
Field trips are required.
May be repeated one time.

135 INTRODUCTION TO RAKU 1.5-3 Units
Prerequisite: Art 131a recommended
Studio: 3-6 hours
Introduction to raku process, historic origins and contemporary uses. Practical experience in clay bodies, glazes, and raku firing.

137 INTRODUCTION TO PRINTMAKING 1.5-3 Units
Studio: 3-6 hours
Introduction to basic intaglio and relief printmaking procedures including etching, engraving, collograph, linocut, and woodcut.

150a COMMERCIAL FREEHAND LETTERING: Beginning 2 Units
Lecture: 1 hour
Studio: 2 hours
Introduction to freehand lettering and calligraphy; practice in the three major calligraphic styles of sign writing and commercial lettering; Roman, Gothic, and script technique emphasis.

150b COMMERCIAL FREEHAND LETTERING: Intermediate 2 Units
Prerequisite: Art 150a
Lecture: 1 hour
Studio: 2 hours
Continuation of Art 150a with emphasis on various sign writing media such as banner writing, real estate signs, truck lettering, show cards, billboards, illustrations, wood routed signs, and concrete signs will be explored.

153a SILKSCREEN PRINTMAKING: Beginning 1.5-3 Units
Studio: 3-6 hours
Introduction to basic silkscreen printmaking using various stencil techniques.

153b SILKSCREEN PRINTMAKING: Advanced 1.5-3 Units
Prerequisite: Art 153a or consent of instructor
Studio: 3-6 hours
An extension of Art 153a with emphasis on experimentation and self-expression. Advanced techniques with stencils, color, inks, photographic materials and special problems.

167a TEXTILE DESIGN: Introductory 1.5 Units
Studio: 3 hours
Introduction to basic textile design. Problems and techniques of the fiber arts.
May be repeated one time.

167b TEXTILE DESIGN: Advanced 1.5 Units
Prerequisite: Art 167a or consent of instructor
Studio: 3 hours
Continuation of Art 167a with emphasis on creative design. Introduction to floor loom.

171a SCULPTURE: Introductory 1.5-3 Units
Studio: 3-6 hours
Basic principles, techniques, and problems of sculpture.

171b SCULPTURE: Advanced 1.5-3 Units
Studio: 3-6 hours
Continuation of Art 171a emphasizing advanced problems and techniques in sculpture.

171c SCULPTURE: Special Problems 1.5-3 Units
Studio: 3-6 hours
Continuation of Art 171b with emphasis on experimentation and development of personal expression.
May be repeated one time.

Photography

141a PHOTOGRAPHY: Beginning 3 Units
Lecture: 2 hours
Laboratory: 3 hours
Introduction to history, development, and capabilities of the art/science of photography and elementary procedures with camera and in darkroom.
Field trips may be required.

141b PHOTOGRAPHY: Intermediate 3 Units
Prerequisite: Art 141a or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Expansion of previous knowledge stressing creative expression through a variety of photographic techniques.
Field trips may be required.

141c PHOTOGRAPHY: Advanced 3 Units
Prerequisite: Art 141b, Art 102 or equivalent
Lecture: 2 hours
Laboratory: 3 hours
Continuation of Art 141b with further attention to practical and aesthetic zone system techniques and advanced negative and printmaking methods. Particular attention will be paid to medium and large format photography. Emphasis on visual literacy, elements of design, composition, and semeiology.
Field trips may be required.

142a COLOR PHOTOGRAPHY: Slide Making and Positive Printing 3 Units
Prerequisite: Art 141a
Lecture: 2 hours
Laboratory: 3 hours
Development and printing of color slides. Includes the history and theory of color photography, an analysis of color films, color balance, exposure latitude, film speed, pushed processing, positive to positive printing, print display and critique.
Field trips may be required.

142b COLOR PHOTOGRAPHY: The Color Negative 3 Units
Prerequisite: Art 142a
Lecture: 2 hours
Laboratory: 3 hours
Development and printing of color negatives. Course includes instruction in the procedures of most typical color negative printing processes as well as recent developments in the medium.
Field trips may be required.

144 ADVANCED PHOTOGRAPHY LABORATORY 1 Unit
Prerequisite: Art 141b or Art 142b or equivalent
Laboratory: 3 hours
Continued exercise of darkroom skills in the production of negatives, slides, and prints.
May be repeated one time.

145 FIELD PHOTOGRAPHY 1-2 Units
Lecture: .5-1 hour
Laboratory: 1.5-3 hours
The art of producing professional quality nature photographs. Field instruction in locations of natural beauty will be emphasized and followed up with lectures, demonstrations, and critique sessions.

148 SPECIAL TOPICS IN PHOTOGRAPY 1-4 Units
Prerequisite: Will vary according to topic scheduled
Lecture .5-2 hours
Laboratory: 1.5-6 hours
Various field and studio-oriented courses limited to particular photographic topics such as slide-tape presentations, landscape, architecture, portraiture, nude, product and still-life photography, photojournalism, alternative processes, and guest lecture forum.
Field trips may be required.
May be repeated with different topics only for a maximum of three times.

149 PORTFOLIO AND EXHIBITION PREPARATION 2 Units
Prerequisite: Art 102, Art 141c, and Art 142b
Lecture: 1 hour
Laboratory: 3 hours
Intended for photography majors, this course involves primarily the craft and techniques involved in assembling and installing a large photographic portfolio for exhibition.

AUTOMOTIVE TECHNOLOGY

See Page 27 for Certificate Requirements

101 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY 1 Unit
Lecture: 1 hour
Theory of operation of automobile systems. Fundamentals of math, micrometers, fasteners, shop safety and tools will be covered.

103 PREVENTIVE MAINTENANCE 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Preventive maintenance procedures, emphasis on lubrication and safety inspection as well as record keeping.

112 PULLING AND INSTALLING ENGINES 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Practical experience in pulling and installing engines.

114 MACHINE SHOP PROCEDURES 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Practical experience in head, block service, and common machine shop procedures used in repair shops.

116 ENGINE REBUILDING 4 Units
Prerequisite: Auto. Tech. 101 and Auto. Tech. 114.
Lecture: 2 hours
Laboratory: 6 hours
Techniques involved in engine rebuilding.

117a CARBURETION AND EMISSION CONTROL: Fuel Systems 1 Unit
Lecture: .5 hours
Laboratory: 1.5 hour
Techniques and procedures for overhaul and service of carburetor and accessories. Fuel injection service is also covered.

117b CARBURETION AND EMISSION CONTROL: Emission Control 1 Unit
Prerequisite: Auto. Tech. 117a
Lecture: .5 hour
Laboratory: 1.5 hours
Installation, operation and repair of automotive pollution control devices. State and federal regulations are also covered.

119 GASOLINE ENGINE TUNE-UP 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Operation and principles of various types of ignition systems. Emphasis on use of handheld test equipment as well as the oscilloscope and infrared analyzer.

130 MANUAL TRANSMISSION REBUILDING 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Principles and operation of automotive power trains including diagnosis and overhaul of clutches, manual transmissions, overdrives, and transfer cases.

134 AXLES AND DRIVE LINES 1 Unit
Prerequisite: Auto. Tech. 130
Lecture: .5 hour
Laboratory: 1.5 hours
Service, diagnosis, and repair of drivelines, rear axles and third members, front wheel drive hubs, and 4 x 4 front axles and hubs.

136 AUTOMATIC TRANSMISSION (G.M) 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Practical experience in disassembly and assembly, failure and analysis, trouble-shooting, pressure testing, and automatic transmission rebuilding.

138 AUTOMATIC TRANSMISSION (Ford) 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Practical experience in disassembly and assembly, failure and analysis, trouble-shooting, pressure testing, and automatic transmission rebuilding.

140a BRAKES: Drum 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Principles of operation of automotive drum brakes, including diagnosis and overhaul techniques.

140b BRAKES: Disc 1 Unit
Prerequisite: Auto. Tech. 140a
Lecture: .5 hour
Laboratory: 1.5 hours
Service procedures, including overhaul techniques of disc brakes.

144a FRONT-END AND SUSPENSION 2 Units
Lecture: 1 hour
Laboratory: 3 hours
Fundamentals and theory of automotive suspensions and steering systems. Adjustment, diagnosis, inspection and repair of alignment problems, including wheel balancing and tire problems.

144b FRONT-END AND SUSPENSION 1 Unit
Prerequisite: Auto. Tech. 144a
Lecture: .5 hour
Laboratory: 1.5 hours
Front-end and suspension rebuilding and maintenance. Rear axle alignment is included.

150a VEHICLE ELECTRICITY: Electrical Theory 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Fundamentals of electricity that apply to all electrical systems.

150b VEHICLE ELECTRICITY: Charging Systems 2 Units
Prerequisite: Auto. Tech. 150a
Lecture: 1 hour
Laboratory: 3 hours
Diagnosis and repair of the battery and charging systems.

150c VEHICLE ELECTRICITY: Starting and Ignition Systems 2 Units
Prerequisite: Auto. Tech. 150a
Lecture: 1 hour
Laboratory: 3 hours
Diagnosis and repair of starting systems, magnetos and battery ignition systems.

150d VEHICLE ELECTRICITY: Lighting and Chassis Electrics 1 Unit
Prerequisite: Auto. Tech. 150a
Lecture: .5 hour
Laboratory: 1.5 hours
Diagnosis and repair of headlamp, stoplight, turn signals, as well as fuse box, trailer wiring, gauges.

162 AIR CONDITIONING 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Understanding the principles and operation of air conditioning, as well as the techniques of recharging diagnosis and service.

170a PRACTICAL LABORATORY 2 Units
Prerequisite: 8 units of shop classes with not more than 2 of the 8 units taken concurrently with Auto. Tech. 170a or consent of instructor.
Laboratory: 6 hours
Special repair projects are assigned to advanced students with emphasis on speed, accuracy, and work habits.

170b PRACTICAL LABORATORY 2 Units
Prerequisite: Auto. Tech. 170a
Laboratory: 6 hours
Continuation of Automotive Technology 170a.

170c PRACTICAL LABORATORY 2 Units
Prerequisite: Auto. Tech. 170b
Laboratory: 6 hours
Continuation of Automotive Technology 170b.

170d PRACTICAL LABORATORY 2 Units
Prerequisite: Auto. Tech. 170c
Laboratory: 6 hours
Continuation of Automotive Technology 170c.

BIOLOGY

58 BIRDS OF THE MOTHER LODE 1 Unit
Laboratory: 3 hours
A survey of the birds of the Mother Lode area of California through field observations. Stresses recognition by plumage, song, and behavior patterns. Discusses ecological relationships, nesting habits, and economic importance.
Field trips may be required.
May be repeated one time.

59 WILDFLOWERS OF THE MOTHER LODE 2 Units
Lecture: 2 hours
An introduction to the Mother Lode flora. A non-technical approach to botanical traits will be used to learn common and scientific names of local wildflowers.
Field trips are required.

68 BIRDS OF THE SIERRA NEVADA 1 Unit
Laboratory: 3 hours
Study of bird species inhabiting alpine meadows and forests of the Sierra Nevada through field observations and lectures.
Field trips required.
May be repeated one time.

108 FUNDAMENTALS OF BIOLOGY 3 Units
Lecture: 3 hours
An introductory course for non-Science majors emphasizing the fundamental principles common to all forms of life. These include cell structure and function, reproduction, genetics, ecology, and evolution. (Biology 108 with Biology 109 fulfills the laboratory requirements for transfer and Associate Degree students.)

109 FUNDAMENTALS OF BIOLOGY LABORATORY 1 Unit
Prerequisite: Concurrent enrollment in Biology 108
Laboratory: 3 hours
An optional laboratory to be taken concurrently with Biology 108; designed to complement and amplify Biology 108 which is the lecture portion of the course.

111 PRINCIPLES OF BIOLOGY 4 Units
Prerequisite: One year of high school chemistry with a "B" average or Chemistry 100 recommended
Lecture: 3 hours
Laboratory: 3 hours
A principles course emphasizing certain molecular and cellular activities common to most forms of life. Special reference given to the chemical composition of life, cellular structure, photosynthesis, respiration, heredity, and interaction of life with the physical environment. Designed for Life Science and related majors.
Field trips may be required.

120 FUNDAMENTALS OF PLANT BIOLOGY 2 Units
Lecture: 1 hour
Laboratory: 3 hours
A survey course in botany. Topics discussed include anatomy, physiology, ecology, horticulture, and relationships of plants to human history.
Field trips may be required.

121 PRINCIPLES OF PLANT BIOLOGY 4 Units
Prerequisite: Biology 111
Lecture: 3 hours
Laboratory: 3 hours
A general botany course with an emphasis on plant anatomy, morphology, physiology, and systematics.
Field trips may be required.

125 PLANT TAXONOMY OF THE SIERRA NEVADA 2 Units
Lecture: 1 hour
Laboratory: 3 hours
A study of the flora of the Sierra Nevada with emphasis on the classification of local species of fungi, mosses, ferns, conifers, and flowering plants. Standard taxonomic references are used with an emphasis on scientific nomenclature.
Field trips are required.

131 PRINCIPLES OF ANIMAL BIOLOGY 5 Units
Prerequisite: Biology 111
Lecture: 3 hours
Laboratory: 6 hours
A general zoology course with emphasis on animal diversity, taxonomy, anatomy, and physiology.
Field trips may be required.

139 FIELD BIOLOGY 1-2 Units
Prerequisite: A previous course in Biology recommended
Lecture: 1-2 hours.
A lecture field course in biology to be held in natural surroundings. The site will vary with the seasons. Natural history, ecology, and biology of the locale will be studied.
May be repeated for a maximum of 2 units.

140 INTRODUCTORY HUMAN ANATOMY 4 Units
Prerequisite: Previous or concurrent enrollment in Biology 108 or Biology 111 and a high school or College Chemistry course with a grade of "C" or better
Lecture: 3 hours
Laboratory: 3 hours
A survey course in human anatomy with special emphasis on skeletal, muscular, circulatory, respiratory, and nervous systems.

151 THE TERRESTRIAL ENVIRONMENT 1 Unit
Prerequisite: Enrollment in Biology major program recommended
Laboratory: 3 hours
Field studies of terrestrial ecosystems with emphasis on techniques for gathering and analysis of physical biological data. Designed for the advanced student who has demonstrated the knowledge and maturity for group and independent research.
Field trips are required.

155 THE AQUATIC ENVIRONMENT 1 Unit
Prerequisite: Biology 108, Biology 111, or Earth Science 114 or consent of instructor
Laboratory: 3 hours
Field studies of aquatic ecosystems with emphasis on techniques for gathering and analysis of physical and biological data. Designed for the advanced student who has demonstrated the knowledge and maturity for group and independent research.
Field trips are required.

160 INTRODUCTION TO HUMAN PHYSIOLOGY 4 Units
Prerequisite: Biology 140
Lecture: 3 hours
Laboratory: 3 hours
A survey course in human physiology with special emphasis upon digestive, reproductive, muscular, nervous and endocrine systems.

165 MICROBIOLOGY 4 Units
Prerequisite: High School Chemistry, Chemistry 100, Biology 108 or Biology 111
Lecture: 3 hours
Laboratory: 3 hours
General characteristics of microbic life, conditions influencing bacterial growth, bacteria in disease and aseptic procedures.
Field trips may be required.

BUSINESS

Banking and Finance

110 PRINCIPLES OF BANK OPERATION 3 Units
Lecture: 3 hours
The importance of banking to American economic functions, banking operations, legal relationships between bank and depositors, the Federal Reserve System, banking and public service.

120 INSTALLMENT CREDIT 3 Units
Lecture: 3 hours
Principles and practice of installment lending, establishing credit, obtaining and checking information, loan servicing and collections, inventory financing, special loan programs, business development and advertising and public relations.

125 MONEY AND BANKING 3 Units
Lecture: 3 hours
An introduction to and evaluation of banks and banking systems, price movements, international payments, and monetary theory and policies.

Business Administration

See Page 27-28 for Certificate Requirements

58 PEGBOARD PAYROLL SYSTEM 1 Unit
Lecture: 1 hour
A business simulation designed to give realistic experience in keeping payroll records using a pegboard system.

60a BOOKKEEPING 3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours
Double entry bookkeeping; general and special journals, general and subsidiary ledgers, business forms, financial statements, and completion of the bookkeeping cycle.

60b BOOKKEEPING 3 Units
Prerequisite: Business Administration 60a
Lecture: 2.5 hours
Laboratory: 1.5 hours
Bookkeeping entries requiring analysis and interpretation; promissory notes, adjustments for prepaid, unearned, and accrued items, depreciation, voucher system, payroll records, property sales, and income taxes.

61 SMALL BUSINESS ACCOUNTING 4 Units
Lecture: 4 hours
Accounting procedures and analysis for most small businesses. Includes study of the accounting cycle, accounts receivable and bad debts, notes receivable and payable, merchandise inventory, depreciation, accruals and deferrals, the voucher system, payroll, financial statements, costs for decision-making, partnerships, and corporations.

63 BUSINESS MATHEMATICS 3 Units
Lecture: 3 hours
Mathematical problems of buying, selling, interest, discounts, insurance, commissions, payrolls, depreciation, and taxes.

65 THE METRIC SYSTEM 1 Unit
Lecture: 1 hour
An entertaining presentation of the new language of the modernized metric system in areas of common, everyday application: volume, weight, linear, and cubic measures, temperature, and electricity.

101 PRINCIPLES OF BUSINESS 3 Units
Lecture: 3 hours
Survey of business principles, problems and procedures; ownership; recruitment and training of personnel; labor-management relations; production and distribution of goods; competition; profit; transportation; finance; managerial controls; government and business relations.

104 HUMAN RELATIONS IN BUSINESS 3 Units
Lecture: 3 hours
Influence of industrial development on employer and employee unions, management practices, methods of supervision, employer-employee relationships, mass production and the employee.

115a COMMERCIAL LAW 3 Units
Lecture: 3 hours
Historical development of common law; statutes of California; Federal and State court decisions; legal aspects of business; law of contracts, agency and employment.

115b COMMERCIAL LAW 3 Units
Lecture: 3 hours
Law of sales, negotiable instruments, personal property, real property, partnerships, corporations, insurance, suretyship.

120 PRINCIPLES OF MARKETING 3 Units
Lecture: 3 hours
Marketing principles, policies, and functions, price policies and controls, trade channels, merchandising, market research, advertising, and competitive practices.

123 SALES 3 Units
Lecture: 3 hours
Description of the fundamental principles and practices of sales. Critical look at the selling process and the practical aspects of effective sales techniques for both retail and direct applications.

125 ADVERTISING 3 Units
Lecture: 3 hours
Analysis of the social and economic impact of advertising on a local, state and national scope. Study of media, budgets, research, copy, layout and institutions.

130a ACCOUNTING 4 Units
Lecture: 4 hours
Accounting principles and procedures, owner's equity, closing books, revenue and expense adjustments, merchandising operations, statement and ledger organization, forms of organization, cash and investments, receivables and inventories.

130b ACCOUNTING 4 Units
Prerequisite: Business Administration 130a
Lecture: 4 hours
Cost data and management needs, analysis of data, supplementary statement, uses of capital cash-flow statements, department and branch operation, consolidation, profit planning, and income tax considerations, fixed assets, liabilities, manufacturing operations.

140 PRINCIPLES OF MANAGEMENT 3 Units
Lecture: 3 hours
The functions of management, techniques of decision-making and problem solving, and methods used by the managers to achieve organizational goals, various theories of management, lines of authority, functions of departments, and the importance of policies, procedures, and controls.

145 RETAIL BUSINESS MANAGEMENT 3 Units
Lecture: 3 hours
The retailing world and its functions including organization, buying, merchandising, store management and operations, customer operations, financial control, and systematic problem solving techniques.

150 SMALL BUSINESS MANAGEMENT 3 Units
Lecture: 3 hours
Small business operation with proper balance between business functions of purchasing, production, sales and finance, and the management functions of planning, organizing, actuating, and controlling.

Office Occupations

See Pages 30-31 for Certificate Requirements

56 TYPING SPEED AND ACCURACY BUILDING 1 Unit
Prerequisite: Beginning typing skill
Laboratory: 3 hours
Speed building and accuracy on straight copy, rough draft and statistical writing, intensified drills, timed writings and remedial work.
May be repeated 3 times.

60 REVIEW SHORTHAND 4 Units
Prerequisite: Typing rate 30 words per minute
Lecture: 4 hours
Review of Gregg dictation theory; transcription skills.

65 BUSINESS ENGLISH 3 Units
Lecture: 3 hours
The mechanics of English as applied to the field of business, including skills of written communication, sentence structure, punctuation, spelling, and use of the dictionary.

68 BUSINESS CORRESPONDENCE 3 Units
Lecture: 3 hours
Effective business practices in the construction of sentences, paragraphs, and letters; the writing of effective business letters such as sales, applications, orders, requests, adjustments, refusals, credit and collection.

70 REPORT WRITING 2 Units
Lecture: 2 hours
Study and practice of the skills necessary to write well-organized reports.

101a KEYBOARDING 1 Unit
Laboratory: 3 hours
Designed to prepare students to use the electric typewriter for written communication, emphasizing keyboard instruction and speed development.

101b BASIC TYPING APPLICATIONS 2 Units
Prerequisite: Office Occupations 101a or previous typing course
Lecture: 1.5 hours
Laboratory: 1.5 hours
Emphasizing typing accuracy, speed building, and preparation of business letters, tables and reports.

103 INTERMEDIATE TYPING 3 Units
Prerequisite: Office Occupations 101b or typing rate of 40 words per minute.
Lecture: 2 hours
Laboratory: 3 hours
Development of speed and accuracy, advanced correspondence, tabulation, typing of manuscripts, outlines, and business forms.

104 ADVANCED TYPING 3 Units
Prerequisite: Office Occupations 103 or typing rate of 45 words per minute.
Lecture: 2 hours
Laboratory: 3 hours
Further development of speed and accuracy; study of business forms, advanced tabulated material, legal forms, typing for reproduction, and special problems in letter placement.

108 WORD PROCESSING: ELECTRONIC TYPEWRITER 1 Unit
Prerequisite: Office Oc. 103 or consent of instructor
Laboratory: 3 hours
Instruction on the electronic typewriter including document and phrase storage, revisions, storage procedures, tabulation, and repetitive documents.

109 WORD PROCESSING: DISPLAY SYSTEM 2 Units
Prerequisite: Office Oc. 103, Office Oc. 132 or current employment applying advanced typing techniques
Lecture: 1 hour
Laboratory: 3 hours
Use of the display word processing system which includes document production and storage, editing, retrieval, formatting, local and global search, entry and execution of variable data. Word processing concepts relating to information processing are introduced.

110 BEGINNING SHORTHAND 4 Units
Prerequisite: Typing rate of 30 words per minute
Lecture: 4 hours
Complete theory of Gregg shorthand; foundation for dictation and transcription.

112 INTERMEDIATE SHORTHAND 4 Units
Prerequisite: Dictation rate 60 words per minute for three minutes and typing rate of 45 words per minute.
Lecture: 4 hours
Sustained dictation speed on new material; accuracy on transcription; spelling, punctuation, and office-style dictation.

130 FILING SYSTEMS AND RECORDS MANAGEMENT 2 Units
Lecture: 2 hours
Study of alphabetic, numeric, geographic, and subject filing systems; management and control of business records including card and visible records, correspondence and non-correspondence records and micrographics.

132 MACHINE TRANSCRIPTION 2 Units
Prerequisite: Office Occupations 103 or equivalent experience
Lecture: 1 hour
Laboratory: 3 hours
Study and use of various transcribing machines.

136 ELECTRONIC PRINTING CALCULATORS 1 Unit
Laboratory: 3 hours
Practical instruction in the operation of the electronic printing calculator, emphasizing business applications.

138 OFFICE PROCEDURES 3 Units
Prerequisite: Bus. Ad. 60a, Off. Oc. 103, or consent of instructor.
Lecture: 2 hours
Laboratory: 3 hours
General office duties and procedures as well as office etiquette and dress. Designed to acquaint the student with the duties and responsibilities of an office worker from the intermediate typist to administrative assistant. Emphasis on human relations, handling mail, telephone techniques, travel arrangements, financial data, and job search skills and applications.

140 MEDICAL TERMINOLOGY 4 Units
Lecture: 4 hours
An introduction to basic medical word structure including word roots, prefixes and suffixes used in medical vocabulary by allied health field members.

142a MEDICAL TRANSCRIPTION 2 Units
Prerequisite: Office Oc. 103 or equivalent; Office Oc. 132, Office Oc. 140 or consent of instructor
Laboratory: 6 hours
Development of skills for medical transcription in physicians' offices, clinics, hospitals and related allied health field positions. Students will type history, physical, and surgery reports, using medical terminology and transcription skills.

142b MEDICAL TRANSCRIPTION 2 Units
Prerequisite: Office Oc. 142a
Laboratory: 6 hours
Continuation of Office Occupations 142a; surgery reports and discharge summaries.

144 MEDICAL INSURANCE 2 Units
Prerequisite: Office Occupations 103, Office Occupations 140 or consent of instructor
Lecture: 2 hours
A fundamental course in medical insurance and insurance billing including instruction in coding, Blue Cross and Blue Shield forms, Medicaid and Medi-Cal, Medicare, Champus and Workers' Compensation.

154 LEGAL TRANSCRIPTION/ TERMINOLOGY 2 Units
Prerequisite: Off. Oc. 103, Off. Oc. 132
Laboratory: 6 hours
Training for the specialized area of the legal office. Development of legal terminology; transcription of legal documents and correspondence; use of legal reference materials.

157 LEGAL OFFICE PROCEDURES 3 Units
Prerequisite: Off. Oc. 103, Off. Oc. 132, Off. Oc. 154.
Lecture: 2 hours
Laboratory: 3 hours
A course designed to train the student for employment as a secretary in a law office. Specialized training in knowledge and skills required of legal secretaries including preparation of legal papers and court documents, assistance in legal research, bookkeeping and filing in a law office.

Real Estate

101 PRINCIPLES OF REAL EST TE 3 Units
Lecture: 3 hours
Real and personal acquisition, ownership, estates, joint tenancies, partnerships, sales, contracts, deeds, taxes, and financing real estate.

105 REAL ESTATE PRACTICE 3 Units
Prerequisite: Real Estate 101 or Real Estate License
Lecture: 3 hours
Customer relationship; general real estate operations and the industry; includes types and valuation of listings, selling and current marketing techniques, financing, taxes, leasing, appraisals, insurance, public sales, exchanges, trade-in programs and investments.

110 LEGAL ASPECTS OF REAL ESTATE 3 Units
Prerequisite: Real Estate 101
Lecture: 3 hours
California real estate law; titles, encumbrances, recording, real property acquisition and transfer; Penal Code.

115 REAL ESTATE FINANCE 3 Units
Prerequisite: Real Estate 101
Lecture: 3 hours
Residential and commercial financing; lending institutions, money markets and interest rates.

120 REAL ESTATE APPRAISAL 3 Units
Prerequisite: Real Estate 105, Real Estate 110
Lecture: 3 hours
Appraisal of residential and commercial properties; methods and techniques for determining market value; the appraisal report.

125 REAL ESTATE ECONOMICS 3 Units
Prerequisite: Real Estate 101
Lecture: 3 hours
Economic factors influencing real estate; real estate market and business cycles; commercial, industrial, and residential properties; urban development and renewal; regulation of land uses.

Supervisory Training

110 ELEMENTS OF SUPERVISION 3 Units
Lecture: 3 hours
Supervisor's role in business and industry; organizational policies, management directives, personnel problems and practices; leadership techniques.

115 MIDDLE MANAGEMENT 3 Units
Prerequisite: Supervisory Training 110
Lecture: 3 hours
The basis for management; planning, organizing, staffing and controlling management functions.

CHEMISTRY

60 CONSUMER CHEMISTRY: Food 1 Unit
Lecture: 1 hour
A study of the chemicals found in our food: where they come from, what they are, and what happens to them when they are consumed.

71 CHEMICAL CALCULATIONS 1 Unit
Prerequisite: Mathematics 55 or equivalent.
Lecture: 1 hour
A basic math course designed to prepare the student for solving problems in Chemistry 100 and Chemistry 101ab.

100 FUNDAMENTALS OF CHEMISTRY 4 Units
Prerequisite: Mathematics 55 or one year of high school algebra
Lecture: 3 hours
Laboratory: 3 hours
Fundamental theories and principles of inorganic chemistry; atomic and molecular structure, chemical and physical changes, solutions, colloids, gases, nonmetals, metals, and nuclear chemistry.

101a GENERAL CHEMISTRY 5 Units
Prerequisite: One year of high school chemistry with a "B" average and Math. 103 or equivalent; or Chemistry 100 and Math. 103; or consent of instructor
Lecture: 4 hours
Laboratory: 3 hours
Survey of atoms, nuclear chemistry, molecules, ions, chemical bonding, gases, liquids, solids, solutions, kinetics, and equilibria.

101b GENERAL CHEMISTRY 5 Units
Prerequisite: Chem. 101a or equivalent or consent of instructor
Lecture: 4 hours
Laboratory: 3 hours
Survey of thermodynamics, electrochemistry, nonmetals, qualitative analysis and organic compounds.

108 ORGANIC CHEMISTRY 4 Units
Prerequisite: Chemistry 101a with a grade of "C" or better or consent of instructor
Lecture: 3 hours
Laboratory: 3 hours
A study of the nomenclature, structure, synthesis and characteristic reactions of organic compounds with emphasis on chemicals of interest to students in the biological sciences.

COMPUTER SCIENCE

See Page 28 for Certificate Requirements

101 INTRODUCTION TO MICRO-COMPUTERS 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Designed to familiarize students with computer keyboard operations; will emphasize care of equipment, tapes, and disks and will include the following computer applications: screen editing, simple BASIC commands, applications on microcomputers, accessing disk and cassette drives, executing programs, trouble-shooting, printer listings, copying a program and saving it, data input, and information output.

103 COMPUTER OPERATING SYSTEMS 1 Unit
Prerequisite: One year of high school algebra or Mathematics 55
Lecture: .5 hour
Laboratory: 1.5 hours
An introduction to the use of computer operating systems, including hardware and software. Emphasis is on the use of menus, applications programs, storage management, operating system design, and general machine familiarity. Topics include concepts applicable to small business or home computers which use a popular type of operating system.

120 BASIC PROGRAMMING 3 Units
Prerequisite: One year high school algebra or Math. 55; Computer Science 101 or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
BASIC language syntax is used to study programming logic; includes concepts of hierarchy, flowcharting, interactive input, analytic approaches to processing data and creating reports, valid and invalid logic structures, logical operators, comparisons, arithmetic operations, loop structures, arrays, search logic, sorting techniques, sub-routines, modular and top-down program design, and string processing.

121 DATA FILE PROGRAMMING WITH BASIC 3 Units
Prerequisite: Computer Science 120 plus 2 years of high school algebra or Math. 101 or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Advanced techniques of programming in BASIC language, including disc operation and file management, optimization of core usage, algorithm efficiency, and advanced I/O commands.

125 PASCAL PROGRAMMING 3 Units
Prerequisite: Two years high school algebra or Math. 101; Computer Science 101 and Computer Science 103, or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Structured programming in the PASCAL language. Emphasis on writing, executing and modifying programs that conform to industry standards. Topics will include structured software development and maintenance utilizing PASCAL language techniques for logical operations, branching, and file management.

127 FORTRAN PROGRAMMING 3 Units
Prerequisite: Two years high school algebra or Math. 101; Computer Science 101 and Computer Science 103, or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Recommended for mathematics and science majors and business students expecting to program using the FORTRAN language. Emphasis is on program design, debugging, and documentation. Topics include input/output, calculations, looping, logical operators, arrays, algorithms, and structured design.

129 COBOL PROGRAMMING 3 Units
Prerequisite: Computer Science 101 and Computer Science 103 or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Programming in the business-oriented computer language, COBOL. Programming assignments emphasize business applications. Topics include language structure, data representation, file manipulation, report generation, input/output, and arithmetic.

132 RPG II PROGRAMMING 3 Units
Prerequisite: Computer Science 101 and Computer Science 103, or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
A language specifically designed for generating reports in a business-oriented environment. Topics include language structure, data representation, file manipulation, report generation, input/output, and arithmetic.

140 ASSEMBLY LANGUAGE PROGRAMMING 3 Units
Prerequisite: Computer Science 125, Computer Science 127, or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Techniques of writing machine language or assembly language instructions utilizing an editor to enter assembly language programs or subroutines. Programs will be assembled, linked and executed. Preliminary study will include machine logic configuration and external number/character representation.

155 DATA BASE MANAGEMENT 3 Units
Prerequisite: Computer Science 127 or Computer Science 129 or Computer Science 132 or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Study of data base information systems and applications on a computer. Topics include lists, tree structures, access methods, report generation, sorting, merging, searching, spooling, and queues.

CONSTRUCTION

Construction Technology

101 INTRODUCTION TO CARPENTRY 3 Units
Lecture: 3 hours
Theory and framing non-commercial buildings for private use. Construction of small non-structural projects; local code ordinances governing such construction.

111 INTRODUCTION TO RESIDENTIAL WIRING 3 Units
Lecture: 3 hours
Electrical theory, blueprint reading, service, circuits, conduits, and flexible wiring in residential construction. Remodeling and large appliance installation procedures; applicable local code ordinances.

121 INTRODUCTION TO RESIDENTIAL PLUMBING 3 Units
Lecture: 3 hours
Types of pipes and common fittings, cold and hot water supply, soil pipe and drainage systems, fixture mounting, and natural gas plumbing; applicable local code ordinances.

DRAFTING

110a BASIC DRAFTING 3 Units
Lecture: 2 hours
Laboratory: 3 hours
An introductory course for beginners or a refresher course for those with a limited drafting background. Basic instruction on the use of tools, lettering form and balance stressed, geometric figures, orthographic projections, dimensioning.

110b BASIC DRAFTING 3 Units
Prerequisite: Drafting 110a
Lecture: 2 hours
Laboratory: 3 hours
Continuation of Drafting 110a; sectioning, auxiliary projections, pictorial, tolerances, and inking experiences.

115a ADVANCED DRAFTING 3 Units
Prerequisite: Drafting 110b
Lecture: 2 hours
Laboratory: 3 hours
Specialized areas of mechanical drafting, technical illustrations, map making, sheet metal layouts, welding, cams and gears, template inking.

115b ADVANCED DRAFTING 1 Unit
Prerequisite: Drafting 115a
Laboratory: 3 hours
Practical laboratory in area of interest such as map drafting, electrical and electronic, aerospace, and technical illustration. Projects must involve current industrial practices.

130 ARCHITECTURAL DRAFTING 3 Units
Prerequisite: Drafting 115a or Drafting 115b
Lecture: 2 hours
Laboratory: 3 hours
Study and preparation of residential designs. Creative as well as technical aspects of design will be covered. Problems relating to finance and codes will be discussed.

DRAMA

102 ORAL EXPRESSION & INTERPRETATION 3 Units
Lecture: 2 hours
Activity: 2 hours
Techniques in reading literature aloud; understanding and interpreting prose, poetry, and dramatic selections; oral presentation, and expression of thought.

122 INTRODUCTION TO READERS' THEATRE 3 Units
Lecture: 2 hours
Activity: 2 hours
Theory and practice of Readers' Theatre as an art form. Directed experiences in selecting, cutting, arranging and performing the Readers' Theatre script.

136 PLAYWRITING 3 Units
Lecture: 3 hours
Theory and practice of writing for the theatre; analysis of relevant literature and productions; investigation of dramatic methods appropriate to the playwright.
May be repeated one time.

143a ACTING: Fundamentals 3 Units
Lecture: 2 hours
Activity: 2 hours
Investigation of techniques and theories prerequisite to theatrical performances; psychological, philosophical, and practical preparation for the actor's art.

143b ACTING: Acting-Directing 3 Units
Prerequisite: Drama 143a or consent of instructor
Lecture: 2 hours
Activity: 2 hours
A workshop in techniques of both acting and directing with specific focus upon the production of short scenes from a variety of theatrical genre.

143c ACTING: Advanced Projects 1-3 Units
Prerequisite: Either Drama 102, Drama 143b, Drama 145, or audition depending upon the focus of the course during the semester it is being offered
Laboratory: 3 hours equals 1 unit of credit
Lecture: 1 hour, Laboratory: 3 hours equals 2 units of credit
Lecture: 1 hour, Laboratory: 6 hours equals 3 units of credit
Advanced workshop activity for production of one-act plays, segments of longer plays or full length plays whose technical requirements are minimal; intensive workshop concentration designed for public performances in the areas of improvisation or mime.
May be repeated 3 times.

145 IMPROVISATION 3 Units
Lecture: 2 hours
Activity: 2 hours
Intensive study of the basic techniques of improvisational acting with specific concentration on improvisational theatre production formats as well as development of group inspired and created scenarios and one-act plays.

147 AUDITIONS 3 Units
Lecture: 2 hours
Activity: 2 hours
Theory, techniques, and practice in auditioning for performance; development of audition materials, practical audition experience for theatre, film, and television.

156 TECHNICAL THEATRE LABORATORY 1-3 Units
Laboratory: 3-9 hours
Applied laboratory experience in all phases of technical theatre related to mounting a production; practical projects in design and construction involving costumes, stage settings, stage properties, lighting, sound, and make-up for a specific theatre production.

158 THEATRE PRODUCTION 4 Units
Lecture: 1 hour
Laboratory: 9 hours
Directed activities in acting and technical theatre with participation in public performances and related production activities.
May be repeated three times.

EARTH SCIENCE

59 GEOLOGY OF THE MOTHER LODE 2 Units
Lecture: 2 hours
A synoptic view of the geologic history of the Sierra Nevada.
Field trips may be required.

114 PHYSICAL GEOLOGY 4 Units
Lecture: 3 hours
Laboratory: 3 hours
Materials and structures of the earth, agents of erosion, forces of change, volcanoes and earthquakes.
Field trips may be required.

125 GEOLOGY OF THE NATIONAL PARKS 3 Units
Lecture: 3 hours
Interpretation of the geologic features of our national parks and monuments with an introduction to the geologic processes responsible for their formation. Students may choose a particular park for their in-depth study.
Field trips may be required.

133 GLOBAL TECTONIC GEOLOGY 3 Units
Lecture: 3 hours
An introduction to the new global geology and how it has revolutionized man's understanding of the way the earth works. For all who wish to learn about the earth's wandering continents and spreading sea floors; what causes rising mountain ranges, volcanoes, and earthquakes.

139 FIELD GEOLOGY 1-3 Units
Prerequisite: A previous course in Earth Science is desirable
Lecture: .5-1.5 hours
Laboratory: 1.5-4.5 hours
A field study of selected geologic features and related Earth Science topics. A one to seven day field trip will be taken with pre and post-classroom sessions.
May be repeated two times.

142 DESCRIPTIVE ASTRONOMY 3 Units
Lecture: 3 hours
A non-mathematical survey course in astronomy for non-science majors. Topics include history of astronomy, telescopes, solar system, stars, galaxies, origin of universe, and extra-terrestrial life.
Field trips may be required.

144 GENERAL ASTRONOMY 4 Units
Prerequisite: A high school science and Mathematics 55 or consent of instructor
Lecture: 3 hours
Laboratory: 3 hours
History of astronomy, modern astronomy, tools of astronomy, the solar system and its relationship to the galaxies; properties and evolution of stars; development of observatory skills; learning constellations, setting up and using telescopes, determining rising and setting times of the sun, moon, planets, and stars. Approximately one-half of the required labs will meet at night at the observatory.
Field trips may be required.

161 FUNDAMENTALS OF METEOROLOGY 3 Units
Lecture: 2 hours
Laboratory: 3 hours
Origin of the world's atmosphere, its structure, composition, and circulation; the weather elements, weather instruments and their use, gas laws, air masses, frontal movements, cloud types, and laboratory techniques; meteorological effects on modern society.
Field trips may be required.

171 FUNDAMENTALS OF OCEANOGRAPHY 3 Units
Lecture: 2 hours
Laboratory: 3 hours
The origins of the world's oceans, its structure, composition, and circulation; tides, currents, salinity, density, oceanographic instruments and their use, life in the sea, the interaction of the ocean and the atmosphere, the ocean and modern society.

ECONOMICS

55 UNDERSTANDING THE AMERICAN ECONOMY 3 Units
Lecture: 3 hours
Introduction to macro-economic principles with an emphasis on U.S. economic policies and institutions. Topics are gross national product, recession, inflation, fiscal policy, money and the Federal Reserve System, monetary policy, wage and price controls, balance of payment policies.

101a PRINCIPLES OF ECONOMICS 4 Units
Lecture: 4 hours
Macro-economics. Introduction to the U.S. economy and capitalism; national income and employment analysis, economic fluctuations, monetary and fiscal policies, economic stability-instability, public finance, and special economic problems.

101b PRINCIPLES OF ECONOMICS 4 Units
Lecture: 4 hours
Micro-economics. The corporation, analysis of costs, theory of production, pricing factor inputs including wages, rent, and interest; the social implications of various market structures; special economic problems.

ENGLISH

51 COLLEGE COMPOSITION 3 Units
Lecture: 3 hours
Training in basic composition skills, reading, interpretation, and discussion of college-level materials; basic mechanics, sentence structure, paragraph development, essay and report organization.

75 WRITING FUNDAMENTALS 1 Unit
Lecture: 1 hour
Individual instruction in the fundamentals of writing.
May be repeated one time.

101a READING AND COMPOSITION: Beginning 3 Units
Lecture: 3 hours
Development of reading and composition skills with emphases on applying techniques of logic in interpreting and writing the expository essay and reading and interpretation of the short story.

101b READING AND COMPOSITION: Advanced 3 Units
Prerequisite: English 101a
Lecture: 3 hours
Further development of reading and composition skills with an emphasis on reading and interpreting one novel with secondary sources, poetry, and drama, with the composition of at least one longer, documented paper.

110 CREATIVE WRITING 3 Units
Prerequisite: English 101a or consent of instructor
Lecture: 3 hours
Instruction and practice in writing poetry, fiction, and drama. Analysis of contemporary works with respect to literary techniques.
May be repeated one time.

111 FILM APPRECIATION 3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours
Development of technical awareness and critical judgment in individual response to cinema.

117a LITERATURE OF THE UNITED STATES 3 Units
Prerequisite: English 101a or consent of instructor
Lecture: 3 hours
A study of the literature of the United States from the beginning of the English colonization through the transcendentalists. Reading, analysis, and discussion of the major literary trends and authors of the time.

117b LITERATURE OF THE UNITED STATES 3 Units
Prerequisite: English 101a or consent of instructor
Lecture: 3 hours
A study of the literature of the United States from realism to the present.

146a SURVEY OF ENGLISH LITERATURE 3 Units
Prerequisite: English 101a or consent of instructor
Lecture: 3 hours
English literature from the Anglo-Saxons through the 18th Century.

146b SURVEY OF ENGLISH LITERATURE 3 Units
Prerequisite: English 101a or consent of instructor
Lecture: 3 hours
English literature of the 19th and 20th Centuries.

149 CALIFORNIA LITERATURE 3 Units
Prerequisite: English 101a or consent of instructor.
Lecture: 3 hours
A chronological survey of California literature in the 19th and 20th Centuries with emphasis on selected works of major American authors living and writing in California.

150 INTRODUCTION TO SHAKESPEARE 3 Units
Prerequisite: English 101a
Lecture: 3 hours
An introduction to the representative works by Shakespeare including the characteristics of the different genres — comedy, history, and tragedy, and a study of a number of the sonnets. In addition, students will study the literary, social, and historical backgrounds of Shakespeare's time as they affect the meaning of the works studied.

FIRE TECHNOLOGY

See Page 28 for Certificate Requirements

55a VOLUNTEER FIREFIGHTER TRAINING 2 Units
Lecture: 2 hours
Basic concepts, techniques, skills and theories for volunteer firefighters.

55b VOLUNTEER FIREFIGHTER TRAINING 2 Units
Prerequisite: Fire Technology 55a
Lecture: 2 hours
Continuation of Fire Technology 55a.

57 FIRST RESPONDER MEDIC FIRST AID AND CPR 1.5 Units
Lecture: 1.5 hours
A basic course for the volunteer firefighter who is on a first-responder unit assigned medical responses in the rural setting. Stresses continuity of care through the approach to the patients and prioritization of their injuries/illnesses where advanced life support response is delayed.

59 FIRE COMMAND/ICS FOR THE VOLUNTEER FIREFIGHTER 1 Unit
Lecture: 1 hour
Command and control techniques used at the scene of an emergency by the volunteer fire company officer. Emphasizes decision making, the act of commanding, personnel and organization structures and pre-planning for effective command performance. Includes a review of the Incident Command System instituted by the State of California Fire Services.

61 ORGANIZATION AND FIRE CONTROL 2 Units
Lecture: 2 hours
Basic concepts in fire service organization and theories of fire control including the laws and regulations affecting the fire service, fire service personnel and functions, professional fire service organizations, principles of fire behavior and the basic considerations in fire strategy and tactics.

62 EQUIPMENT OPERATION 2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours
Manipulative and technical training in the identification and operation of fire service tools and equipment. The course also includes basic considerations of building construction and the tying and employment of fire service knots and hitches.

63 EXTINGUISHERS AND PROTECTIVE EQUIPMENT 2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours
Manipulative and technical training in the identification, actuation and employment of portable fire service extinguishers of all types; donning and testing of protective breathing apparatus and clothing; operation of building protective systems, elevators, and fire escape ladders and stairs; employment of life lines, life belts, life guns, and life nets.

64 HOSE, NOZZLES AND FITTINGS 2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours
Manipulative and technical training in basic hose evolutions and recognition of fire service equipment used in hose evolution, including the operation of hydrants. Determining range and reaction of fire streams; identifying of characteristics of good fire streams; and loading hose on apparatus.

65 HOSE EVOLUTIONS 2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours
Manipulative and technical training in hose evolutions, including the laying of multiple lines of hose, extending and reducing lines of hose; joining and wyeing lines of hose; connecting hose lines to auxiliary appliances; operating master stream appliances; laying and operating hose lines above and below street level.

66 FIRE SERVICE LADDERS 2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours
Manipulative and technical training in fire service ladder evolutions, including removing, carrying, raising, and lowering of ladders; climbing, locking-in on, working on and footing of ladders; employing ladders as improvised equipment in foreground situations.

67 SALVAGE AND OVERHAUL PROCEDURES 2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours
Manipulative and technical training in basic salvage and overhaul techniques, including salvage cover operations, protection of property, removal of water, overhaul and fire investigation.

70 CERTIFIED FIREFIGHTERS I: SUPPLEMENTAL REQUIREMENTS 2 Units
Prerequisite: Certified Volunteer Firefighter or equivalent
Lecture: 2 hours
Laboratory: .5 hours
Designed to provide the Certified Volunteer Firefighter with the advanced and supplemental training requirements necessary to upgrade their competence and certification to Certified Firefighter I.

101 INTRODUCTION TO FIRE TECHNOLOGY 2 Units
Lecture: 2 hours
Introduction to fire protection; career opportunities in fire protection and related fields, history of fire protection, fire loss analysis, public, quasi-public and private fire protection services, specified fire protection functions, basic fire chemistry and physics. Designed to give the learner an overview of fire technology, the fire service, and the fire protection field as career potential.

102 FUNDAMENTALS OF PERSONAL FIRE SAFETY AND EMERGENCY ACTION 2 Units
Lecture: 1.5 hour
Laboratory: 1.5 hours
Designed to provide basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic CPR and Standard First Aid.

103 FUNDAMENTALS OF FIRE PROTECTION 2 Units
Lecture: 2 hours
Theory and fundamentals of fire protection, including fire protection laws, water systems and public fire protection systems; fire protection in buildings and open areas.

104 FUNDAMENTALS OF FIRE BEHAVIOR AND CONTROL 2 Units
Lecture: 2 hours
Theory and fundamentals of how fires start, spread and are controlled. An in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. Designed to give the learner a comprehensive exposure to basic fundamentals of fire behavior and control in preparation for more advanced study in the field of fire protection.

105 FUNDAMENTALS OF FIRE PREVENTION 3 Units
Lecture: 3 hours
Organization and function of fire prevention; inspections, surveying and mapping procedures, recognition of fire and life hazards, engineering a solution of a fire hazard, enforcing the solution of a fire hazard, public education aspects of fire prevention.

108 FIRE FIGHTING STRATEGY AND TACTICS 2 Units
Prerequisite: Fire Technology 101
Lecture: 2 hours
Fire chemistry; equipment and manpower, fire fighting tactics and strategy, methods of attack, pre-planning fire problems.

110 RURAL FIRE COMPANY OPERATIONS 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Emphasis on utilization of resources at maximum potential, where conditions peculiar to small and remote fire service operations exist. Includes manipulative and technical training in pre-planning, and incident control in the rural setting.

114 FIRE APPARATUS AND EQUIPMENT 2 Units
Prerequisite: Fire Technology 101
Lecture: 1.5 hours
Laboratory: 1.5 hours
Driving laws and techniques, construction and operation of pumping engines, tank trucks and trailers.

115 PUBLIC FIRE EDUCATION 3 Units
Lecture: 3 hours
Concepts and processes in designing, implementing, and evaluating fire education programs. Includes specific instruction in establishing programs through the media, use of appropriate audio/visual aids and use and selection of household safety appliances and equipment.

117 WILDLAND FIRE CONTROL 2 Units
Lecture: 2 hours
Factors affecting wildland fire prevention, fire behavior, and control techniques.

120 HEAVY EQUIPMENT IN FIRE CONTROL 2 Units
Lecture: 2 hours
Theory of heavy equipment used by a coordinated fire control team in fighting range fires.

123 FIRE HYDRAULICS 3 Units
Prerequisite: Mathematics 55 or consent of instructor
Lecture: 3 hours
Review of basic mathematics, hydraulic laws and formulas as applied to the fire service, application of formulas and mental calculation to hydraulic problems, water supply problems; underwriters' requirements for pumps.

125 FIRE EQUIPMENT REPAIR AND MAINTENANCE 2 Units
Prerequisite: Fire Technology 61 through 67 or equivalent
Lecture: 1 hour
Laboratory: 3 hours
Repair of commonly used fire service equipment including hand tools, small and auxiliary gas or electric powered tools, hydraulic mechanisms and personnel safety devices. Includes preventive maintenance, inspection procedures and measuring tolerances of calibrated equipment and devices.

127 FIRE INVESTIGATION 2 Units
Lecture: 2 hours
Determining causes and types of fires; possible evidence at the scene; interviewing witnesses and suspects; arrest, detention, and court procedures; giving court testimony.
(Students may not receive credit for both Fire Science 127 and Law Enforcement 140ab.)

129 HAZARDOUS MATERIALS INCIDENT CONTROL 2 Units
Prerequisite: Fire Technology 104 and Fire Technology 130 or equivalent
Lecture: 2 hours
Hazardous materials storage, handling laws, standards and emergency practices with emphasis on firefighting and incident control at the company officer level.

130 FIRE PROTECTION EQUIPMENT AND SYSTEMS 2 Units
Prerequisite: Fire Technology 101
Lecture: 2 hours
Portable fire extinguishing equipment, sprinkler systems, protection systems for special hazards, fire alarm and detection systems.

FOREIGN LANGUAGE

Spanish

100a CONVERSATIONAL SPANISH: Beginning 3-4 Units
Lecture: 3 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Practice in vocabulary, idioms, and grammatic usage with emphasis in conversational use of the language as spoken in Mexico.
May be repeated one time.

100b CONVERSATIONAL SPANISH: Intermediate 3-4 Units
Prerequisite: Spanish 100a
Lecture: 3 hours
or
Lecture: 3 hours
Laboratory: 3 hours
A continuation of Spanish 100a with emphasis on idioms, culture and use of the total language.

FORESTRY

101 INTRODUCTION TO PROFESSIONAL FORESTRY 3 Units
Lecture: 3 hours
History of forestry, survey of forest resources, forest management and utilization techniques, career opportunities, legislation, and forest practices.
Field trips will be required.

110 DENDROLOGY 3 Units
Prerequisite: Biology 120, Biology 121, or Biology 125 recommended
Lecture: 2 hours
Laboratory: 3 hours
Silvicultural and botanical characteristics, identification, classification, range, and uses of native forest species of the United States; emphasis on plants of economic importance to forest practices in California and the western United States.
Field trips will be required.

FORESTRY TECHNOLOGY

See Page 28 for Certificate Requirements

50 INTRODUCTION TO TECHNICAL FORESTRY 2 Units
Lecture: 2 hours
Nature and scope of the forest technician's work, knowledge and skills for employment, employment opportunities. Survey of forest resources, history of forestry, forest utilization and applied forest management.
Field trips will be required.

53 FOREST SURVEYING TECHNIQUES 3 Units
Lecture: 2 hours
Laboratory: 3 hours
Use of basic forest surveying instruments. Application of hand and staff compass, topographic and engineer's chain, abney and dumpy level, plane table and alidade, engineer's transit and redy mapper. Field recording techniques, laboratory computations and map drafting.
Field trips will be required.

56 TREE AND PLANT IDENTIFICATION 3 Units
Lecture: 2 hours
Laboratory: 3 hours
Classification and identification of major United States timber species with emphasis on western and California plant cover. Description of botanical, economic and silvicultural characteristics of trees and other plants as related to forest management and utilization.
Field trips will be required.

62 APPLIED FOREST INVENTORY AND MANAGEMENT 4 Units
Prerequisite: Forestry Technology 53. Forestry Technology 56 and Natural Resources Technology 60 recommended
Lecture: 2 hours
Laboratory: 6 hours
Techniques of forest inventory including cruising, scaling and evaluation; field tabulation and computation methods; location and inventory of a given forest property in the field; development of property boundaries and inventory of timber and other natural resources; topographic map and road system design for property.
Field trips will be required.

GEOGRAPHY

102 INTRODUCTION TO CULTURAL GEOGRAPHY 3 Units

Lecture: 3 hours

The study of humankind's relationship with the environment. The techniques and resources of the cultural and political geography, anthropology, environmental science, history, and sociology will be utilized.

GUIDANCE

101 CAREER PLANNING 2 Units

Lecture: 2 hours

Designed to clarify thinking regarding the selection and preparation for a career. Personal assessment of interests, aptitudes and values (May include use of selected interest and aptitude inventories.); relationship between education and occupations; occupational trends; resources useful in career planning; and development of skills in resume writing and interviewing.

Offered for Credit/No Credit only.

105 JOB HUNTING STRATEGIES .5 Units

Lecture: .5 hour

Development of job hunting strategies. Effective use of tools necessary in the job search including: the application, resume, letter of application and interview. Primarily for the student nearing graduation or currently looking for employment.

Offered for Credit/No Credit only.

HEALTH EDUCATION

50 CARDIOPULMONARY RESUSCITATION .5 Unit

Lecture: 9 hours total

Information necessary to develop the student's first aid knowledge, skills, and judgment to provide basic life support until the victim recovers or until advanced life support is available.

Offered for Credit/No Credit only.

60 COPING WITH STRESS 1 Unit

Lecture: 1 hour

The nature of stress and the coping strategies that can lead to effective stress management and self regulation; combined with relaxation exercises, visualizing techniques, and demonstrations.

101 HEALTH AND FITNESS EDUCATION 3 Units

Lecture: 3 hours

Personal and community health: an understanding of contemporary health issues and problems with an emphasis on personal fitness and adjustment. An informative material survey contributing to a person's mental, physical, and social well being.

105 CONSUMER HEALTH 2 Units

Lecture: 2 hours

A survey of health fads, frauds, and fallacies most frequently encountered by today's health consumer in the marketplace; emphasis on developing individual awareness of questionable advertising and outright quackery.

110 SAFETY AND FIRST AID EDUCATION 2 Units

Lecture: 2 hours

Theory and skills involved in the immediate and temporary care given to the victims of accidents and sudden illnesses. Covers Red Cross Standard First Aid with certificate available upon satisfactory completion of course.

May be repeated one time.

113 ADVANCED FIRST AID AND EMERGENCY CARE 3 Units

Lecture: 3 hours

To develop functional capabilities of individuals who as a part of everyday experiences may be required to provide emergency first aid care prior to care by qualified medical personnel.

May be repeated one time.

115 ADVANCED FIRST AID AND EMERGENCY CARE REFRESHER 1 Unit

Prerequisite: A valid certificate in Advanced First Aid
Lecture: 1 hour

A review of emergency first aid care. Upon the successful completion of the course a certificate is issued for Advanced First Aid and Emergency Care.

May be repeated 3 times.

120 NUTRITION 3 Units

Prerequisite: One year of high school or college chemistry
Lecture: 3 hours

Introductory study of energy and nutrient requirements of the body in relation to growth, maintenance, and reproduction; factors influencing normal metabolism; construction of the adequate diet. Emphasis is placed upon the chemical aspects of nutrition.

HEALTH OCCUPATIONS

103 EMERGENCY MEDICAL TECHNICIAN TRAINING 6 Units

Prerequisite: Completion of standard first aid course within the last two years or consent of instructor
Lecture: 6 hours

An intensive course to assist the student in developing skill in recognition of illness and injuries and proper procedures in administering emergency care.

107 EMERGENCY MEDICAL TECHNICIAN REFRESHER 1.5 Units

Prerequisite: E.M.T. Certificate
Lecture: 1.5 hours

Update of the existing E.M.T. certificates which are expiring.

May be repeated three times.

108a EMERGENCY MEDICAL TECHNICIAN II 9 Units

Prerequisite: E.M.T. I certification, one year E.M.T. practice, CPR certification
Lecture: 8 hours
Laboratory: 4 hours

Designed to provide students with the knowledge and skills necessary to be certified as an Emergency Medical Technician II in California. Laboratory assignments will be conducted in hospitals.

108b EMERGENCY MEDICAL TECHNICIAN II 9 Units

Prerequisite: Health Occupations 108a
Lecture: 8 hours
Laboratory: 4 hours

A continuation of Health Occupations 108a. Emphasis will be on the musculoskeletal system, obstetrics, pediatrics, multiple injury and casualty situations and psychiatric emergencies.

VOCATIONAL NURSING

See Page 31 for Certificate Requirements

The Vocational Nursing Program is accredited by the California State Board of Vocational Nurse and Psychiatric Technician Examiners. Students who successfully complete all courses with a grade of "C" or better are eligible to take a state examination leading to licensure as a vocational nurse.

Eligibility requirements for admission are established by the California State Board of Vocational Nurse and Psychiatric Examiners and by the affirmative action guidelines of the college. A variety of screening and testing techniques are used culminating with a personal interview. A part of the screening process will be the findings of a required physical examination. All applicants must file two applications: one to the college for admission and one to the program specifically. Students interested in applying should contact the Admission and Records office for further information.

Vocational Nursing courses are intended for health oriented professional students. They may not be used for continuing education credit required for renewal of licensure by registered or licensed vocational nurses. Students may be admitted to certain courses provided they have met the prerequisite either by enrollment in the current LVN class, transfer from another vocational nursing program, as a refresher course, or by consent of the instructor. The nursing courses must be taken in numerical sequence and at least a grade of "C" must be maintained in courses required for licensure.

110 INTRODUCTION TO VOCATIONAL NURSING 3 Units

Prerequisite: Current enrollment in Vocational Nursing Program
Lecture: 3 hours

An introduction to the Licensed Vocational Nurse's role in the allied health field including law, professional ethics, hospital routine, calculation of dosages, drug sources, standards and dosages, basic procedures for administering drugs.

113 ANATOMY AND PHYSIOLOGY FOR VOCATIONAL NURSES 3 Units

Lecture: 3 hours

A study of the human body with emphasis on the individual systems and their function.

115 MATERNITY NURSING 3 Units

Prerequisite: Current enrollment in Vocational Nursing Program or consent of instructor.
Lecture: 3 hours

Normal process of pregnancy; nursing care of mother and infant including complications.

120a EFFECTS OF MEDICATION ON BODY SYSTEMS 2 Units

Prerequisite: Satisfactory completion of Health Occupations 110 or consent of instructor
Lecture: 2 hours

Medications used to alleviate patient discomfort. Medications used for the treatment of common disease conditions.

120b EFFECTS OF MEDICATION ON BODY SYSTEMS 2 Units

Prerequisite: Health Occupations 120a
Lecture: 2 hours

Continuation of Health Occupations 120a.

123 PEDIATRICS 2 Units

Prerequisite: Health Occupations 115 or consent of instructor
Lecture: 2 hours

The child's growth, development and care.

125a MEDICAL-SURGICAL NURSING 2 Units

Prerequisite: Current enrollment in Vocational Nursing Program.
Lecture: 2 hours

An introduction to illness, its causes, effects on the individual and methods of treatment.

125b MEDICAL-SURGICAL NURSING 5 Units

Prerequisite: Health Occupations 125a
Lecture: 5 hours

A continuation of Health Occupations 125a with emphasis on care and treatment of the medical and surgical patient with diseases of the cardiovascular and respiratory systems, the cancer patient and the patient with allergies.

125c MEDICAL-SURGICAL NURSING 5 Units
Prerequisite: Health Occupations 125b
Lecture: 5 hours
A continuation of Health Occupations 125b with emphasis on care of the patient with diseases of the gastrointestinal, musculoskeletal, endocrine, urinary, reproductive, and nervous systems and the eye, ear, and skin.

128 COMMUNITY HEALTH 3 Units
Prerequisite: Current enrollment in Vocational Nursing Program or consent of instructor
Lecture: 3 hours
Disease control and prevention, mental health and first aid, the community services available in prevention of disease and promotion of good health.

140a CLINIC 8 Units
Prerequisite: Current enrollment in Vocational Nursing Program
Lecture: 3 hours
Laboratory: 15 hours
Practical clinical experience in a hospital; to include hospital routine, departments, and patient care.

140b CLINIC 7 Units
Prerequisite: Health Occupations 140a
Laboratory: 21 hours
Continuation of Health Occupations 140a.

140c CLINIC 7 Units
Prerequisite: Health Occupations 140b
Laboratory: 21 hours
Continuation of Health Occupations 140b.

HEAVY EQUIPMENT AND TRUCK REPAIR

50 BUS DRIVER TRAINING 1.5 Units
Prerequisite: Possession of a valid California driver's license
Lecture: 1.5 hours
Instruction in the driver's responsibility for pupils, care and operation of a school bus, and laws relating to pupil transportation.

HISTORY

104a WORLD CIVILIZATIONS: to 1650 4 Units
Lecture: 4 hours
A survey of civilizations to 1650 A.D. Prehistoric cultures, the ancient Near East and Far East, Greek and Roman history and civilization; the rise of medieval Europe, Byzantine, and Moslem Empires; the Renaissance and Reformation periods.

104b WORLD CIVILIZATIONS: 1650 to Present 4 Units
Lecture: 4 hours
A survey of European, American, and non-Western civilizations from 1650 A.D. to the present. The emergence of strong national states, their struggle for world power, and their impact on the non-Western world.

111 ASIAN CIVILIZATIONS 3 Units
Lecture: 3 hours
Survey of the political and cultural history of India, China, Japan, and Southeast Asia; the response of Asian nations to the impact of the West, and resulting contemporary problems.

117a UNITED STATES: to 1865 3 Units
Lecture: 3 hours
Survey of United States history from Colonization to Reconstruction. Analysis of English Imperialism, Revolution, Nationalism, Political Democracy, Sectionalism, and Civil War.

117b UNITED STATES: 1865 to Present 3 Units
Lecture: 3 hours
Survey of United States history from Reconstruction to the present. Analysis of Industrialism, Progressivism, Internationalism, New Deal, and Contemporary America.

121 HISTORY OF CALIFORNIA 3 Units
Lecture: 3 hours
Survey of California history from pre-Columbian period to the present. Emphasis will include the Indians, Spaniards, Mexicans, Anglo-Americans and various minorities. Considerable attention will be devoted to California's influential role in national and world events.

133 ORAL HISTORY 2 Units
Lecture: 1 hour
Laboratory: 3 hours
Fundamentals of the tape-recorded interview. Demonstrations and discussions of the interview as a method in historical research and writing.

149 THE MOTHER LODE 3 Units
Lecture: 3 hours
History and lore of the Gold Rush country with emphasis on the Central Sierra communities.
Field trips may be required.

155 THE AMERICAN FRONTIER 3 Units
Lecture: 3 hours
Study of successive frontier zones and hostile environments in reshaping imported customs and habits into uniquely "American" characteristics. Emphasis will be on the 19th Century.

HOSPITALITY MANAGEMENT

See Page 29 for Certificate Requirements

101 INTRODUCTION TO THE HOSPITALITY INDUSTRY 3 Units
Lecture: 3 hours
Survey of the hotel-motel, food services, travel-tourism, club and recreation business. Analysis of the organizational structure of the hospitality industry, including historical development and examination of industry trends. Major emphasis will be placed on career planning and management in the hospitality industry.
Field trips may be required.

103 MARKETING OF HOSPITALITY SERVICES 3 Units
Lecture: 3 hours
A study of people, product, package, price, and promotion, and how they interrelate and constitute the ingredients in a marketing program.
Field trips may be required.

112 FRONT OFFICE MANAGEMENT/ HOTEL CATERING 3 Units
Lecture: 1 hour
Laboratory: 6 hours
Essential equipment, routines, and duties of the front desk clerk and relationship to other hotel departments; planning and preparation for private parties, dinners, meetings, and other special events that a hotel or restaurant may cater.

114 INTRODUCTION TO MAINTENANCE AND HOUSEKEEPING 2 Units
Laboratory: 6 hours
Provides essential technical information on equipment and its servicing to establish a preventive maintenance routine. Provides broad scope of the housekeeping position, stressing employee responsibilities, record-keeping, and use of equipment and materials.

116 LAWS OF INKEEPING 2 Units
Lecture: 2 hours
Legal relationships between California innkeepers and others; rights, duties, and liabilities of innkeepers and their personnel.
Field trips may be required.

Food Services

130 FOOD SERVICE MANAGEMENT 2 Units
Lecture: 2 hours
Introduction to culinary nomenclature, cost controls, kitchen equipment, planning, management reports, menu planning, food purchasing, nutrition and sanitation.
Field trips may be required.

131 DINING ROOM SERVICE 2 Units
Lecture: 1 hour
Laboratory: 3 hours
Service techniques, table settings, and etiquette used in all aspects of dining room service. Emphasis on devehowever the finer points in skills and showmanship.
Field trips may be required.

132 DINING ROOM MANAGEMENT 1.5 Units
Laboratory: 4.5 hours
Management of service in the dining room; coordinating the dining room staff to ensure proper service techniques and procedures are being followed, acting as host to ensure customer satisfaction.

133a INTRODUCTION TO COMMERCIAL FOOD PREPARATION 3 Units
Prerequisite: Negative Tuberculosis Test
Lecture: 1 hour
Laboratory: 6 hours
General introduction to safety, sanitation, culinary nomenclature, cook's tools, recipe conversion and food costs. Preparation of beverages, breakfasts and salads; commissary control and ordering of supplies.

133b INTRODUCTION TO COMMERCIAL FOOD PREPARATION 3 Units
Prerequisite: Hospitality Management 133a and Negative Tuberculosis Test
Lecture: 1 hour
Laboratory: 6 hours
Continuation of Hospitality Management 133a with emphasis on preparation of vegetables, sauces, rice, and farinaceous products; basic techniques of broiling, roasting, sauteing, and deep fat frying.

135 COMMERCIAL BAKING 3 Units
Prerequisite: Hosp. Management 130 or consent of instructor
Lecture: 1 hour
Laboratory: 6 hours
Tools, terms and functions in preparation of baked goods, gourmet desserts and cake decorating.
Field trips may be required.

139 FOOD SCIENCE AND NUTRITION 3 Units
Lecture: 3 hours
Scientific and sensory evaluation of food. Composition and functional properties of foods; study of food processing, additives, and legal control of food safety; how the body utilizes these foods.

140a CLASSICAL CUISINE: Beginning 3 Units
Prerequisite: Hospitality Management 133b
Lecture: 1 hour
Laboratory: 6 hours
French and classical cooking for the advanced student; saute, stock reduction, cold station preparation, hot station, and Garde Manger.

140b CLASSICAL CUISINE: Intermediate 3 Units
Prerequisite: Hospitality Management 140a
Lecture: 1 hour
Laboratory: 6 hours
A continuation of Hospitality Managment 140a with emphasis on preparation of vegetables, sauces, rice and farinaceous products; basic techniques of broiling, roasting, sauteing, and deep fat frying.

144 MEAT ANALYSIS 2 Units
Lecture: 1 hour
Laboratory: 3 hours
Study of various grades and cuts of meat and their use in restaurant sales. Cost control and fabrication.
Field trips may be required.

147 BEVERAGE MANAGEMENT 3 Units
Prerequisite: At least 21 years of age
Lecture: 2 hours
Laboratory: 3 hours
Study of all aspects of beverage management including federal, state and local regulations, mixology, background, and future of the beverage industry.
Field trips may be required.

148 HISTORY AND PRODUCTION OF CALIFORNIA WINES 2 Units
Lecture: 2 hours
Introduction to the history, development, production and types of wines.
Field trips are required.

Recreation Industry

151 INTRODUCTION TO PARKS AND RECREATION 3 Units
Lecture: 2 hours
Laboratory: 3 hours
An introductory course for individuals interested in parks and recreation, with exposure to park management, design, maintenance and construction; recreational aspects, job opportunities and duties.

160 INTRODUCTION TO TRAVEL-TOURISM INDUSTRY/TOURS 3 Units
Lecture: 3 hours
Evolution of tourism as an industry. Survey of domestic and international travel, laws, services, communications systems, and interaction with other sectors of the hospitality industry; the principles and procedures of group tour management and planning.
Field trips may be required.

HUMANITIES

101 OLD WORLD CULTURE 3 Units
Lecture: 3 hours
An introductory survey of humanistic culture, historically structured from classical Greece to the Renaissance, presenting enduring works of art, drama, literature, music, and philosophy.

102 MODERN CULTURE 3 Units
Lecture: 3 hours
An introductory survey of humanistic culture, historically structured from the Enlightenment to the present scene, presenting enduring works of art, drama, literature, music, and philosophy.

JOURNALISM

101a INTRODUCTION TO JOURNALISM 3 Units
Lecture: 3 hours
Introduction to basic newsgathering, writing techniques, production methods, photography, commercial art, advertising, libel and slander laws, journalism careers.

101b INTRODUCTION TO JOURNALISM 3 Units
Prerequisite: Journalism 101a
Lecture: 3 hours
Continuation of Journalism 101a.

107 NEWSPAPER PRODUCTION 1-3 Units
Prerequisite: Previous or concurrent enrollment in Journalism 101a
Laboratory: 3-9 hours
Laboratory using campus newspaper publications and other programs for application of newsgathering, writing skills and production methods.
Field trips may be required.
May be repeated two times.

LAW ENFORCEMENT

140a ARSON INVESTIGATION: Beginning 2 Units
Lecture: 2 hours
Designed to prepare fire suppression officers and police patrol officers to carry out the responsibility of arson detection and establish the foundation for an in-depth arson investigation.
(Students may not receive credit for both Fire Science 127 and Law Enforcement 140ab.)

140b ARSON INVESTIGATION: Advanced 2 Units
Prerequisite: Law Enforcement 140a or consent of instructor
Lecture: 2 hours
A continuation of the introductory course emphasizing preservation of evidence, explosive devices, testimony as an expert, insurance laws, and advanced fire problems.

160 ADVANCED OFFICERS' TRAINING 1-3 Units
Prerequisite: 24 Units in Law Enforcement or completion of recognized academy or consent of instructor
Lecture: 1-3 hours
Designed to upgrade officers currently working in any phase of law enforcement. Studies include administration of justice, patrol procedures, criminal law, and criminal investigation.

LIBRARY

101 INTRODUCTION TO LIBRARY RESOURCES 1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours
Instruction to the effective use of a library, its resources and services. Provides training in using the card catalog, periodical indexes, major reference tools, and in developing an effective search strategy.

MATHEMATICS

50 BASIC MATHEMATICS 2 Units
Lecture: 2 hours
or
Lecture: 1 hour
Laboratory: 3 hours
A basic course in arithmetic.

55 BEGINNING ALGEBRA 4 Units
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Algebraic structures of real numbers, development of algebraic techniques, rational operations, radicals, polynomials, factoring, linear equations, inequalities, and quadratic equations.

60 GEOMETRY 4 Units
Prerequisite: Mathematics 55 or one year high school algebra recommended
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Rectilinear figures, circles, parallels, perpendiculars, areas, similarity, constructions, logic, and proofs.

101 INTERMEDIATE ALGEBRA 4 Units
Prerequisite: Mathematics 55 or one year high school algebra
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Extension of elementary algebra; includes complex numbers.

102 TRIGONOMETRY 4 Units
Prerequisite: Mathematics 60 or Mathematics 101 or second year high school algebra and one year geometry
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Mathematics of angles, triangles, periodic function, identities, graphs, and logarithms for advanced mathematics and technical and engineering courses.

103 COLLEGE ALGEBRA 4 Units
Prerequisite: Mathematics 101 or equivalent high school course
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Extension of algebraic concepts; includes quadratic equations, inequalities, systems of equations, complex numbers, matrices, determinants, and polynomial, exponential, and logarithmic functions.

104 INTRODUCTION TO LOGIC (See also Philosophy 104) 3 Units
Lecture: 3 hours
Fundamentals of logic: (1) deduction, including syllogisms, truth functions, symbolic quantification, and fallacies; (2) induction, including probability, analogy, hypothesis, and the scientific method; (3) philosophy of logic.
(Credit for this course will be awarded for either Mathematics 104 or Philosophy 104, but not both.)

105 ELEMENTS OF STATISTICS 4 Units
Prerequisite: Mathematics 101 or second year high school algebra
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Statistical concepts of probability, analysis and significance of measurements, measures of central tendency, correlation, variation, distributions, and reliability and validity of tests.

110 FINITE MATHEMATICS 4 Units
Prerequisite: Mathematics 101 or two years of high school algebra
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Symbolic logic, sets, probability, vectors, matrices, and game theory.

115 MATRIX MATHEMATICS FOR COMPUTERS 2 Units
Prerequisite: Mathematics 55 or one year high school algebra
Lecture: 1 hour
Laboratory: 3 hours
Matrix properties and operations, matrix identity and inverse, matrix translations and rotation, systems of equations, and applications.

120a CALCULUS WITH ANALYTIC GEOMETRY 4 Units
Prerequisite: Two years of high school algebra, one year of plane geometry, and one-half year of trigonometry or Mathematics 102. Mathematics 103 recommended
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Inequalities, relations, functions, graphs, limits, the derivative, continuity, lines, circles, and conics with geometric and physical interpretations of the derivative.

120b CALCULUS WITH ANALYTIC GEOMETRY 4 Units
Prerequisite: Mathematics 120a
Lecture: 4 hours
or
Lecture: 3 hours
Laboratory: 3 hours
Polar coordinates, vectors in the plane, techniques in integration, and applications of the integral.

MUSIC

100 STANDARD NOTATION 2 Units
Lecture: 2 hours
Introduction to traditional musical notation, key signatures, scales, intervals and chords, sight singing and ear training.

102 INTRODUCTION TO MUSIC 3 Units
Lecture: 3 hours
Study and analysis of music, including instrumentation, form, basic elements, and general background of styles and composers.

109 PERFORMANCE PRACTICUM .5 Units
Activity: 1 hour
A series of concerts and recital demonstrations involving students, staff and visiting artists for the development of performance methodology and critical listening skills.

110a SURVEY OF MUSIC HISTORY AND LITERATURE: Ancient to 1750 3 Units
Lecture: 3 hours
A survey of elements of style, major composers, and masterpieces of music from the Greek era through the Medieval, Renaissance, Baroque, and Early Classic periods, from 1000 B.C. through 1750 A.D.

110b SURVEY OF MUSIC HISTORY AND LITERATURE: 1750 to Present 3 Units
Lecture: 3 hours
A survey of elements of style, major composers, and masterpieces of music during the Classic, Romantic, and 20th Century periods, from 1750 to the present. Study will include significant developments in American music from its origins to the present.

112 SURVEY OF JAZZ AND POPULAR MUSIC 3 Units
Lecture: 3 hours
Nature, processes and history of jazz and popular music from its origins to the present.
Field trips may be required.

120a MUSIC THEORY 5 Units
Lecture: 4 hours
Activity: 2 hours
Analysis of the essentials for understanding and writing music. Included are rhythm, scales, intervals, chords, notation, melody writing; study of diatonic 4-part harmony, figured bass, chord progressions, harmonic motion, ear training, and keyboard applications.

120b MUSIC THEORY 5 Units
Prerequisite: Music 120a
Lecture: 4 hours
Activity: 2 hours
Continuing study in harmony and analysis. Included are secondary dominants, modulation, altered chords, non-harmonic notes, extended chords, harmonic ear training, and keyboard harmony.

126 COMPOSITION 3 Units
Prerequisite: Music 120b
Lecture: 2 hours
Laboratory: 3 hours
Composing in various musical styles as well as synthesis of student's own style. Study and analysis of different methods of composition of music in relation to project chosen by student.
May be repeated one time.

131a ELEMENTARY CLASS PIANO 2 Units
Prerequisite: Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Study of basic techniques of piano playing, fundamentals of music theory, sight-reading, improvisation, and harmonization.

131b ELEMENTARY CLASS PIANO 2 Units
Prerequisite: Music 131a or consent of instructor. Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Continuation of Music 131a.

136a ELEMENTARY CLASS VOICE 2 Units
Prerequisite: Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Group instruction in basic singing technique, including breath support, tone production, diction, intonation, sight-reading, and stage presence.

136b ELEMENTARY CLASS VOICE 2 Units
Prerequisite: Music 136a or consent of instructor. Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Continuation of Music 136a.

138 BEGINNING JAZZ IMPROVISATION 2 Units
Lecture: 1 hour
Activity: 2 hours
Beginning study in jazz improvisation with emphasis on style, rhythm, and pentatonic and diatonic scales.

141a INTERMEDIATE CLASS PIANO 2 Units
Prerequisite: Music 131b or consent of instructor. Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Study of playing techniques requiring the full range of the piano and covering piano literature from 1700 to the present, emphasizing style and interpretation.

141b INTERMEDIATE CLASS PIANO 2 Units
Prerequisite: Music 141a or consent of instructor. Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Continuation of Music 141a.

146a INTERMEDIATE CLASS VOICE 2 Units
Prerequisite: Music 136b or consent of instructor. Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Group instruction in the refinement of singing technique, using classical and popular solo repertoire from 1600 to the present and emphasizing style and interpretation.

146b INTERMEDIATE CLASS VOICE 2 Units
Prerequisite: Music 146a, or consent of instructor. Concurrent enollment in Music 109 recommended
Lecture: 1 hour
Activity: 2 hours
Continuation of Music 146a.

148 INTERMEDIATE JAZZ IMPROVISATION 2 Units
Prerequisite: Music 138 or consent of instructor
Lecture: 1 hour
Activity: 2 hours
Study and practice of jazz improvisation techniques including basic chord scales, style, selected ear training, and analysis of transcribed solos.
May be repeated one time.

150 SERIES — APPLIED MUSIC
Prerequisite: Audition. Concurrent enrollment in Music 109 recommended
Lecture: 1 hour
Study of performance techniques, interpretation, and repertoire related to private music instruction. Designated for music majors and minors.
May be repeated three times.

150 APPLIED MUSIC: Guitar	1 Unit
151 APPLIED MUSIC: Keyboard	1 Unit
152 APPLIED MUSIC: Woodwinds	1 Unit
153 APPLIED MUSIC: Brass	1 Unit
154 APPLIED MUSIC: Strings	1 Unit
155 APPLIED MUSIC: Percussion	1 Unit
156 APPLIED MUSIC: Voice	1 Unit
157 APPLIED MUSIC: Synthesizer	1 Unit

160 CHOIR 1-2 Units
Prerequisite: Concurrent enrollment in Music 109 recommended
Activity: 2-4 hours
Study and performance of mixed choral works of various periods and styles.
May be repeated three times.

164 JAZZ CHOIR 1-3 Units
Prerequisite: Audition
Activity: 2-6 hours
Study and performance of vocal jazz and improvisation in an ensemble of limited size.
May be repeated three times.

165 THEATRE PRODUCTION: Music Emphasis 1-3 Units
Prerequisite: Audition
Laboratory: 3-9 hours
Directed activities in theatre production for public performance with a concentration in vocal or instrumental music.
May be repeated three times.

166 COMMUNITY CHORUS 1.5 Units
Prerequisite: Concurrent enrollment in Music 109 recommended
Activity: 3 hours
Study and performance of mixed choral works of various periods and styles.
May be repeated three times.

169 MADRIGAL ENSEMBLE 1.5 Units
Prerequisite: Audition. Concurrent enrollment in Music 109 recommended
Activity: 3 hours
Study and performance of vocal chamber music with emphasis on the Renaissance and Contemporary periods.

170 WIND ENSEMBLE 1-2 Units
Prerequisite: Audition. Concurrent enrollment in Music 109 recommended
Activity: 2-4 hours
Study and performance of advanced wind ensemble literature. Attendance at all scheduled performances is required.
May be repeated three times.

172 JAZZ ENSEMBLE 1-2 Units
Prerequisite: Audition. Concurrent enrollment in Music 109 recommended
Activity: 2-4 hours
Study and performance of instrumental jazz and improvisation; techniques of improvisation will be explored.
May be repeated three times.

176 ORCHESTRA 1-2 Units
Prerequisite: Audition. Concurrent enrollment in Music 109 recommended
Activity: 2-4 hours
Study and performance of orchestral literature of various styles and media.
May be repeated three times.

179 ENSEMBLE: Instrumental Emphasis 1 Unit
Prerequisite: Audition. Concurrent enrollment in Music 109 recommended
Activity: 2 hours
Study and performance of music for small ensembles, duets, and chamber groups.
May be repeated three times.

NATURAL RESOURCES
See Pages 29-30 for Certificate Requirements

100 ENVIRONMENTAL CONSERVATION 3 Units
Lecture: 3 hours
Conservation of the biological and physical environment. History of the conservation movement. A case-study approach to land use practices of environmental conservation with current topics on endangered species, environmental pollution, wilderness management, energy, population and the uniqueness of California and Alaska natural resources.
Field trips may be required.

105 ALTERNATIVE ENERGY SOURCES 3 Units
Lecture: 2 hours
Laboratory: 3 hours
Home energy conservation and energy-efficient construction methods. Practical applications of solar, wind, and hydro-energy systems for heating, cooling, food drying, water pumping and electrical production.
Field trips will be required.

109 PARKS AND FORESTS LAW ENFORCEMENT 2 Units
Lecture: 2 hours
A general understanding of the rights and responsibilities of both the visitor and the employee in a wildland recreation setting.
Field trips may be required.

130 WILD EDIBLE AND USEFUL PLANTS 3 Units
Lecture: 2 hours
Laboratory: 3 hours
Survey of wild edible and useful plants with particular emphasis on the Sierra Nevada. Methods of collection, preserving and preparing wild plants with an emphasis on acorn preparation. Use of plant identification keys. Exposure to the nutritional content of plants, poisonous plants, basketry, dyeing, wild herbs and maple sugaring.
Field trips will be required.

NATURAL RESOURCES TECHNOLOGY
See Page 30 for Certificate Requirements

50 NATURAL HISTORY AND ECOLOGY 2 Units
Lecture: 2 hours
Natural history of California flora and fauna with emphasis on ecological principles and relationships.
Field trips will be required.

52 APPLIED WILDLANDS MANAGEMENT 3 Units
Prerequisite: Natural Resources Technology 60 recommended
Lecture: 2 hours
Laboratory: 3 hours
Techniques of managing wildlands for maximum forage, soil, water, wildlife and recreation quality. Field observations and applications for restoration and protection of watershed, range, wildlife and recreation values.
Field trips will be required.

55 INTERPRETIVE GUIDED TOURS 2 Units
Lecture: 2 hours
Methods of meeting and serving diverse public groups in their social, cultural and recreational use of wildlife recreation sites.
Field trips will be required.

60 AERIAL PHOTOGRAPHY AND MAP INTERPRETATION 2 Units
Lecture: 1 hour
Laboratory: 3 hours
Use of basic photogrammetric instruments and equipment. Techniques of delineating soil-vegetation and timber types and distinguishing physical features on aerial photographs. Techniques of interpretation of planimetric, topographic, orthophoto topographic and geologic maps. Principles of remote sensing.
Field trips may be required.

63 WATER FOR CONSUMPTION 3 Units
Lecture: 3 hours
Study of present and future sources of community water supply with special attention to state standards for potable water. Analysis, processing, treatment, quality control, storage and distribution of community water.
Field trips may be required.

81 CALIFORNIA WILDLIFE 4 Units
Lecture: 4 hours
Study of the field identification characteristics, habitat requirements, life history, management and population dynamics of selected California mammals, birds and fish. Methods and problems of appraising and manipulating game mammals, furbearers, upland game and fisheries to improve populations. Techniques of habitat appraisal and manipulation to improve wildlife populations.
Field trips may be required.

PHILOSOPHY

101 INTRODUCTION TO PHILOSOPHY 3 Units
Lecture: 3 hours
Survey of the field of philosophy, including (1) human nature, meaning in life, values in ethics, in social justice, and in art; (2) knowledge, truth, logic, and the scientific method; (3) ultimate reality and philosophy of religion.

104 INTRODUCTION TO LOGIC (See also Mathematics 104) 3 Units
Lecture: 3 hours
Fundamentals of logic: (1) deduction, including syllogisms, truth functions, symbolic quantification, and fallacies; (2) induction, including probability, analogy, hypothesis, and the scientific method; (3) philosophy of logic.
(Credit for this course will be awarded in either Philosophy 104 or Mathematics 104, but not both.)

115 WORLD RELIGIONS 3 Units
Lecture: 3 hours
Development of religious consciousness from primitive beliefs in ancient times to the living religions of the world: tribal religions of Native Americans and Africans, Hinduism, Buddhism, Taoism, Shinto, Judaism, Christianity, Islam, and new religions and cults in America.

125 TWENTIETH CENTURY PHILOSOPHY 3 Units
Lecture: 3 hours
A brief survey of twentieth century philosophy emphasizing the leading exponents of each school of thought and their contributions to our understanding of man, nature, society, history, science, technology, human values and the meaning of life.

PHYSICAL EDUCATION

101 INTRODUCTION TO PHYSICAL EDUCATION 2 Units
Lecture: 2 hours
The background and principles of physical education and sports. Study of the aims and objectives of modern physical education with a view toward development of basic philosophy and background for professional education.

103 BASKETBALL: ADVANCED—THEORY AND PRACTICE 2 Units
Lecture: .5 hour
Activity: 3 hours
Advanced concepts, strategy, and practice necessary in the playing and understanding of collegiate basketball.
May be repeated twice for credit.

105 PERSONAL FITNESS CONCEPTS AND EVALUATIONS 2.5 Units
Lecture: 1.5 hours
Activity: 2 hours
A study of "how," "why," and "what" of physical activity and exercise. This course is intended to help students make important decisions about their own personal exercise program and their personal physical fitness directions for a lifetime.

106 THEORY AND PRACTICE OF ADAPTIVE PHYSICAL EDUCATION 2.5 Units
Lecture: 1.5 hours
Laboratory: 3 hours
Designed to provide formal training and practical experience for students interested in pursuing a career in physical education, physical therapy, corrective rehabilitative physical education, therapeutic recreation, corrective therapy, and cardiac rehabilitation or any other area which involves working with the physically limited.

107 CORRECTIVE REHABILITATIVE PHYSICAL EDUCATION -ASSISTING 1-2 Units
Prerequisite: Physical Education 106
Laboratory: 3-6 hours
Designed to allow P.E. 106 students who have gone through the training program to assist in P.E. 158 at the level of teaching assistants. Students will be able to effectively use the knowledge and skills learned in P.E. 106 and learn advanced techniques.

108 WEIGHT TRAINING PRINCIPLES AND PROGRAMMING 1 Unit
Prerequisite: Concurrent enrollment in P.E. 149
Lecture: 1 hour
A study of major theoretical concepts of weight training. Students are led in a clear, meaningful fashion from the physiological mechanisms underlying training techniques to actual practices of them.

112 THEATRE PRODUCTION: DANCE EMPHASIS 1-2 Units
Prerequisite: Audition
Laboratory: 3-6 hours
Directed activities in theatre production for public performance with a concentration in dance.
May be repeated three times.

116 DANCE PRODUCTION 3 Units
Prerequisite: Audition
Activity: 6 hours
Dance production for public performance; theory and practice in choreography, performance styles, and dance rehearsal combined with theatrical structure, non-verbal dramatic techniques, and technical staging designed for concert presentation.
May be repeated three times.

117 CHOREOGRAPHY AND COMPOSITION 3 Units
Prerequisite: Previous or concurrent enrollment in P.E. 116 or consent of instructor and P.E. 123 or P.E. 127 or P.E 129 or P.E. 130 or consent of instructor
Lecture: 2 hours
Activity: 2 hours
Exploration of choreography fundamentals through a problem solving approach. Studies deal with aspects of time, space, dynamics and design in movement with emphasis on extending communication skills of the body.

Activity Courses

120 AEROBIC EXERCISE I 1.5 Units
Activity: 3 hours
Designed to promote cardiovascular fitness, flexibility, muscle tone, and general overall conditioning.

121 AEROBIC EXERCISE II 1.5 Units
Prerequisite: P.E 120
Activity: 3 hours
An advanced exercise class designed to increase cardiovascular fitness. Each workout will include exercise to build strength, flexibility, and endurance.
May be repeated two times.

123 BALLET I 1.5 Units
Activity: 3 hours
Introduction to fundamental classical ballet forms, including basic concepts, positions, and combinations designed to acquaint the student with the technical and expressive elements of ballet.

124 BALLET II 1.5 Units
Prerequisite: P.E. 123 or consent of instructor
Activity: 3 hours
Continuing study of techniques and principles of classical ballet including phrasing, combinations, and stylistic elements.
May be repeated two times.

127 DANCE, JAZZ I 1.5 Units
Activity: 3 hours
Introduction to the fundamentals of jazz dance with emphasis on basic technique, rhythmical analysis, and various cultural and historical styles.

128 DANCE, JAZZ II 1.5 Units
Prerequisite: P.E. 127
Activity: 3 hours
Continuing work in jazz dance with emphasis on developing stylistic elements and performance techniques. Specific attention given to learning extended movement combinations and compositional forms indigenous to American jazz.
May be repeated two times.

129 DANCE, MODERN I 1.5 Units
Activity: 3 hours
Introduction to modern dance movement. Fundamentals, basic movement, and composition presented and practiced as an opportunity for the student to express himself/herself creatively through dance forms.

130 DANCE, MODERN II 1.5 Units
Prerequisite: P.E. 129 or consent of instructor
Activity: 3 hours
Continuing work on Modern Dance movement and elements of rhythm, space and dynamics, emphasis on contemporary dance techniques, individual and group choreography, and cultural influences on expressive dance forms.
May be repeated two times.

132 FENCING 1.5 Units
Activity: 3 hours
Introduction to swordmanship for men and women. Fencing with the French foil, with instruction in the basic skills, rules and officiating of the sport. Intra-class contests will be played.
May be repeated three times.

134 GOLF I 1.5 Units
Activity: 3 hours
Instruction and practice in fundamentals.

135 GOLF II 1.5 Units
Prerequisite: P.E. 134 or consent of instructor
Activity: 3 hours
Instruction and practice in skills, rules and strategy.
May be repeated two times.

138 SKIING CONDITIONING 1.5 Units
Activity: 3 hours
Instruction in progressive exercises and conditioning for snow skiing.
May be repeated three times.

139 SKIING: ALPINE 2 Units
Activity: 4 hours
Instruction and practice in basic fundamentals of snow skiing on the slopes. Care and selection of equipment, terminology, and safety included.

140 SKIING: CROSS COUNTRY 2 Units
Activity: 4 hours
Instruction and practice for snow skiing in the open country. Care and selection of equipment, safety, and outdoor orientation emphasized.
May be repeated one time.

143 TENNIS I 1.5 Units
Activity: 3 hours
Instruction and practice in fundamentals of Eastern grip tennis. Emphasis on development of sound ground strokes, serve and volley. Includes rules, scoring, and game play in both singles and doubles tennis.

144 TENNIS II 1.5 Units
Prerequisite: P.E. 143 or consent of instructor
Activity: 3 hours
Instruction and practice in the advanced aspects of Eastern-grip tennis. Emphasis on game play and development with individualized coaching and analysis for more experienced player. Includes tactics and court coverage to encourage a more powerful game in both singles and doubles tennis.
May be repeated two times.

146 VOLLEYBALL I 1.5 Units
Activity: 3 hours
Basic techniques with emphasis on offensive and defensive tactics of team play. Rules and intra-class competition included.

147 VOLLEYBALL II 1.5 Units
Prerequisite: P.E. 146 or consent of instructor
Activity: 3 hours
An intermediate level of skills and strategies for the experienced player; and introduction to power volleyball play.
May be repeated three times.

149 WEIGHT TRAINING I 1.5 Units
Activity: 3 hours
Instruction in use of weights and body building equipment with emphasis upon individual program development.
May be repeated two times.

150 WEIGHT TRAINING II 1.5 Units
Prerequisite: P.E. 149 or consent of instructor
Activity: 3 hours
Designed to help individuals accomplish a fine state of physical fitness through the use of "overload" equipment and progressive resistance exercises. Each person shall, with the counseling of the instructor, analyze his/her particular needs and establish a program that will help accomplish these goals.
May be repeated two times.

158 ADAPTIVE PHSICAL EDUCATION 1-3 Units
Activity: 2-6 hours
Designed to offer individually prescribed fitness direction to the physically limited with emphasis on the improvements of cardiovascular flexibility and strength components.
May be repeated three times.

Intercollegiate Athletics

162 VARSITY BASKETBALL 2 Units
Prerequisite: Must be enrolled as full-time student
Activity: 10 hours
Preparation and training for intercollegiate varsity basketball competition. Participation in contests with other colleges will be scheduled.
Field trips will be required.

164 VARSITY TENNIS 2 Units
Prerequisite: Must be enrolled as full-time student
Activity: 10 hours
Preparation and training for intercollegiate varsity tennis competition. Participation in contests with other colleges will be scheduled.
Field trips will be required.

166 VARSITY VOLLEYBALL 2 Units
Prerequisite: Must be enrolled as full-time student
Activity: 10 hours
Preparation and training for intercollegiate varsity volleyball competition. Participation in contests with other colleges will be scheduled.
Field trips will be required.

Adult Fitness Program

170a CARDIAC THERAPY: PHASE IV 1-3 Units
Prerequisite: Primary Physician Referral
Activity: 2-6 hours
A secondary prevention program designed for patients with angina pectoris, healed myocardial infarctions, or post-cardiac surgical referrals whose functional capacity is relatively uncompromised.
(Primary physician referral is mandatory.)

170b CARDIAC THERAPY: PHASE IV 1-3 Units
Prerequisite: Physical Education 170a
Activity: 2-6 hours
Continuation of Physical Education 170a.
May be repeated two times.

171 INTRODUCTION TO ADULT FITNESS 1.5 Units
Lecture: 1.5 hours
An overview of the essential principles of physical fitness theory and health appropriate to adults; a survey of exercise theory and techniques designed for adults.

172 MULTIPHASIC FITNESS TESTING PROGRAM 1 Unit
Prerequisite: Concurrent enrollment in P.E. 170a or P.E. 170b.
Lecture: .5 hour
Activity: 1 hour
Physician supervised multiphasic fitness evaluation including exercise stress test on a treadmill or bicycle ergometer with electrocardiographic monitoring for the purpose of determining functional capacity and an ensuing safe exercise prescription. Evaluations also include pulmonary function, body composition to determine percent fat and blood chemistry.

173a ADULT FITNESS PROGRAM I 1-3 Units
Activity: 2-6 hours
Individual evaluation of cardio-vascular function and development of a personalized prescription program for aerobic fitness improvement; monitoring and supervision of exercise regimens and related fitness activities for continued health and fitness maintenance.

173b ADULT FITNESS PROGRAM II 1-3 Units
Prerequisite: Physical Education 173a
Activity: 2-6 hours
A continuation of Physical Education 173a.
May be repeated two times.

175 HEALTH AND PHYSICAL FITNESS WORKSHOP 1 Unit
Lecture: .5 hour
Activity: 1 hour
Instruction in the relationship between the human body, health and physical fitness. Testing to establish individual fitness status involves exercise electrocardiogram, body composition analysis, flexibility and strength evaluations followed by the design of and participation in a personal fitness program with particular emphasis on aerobic type activities.
May be repeated three times.

177 INTRODUCTION TO EXERCISE STRESS TESTING 2.5 Units
Lecture: 1.5 hours
Activity: 2 hours
The study of graded exercise tolerance testing; concepts, protocols, and practices in measuring cardio-vascular response and functional capacity employing the treadmill and bicycle ergometer.

PHYSICS

100 MODERN PHYSICS 2 Units
Prerequisite: Mathematics 101
Lecture: 2 hours
An algebra level investigation of the special and general theories of relativity as well as the theories that gave rise to the concepts of anti-matter and black holes.

120a GENERAL PHYSICS 5 Units
Prerequisite: Mathematics 120ab or Mathematics 102 and concurrent enrollment in Mathematics 120a
Lecture: 4 hours
Laboratory: 3 hours
A general calculus level investigation of physics covering the topics of mechanics, heat, light, sound, electricity and magnetism as well as modern physics.

120b GENERAL PHYSICS 5 Units
Prerequisite: Physics 120a
Lecture: 4 hours
Laboratory: 3 hours
Continuation of Physics 120a.

POLITICAL SCIENCE

101 CONSTITUTIONAL GOVERNMENT 3 Units
Lecture: 3 hours
Basic principles of United States and California constitutional governments with emphasis on dynamics of the American federal system, governmental powers and sources of power at the national, state, and local levels, and the rights and responsibilities of democratic citizenship.

110 AMERICAN POLITICAL THOUGHT 3 Units
Lecture: 3 hours
Historical survey of American political doctrines and issues; influence of political traditions on American politics; contemporary American political issues.

115 INTERNATIONAL RELATIONS 3 Units
Lecture: 3 hours
Dynamics of interstate power relations; diplomacy and international law; international, regional and supranational organizations; war and peace; foreign policy.

125 COMPARATIVE POLITICAL SYSTEMS 3 Units
Lecture: 3 hours
Comparative analysis of major political cultures and systems in the Western and non-Western world.

PSYCHOLOGY

101 GENERAL PSYCHOLOGY 3 Units
Lecture: 3 hours
An introductory survey course of the general field of psychology. Topics to be covered include conditioning, personality development, aggression, emotions, stress, anxiety, therapy, sexuality, motivation, consciousness, biology and behavior, and abnormal psychology.

102 CURRENT ISSUES IN PSYCHOLOGY 3 Units
Prerequisite: Psychology 101
Lecture: 3 hours
A look at the more advanced areas of study in psychology, concentrating on current theoretical approaches and research findings regarding areas of controversy.

103 SOCIAL PSYCHOLOGY 3 Units
Prerequisite: Psychology 101
Lecture: 3 hours
Interrelationship between the individual and his social environment. Social influence upon motivation, perception, group pressure, conformity, attraction, prejudice, behavior. Development of changes of attitudes and opinions. Psychological analysis of small groups, social stratification and mass phenomena.

125 BIOFEEDBACK AND SELF-CONTROL 3 Units
Lecture: 3 hours
Study of various biofeedback modalities in order to enhance self-sensing and to acquire control of the "relaxation response;" to identify the personality traits, coping styles, and lifestyles that promote a sense of self-control, optimal well-being and potential of the student.
May be repeated one time.

126 BIOFEEDBACK AND SELF-CONTROL LABORATORY 1 Unit
Prerequisite: Psychology 125 or consent of instructor
Laboratory: 3 hours
A practical application of the self-paced regulatory technique of biofeedback training.
(Offered for Credit/No Credit except for those students who opt for a letter grade before the end of the sixth week of the semester.)
May be repeated two times.

130 PERSONAL AND SOCIAL ADJUSTMENT 3 Units
Lecture: 3 hours
Group process experience in which students have the opportunity to learn more about themselves in relation to others.
Field trips may be required.
May be repeated one time.

145a DEVELOPMENTAL PSYCHOLOGY Prenatal Through Early Childhood 3 Units
Prerequisite: Psychology 101
Lecture: 3 hours
Research and theories in developmental psychology from prenatal life through early childhood, covering physical, social, emotional, cognitive, language, and personality development. Issue of heredity and environment considered.

145b DEVELOPMENTAL PSYCHOLOGY Later Childhood Through Adulthood 3 Units
Prerequisite: Psychology 101, Psychology 145a recommended
Lecture: 3 hours
Research and theories in developmental psychology from later childhood through adulthood, covering continuing developmental changes and special concerns of these years, e.g., peer acceptance, sexuality, sex roles, drug usage, parent-child relations, career choices, mid-life crisis, etc.

160 PERSONALITY THEORY 3 Units
Prerequisite: Psychology 101
Lecture: 3 hours
A survey course of the various theories of personality development.

SEARCH AND RESCUE

See Page 31 for Certificate Requirements

103 ENVIRONMENTAL INJURIES 1 Unit
Prerequisite: Health Education 113 or Health Occupations 103 recommended
Lecture: 1 hour
A review of injuries caused by recreational and vocational activities in the outdoors, including heat, cold, water, altitude, and animal-caused injuries.

105 MOUNTAIN MEDICINE 1 Unit
Prerequisite: Health Education 113 or Health Occupations 103 recommended
Lecture: 1 hour
Review of common injuries and illnesses encountered in the outdoors. Emphasis on improvised treatment of trauma with a minimum of manpower, equipment and mobility, includes discussion of psychological aspects, proper nutrition and diseases arising from travel in rural areas and recommended first aid supplies.

107 BASIC SURVIVAL 1 Unit
Lecture: 1 hour
An intensive seminar in short-term wilderness survival with emphasis on preventing survival emergencies by psychological and skills preparedness. The human energy and water balance will be stressed, proper clothing and emergency responses to survival in arid and cold climates will be taught along with a simple, inexpensive survival kit.

109 COLD WEATHER SURVIVAL 1 Unit
Lecture: 1 hour
An intensive seminar in short-term survival in cold and wet wilderness environments. Psychological skills, equipment preparedness and emergency prevention will be emphasized. Adaptation of basic skills to the factors of snow, rain, and high winds will be stressed. Illnesses caused by cold/wet environments will be reviewed.

110 INTRODUCTION TO SEARCH THEORY 2 Units
Lecture: 2 hours
An overview of current search theories as developed by the National Park Service and the National Association for Search and Rescue.

112 ORGANIZATION AND DIRECTION OF A SEARCH 2 Units
Lecture: 2 hours
Comprehensive review of Search and Rescue 110 expanding into multi-agency considerations. Designed for the inservice professional or volunteer. National association of Search and Rescue certification available to the student upon successful completion of the course.

114 TRACKING AND SIGN CUTTING 1 Unit
Lecture: 1 hour
An overview of current tracking theories and techniques as developed by the U.S. Border Patrol.
Field trips may be required.

116 THE USE OF SEARCH AND RESCUE DOGS 1 Unit
Lecture: 1 hour
Designed to familiarize search and rescue personnel with the uses and limitations of Search and Rescue dogs; availability of dog units, call-out procedures, OES transportation availability, weather, terrain factors, avalanche dogs and night searching.
Field trips may be required.

122 WILDERNESS NAVIGATION 2 Units
Lecture: 2 hours
Review of useful maps, compass and navigation techniques for outdoor activities; wilderness route-finding and orientation using terrain clues, map and compass, reduction of error via multi-person techniques and concise communication of location.

126 GRID SEARCH TECHNIQUES 1 Unit
Lecture: 1 hour
An overview of current non-winter grid search techniques as developed by William G. Syrotuck and the National Association of Search and Rescue.

130 INTRODUCTION TO RESCUE TECHNIQUES 2 Units
Lecture: 2 hours
A survey course covering the following three specialized areas critical to an effective and field safe search and rescue person: rescue carries, rope management and communication.

132 ASCENDING AND DESCENDING TECHNIQUES 2 Units
Prerequisite: Search and Rescue 130 or consent of instructor
Lecture: 2 hours
Review of rope safety techniques for rescue personnel with emphasis on methods of ascent and descent for rescuer and ambulatory victims in various rescue environments. Instruction and demonstration of safe techniques for the ascent and descent of slopes, buildings and cliffs. Emphasis on rope-safety techniques; knots, belaying and anchors; basic four-point climbing techniques and use of friction knots and mechanical ascenders. Handling and safe use of fire-service ladders reviewed.
Field trips may be required.

134 HELICOPTER OPERATIONS 1 Unit
Lecture: 1 hour
The role of the helicopter in rescue situations with emphasis on the role of ground rescue personnel. Helicopter safety rules, interagency helicopter request information and procedures, selecting a landing zone, evaluations, inserts, crash procedures, and communications.

135 AVALANCHE RESCUE 2 Units
Lecture: 2 hours
This course will introduce the rescue student to the basic concept dealing with avalanche, mountain snowpack, avalanche phenomena, meteorology, stability evaluation, avalanche safety, search and rescue.

136 SWIFTWATER RESCUE 2 Units
Prerequisite: Search and Rescue 130 or consent of instructor
Lecture: 2 hours
Designed to develop a sense of confidence in rescue personnel dealing with swiftwater rescue situations. Topics include: swiftwater physiology, equipment, swimming, line tending, search techniques, and use of helicopters.

150 ROPE RESCUE 1.5 Units
Lecture: 1.5 hours
Instruction in techniques used to evacuate injured parties in various settings. Demonstration of the use of the stokes litter in conjunction with mechanical advantage rope systems in gentle and moderate terrain situations. Review of rope safety belaying and anchoring techniques.

151 RAPELLING SAFETY 1 Unit
Prerequisite: Search and Rescue 150 or consent of instructor
Lecture: 1 hour
Designed to update rescue personnel in equipment and technical developments in rappelling. Emphasis on individual safety, rescue of the injured or trapped rappeller and safe management of the training tower and/or incident scene, review and discussion of documented rappelling accidents.

153 VEHICLE EXTRICATIONS 1 Unit
Lecture: 1 hour
Use of the Hurst Tool and Black Hawk Extrication kits; hands-on instruction on various extrication techniques with special emphasis given to patient management and handling at the accident scene.
Field trips may be required.

154 LADDERS AS A RESCUE TOOL 1 Unit
Prerequisite: Search and Rescue 130 or Search and Rescue 150 or consent of instructor
Lecture: 1 hour
Safe and effective use of fire service ladders in rescue applications, review of the uses and limitations of the ladder as a bridge, shore, derrick, slide, A-frame and jib.

155 EMERGENCY SHORING TECHNIQUES .5 Unit
Lecture: .5 hour
Safe and effective use of improvised building materials to shore unstable environments. Review of the uses and applications of emergency shoring relative to structural collapse, debris, and shafting.

156 EMERGENCY TRENCH SHORING 1 Unit
Lecture: 1 hour
Pre-planning, size-up and management of the trench rescue. Hands-on experience in emergency shoring techniques. (The course meets or exceeds current CAL-OSHA and California State Fire Training requirements in trench rescue procedures).

158 HEAVY RESCUE 2 Units
Prerequisite: Search and Rescue 130 recommended
Lecture: 1.5 hours
Laboratory: 1.5 hours
Training in safe rescue techniques relating to disasters associated with building collapse, mass transportation, caves and mines, including organization, procedures, and resources.

159 HEAVY RESCUE INSTRUCTOR TRAINING 3 Units
Prerequisite: Search and Rescue 158
Lecture: 3 hours
Review and update of heavy duty rescue skills and techniques designed to prepare qualified personnel to teach those skills and techniques to others.

170 SPECIAL TOPICS IN RESCUE .5-3 Units
Prerequisite: Will vary with topic
Lecture: .5-3 hours
Laboratory: 1.5-3 hours
Various topics in rescue will be covered to meet individual or agency needs. Emphasis on specialized development of skills and knowledge, area planning for rescue, development and implementation of training and rescue evolutions.

SKILLS DEVELOPMENT

50a WRITTEN LANGUAGE DEVELOPMENT 3 Units
Prerequisite: Verified Learning Disability
Lecture: 3 hours
Designed for students with learning disabilities who have difficulty succeeding in a traditional classroom. Presents a precise, systematic approach to learning basic communication skills including instruction in phonics, vocabulary building, English speech patterns, reading and writing. The emphasis will be on the development of compensatory strategies for particular skills deficits.

50b WRITTEN LANGUAGE DEVELOPMENT 3 Units
Prerequisite: Verified learning disability and satisfactory completion of Skills Development 50a
Lecture: 3 hours
Continuation of Skills Development 50a with particular emphasis on reading comprehension and paragraph writing.

51 DIAGNOSTIC LEARNING LABORATORY 1 Unit
Prerequisite: Verified Learning Disability
Laboratory: 3 hours
Individualized assistance in analyzing study problems and selecting and applying suitable learning strategies necessary for academic success in college courses.
Offered for Credit/No Credit only.

53 DIAGNOSTIC SPEECH LABORATORY 1 Unit
Prerequisite: Speech and language evaluation by Speech Pathologist
Laboratory: 3 hours
Provides speech remediation for students with speech, language, and hearing disorders. Assistance is provided on an individual and small group basis in the following areas: articulation, voice, language and fluency (stuttering). Emphasis is on addressing student's needs for effectiveness in academic or vocational settings.
Offered for Credit/No Credit only.

55 G.E.D. PREPARATION 1-2 Units
Lecture: .5-1.5 hours
Laboratory: 1.5 hours
Designed to teach the general skills needed to pass the General Educational Development test.
May be repeated for a maximum of 4 units of credit.

61 BASIC ARITHMETIC 1-2 Units
Laboratory: 3-6 hours
Individualized instruction in fundamental operations. Students may start anywhere from whole numbers to formulas.
May be repeated for a maximum of 4 units of credit.

62 REVIEW ALGEBRA 1 Unit
Prerequisite: High School algebra
Laboratory: 3 hours
Individualized instruction in review of high school algebra.

75 COLLEGE SPELLING 1-2 Units
Laboratory: 3-6 hours
Designed to help students improve their spelling skills.
May be repeated for a maximum of 2 units of credit.

80 READING DEVELOPMENT 1-2 Units
Laboratory: 3-6 hours
Individualized instruction and self-instructional materials in specific reading skills units.
May be repeated for a maximum of 2 units of credit.

87 VOCABULARY DEVELOPMENT 1 Unit
Laboratory: 3 hours
Designed to help readers improve their vocabulary skills.
May be repeated one time.

88 SPEED READING 1-2 Units
Laboratory: 3-6 hours
Designed to help competent readers improve their reading rate.
May be repeated for a maximum of 2 units of credit.

90 STUDY SKILLS 1-2 Units
Laboratory: 3-6 hours
Improvement of the basic study skills.
May be repeated for a maximum of 2 units of credit.

95 TEST TAKING SKILLS 1 Unit
Laboratory: 3 hours
A course designed to help students develop skills in taking tests and examinations.

98 PEER TUTORING 2 Units
Prerequisite: Approvals of tutoring instructor, tutorial coordinator, and instructor in the discipline to be tutored.
Lecture: 1 hour
Laboratory: 3 hours
Provides students with an opportunity to give academic assistance to other students.
Offered for Credit-No Credit only.

SOCIAL SCIENCE

140 HUMAN SEXUAL BEHAVIOR 3 Units
Lecture: 3 hours
Exploration of issues in human sexuality from the perspective of the social sciences. Discussion of sexual behavior, feelings and attitudes as they affect one's self and others.

SOCIOLOGY

See Page 29 for Human Services Certificate Requirement

101 INTRODUCTION TO SOCIOLOGY 3 Units
Lecture: 3 hours
Introduction to the principal concepts, methods of sociology; survey of the interactions, interrelationships and processes of society: culture, socialization, stratification , minorities, primary and secondary groups, social change.

102 AMERICAN SOCIAL PATTERNS 3 Units
Lecture: 3 hours
The study of social organization focusing on the major components, such as family, religion, education, economics, politics, and technology; group networks and formal organizations; and social change.

110 DEVIANCE AND CONFLICT 3 Units
Lecture: 3 hours
The analysis of deviant behavior and social disorganization theories and trends in selected topics such as stigma, sexual deviance, aging, death, suicide, mental illness, drugs, medical care, population problems, crime, war, family disorganization.
Field trips may be required.

111 CRIME AND DELINQUENCY 3 Units
Lecture: 3 hours
Sociological analysis of criminal behavior related to social structure and the criminalization process. Juvenile delinquency related to the family, peer groups, community, and institutional structures. Roles of law enforcement and other community agencies in crime and delinquency control.

112 FAMILY, MARRIAGE AND THE INDIVIDUAL 3 Units
Lecture: 3 hours
The family as a social unit of interacting personalities; historical and structural development of the family life in different cultures; functions, duties, and marital interaction of family life; influence of contemporary society on family and family disorganization.

127 AGING 3 Units
Lecture: 3 hours
Examination of the current social, economic, physiological and psychological theories and the aged; institutional, cultural, and environmental factors which influence the attitudes toward the aged will be emphasized.
Field trips may be required.

128 DEATH AND DYING 3 Units
Lecture: 3 hours
Examination of the predominant attitudes and practices in regard to death, dying, and grief in the U.S.; included will be material relevant to suicide, the terminally ill, bereavement, and various viewpoints about the phenomenon of death.
Field trips may be required.

140 HUMAN SERVICES 3 Units
Prerequisite: Sociology 101 or Psychology 101 or consent of instructor
Lecture: 2 hours
Laboratory: 3 hours
Study and development of the skills needed for community social services and some of the helping professions; direct participation in an organized community human service agency.

141 HUMAN SERVICES LABORATORY 1 Unit
Prerequisite: Sociology 140 in the semester immediately preceding
Laboratory: 3 hours
Continuation of skills needed for community social services and some of the helping professions through direct participation in an organized community service agency.

SPEECH

101 FUNDAMENTALS OF SPEECH 3 Units
Lecture: 3 hours
Principles of oral communication; speech composition and techniques of presenting informal and formal speeches. Emphasis given to organization, ideas, critical thinking, and evaluative listening.

115 GROUP DISCUSSION 2 Units
Lecture: 2 hours
Communication processes applied to informal group discussions. Individual and group participation in problem solving discussions, parliamentary procedures, and various speaking activities.

135 INTERPERSONAL COMMUNICATION 3 Units
Lecture: 3 hours
Understanding and utilizing techniques of communication in an effective manner for better interaction between people in one-to-one and small group situations.

150a SIGN LANGUAGE 2 Units
Lecture: 2 hours
Developing receptive and expressive skills in sign language, including skills in finger spelling. Receptive skills emphasized. The sign language system emphasized is American Sign Language.

150b SIGN LANGUAGE 2 Units
Prerequisite: Speech 150a or consent of instructor
Lecture: 2 hours
Developing advanced level receptive and expressive skills in conversational sign language and finger spelling.
May be repeated one time.

TEACHER AIDE TRAINING

See Page 31 for Certificate Requirements

55a TEACHER AIDE TRAINING: Beginning 3 Units

Lecture: 3 hours

Preparation for teacher aide duties that assist teachers in the classroom learning process with emphasis on the school environment as the place for learning.

55b TEACHER AIDE TRAINING: Intermediate 3 Units

Prerequisite: Teacher Aide Training 55a
Lecture: 3 hours

The classroom environment focused on the personalities in the classroom: teachers, students, teacher aides, and interpersonal relationships. Students will be required to spend a minimum of 20 hours observing and assisting a certified teacher in a local elementary school.

65 READING FUNDAMENTALS FOR TEACHER AIDES 2 Units

Prerequisite: Teacher Aide Training 55a
Lecture: 2 hours

Principles of teaching reading and the role of a teacher's aide. Includes approaches to reading; development of reading lessons; word analysis, including phonics; use of manipulative aids; and individualized skill development.

WELDING TECHNOLOGY

See Page 31 for Certificate Requirements

101 INTRODUCTION TO WELDING 3 Units

Lecture: 1 hour
Laboratory: 6 hours

Basic arc and oxygen-acetylene welding as it applies to shop and field techniques.

103 ADVANCED ARC WELDING TECHNIQUES 3 Units

Prerequisite: Welding Technology 101 or consent of instructor
Lecture: 1 hour
Laboratory: 6 hours

Arc welding in all positions (flat, horizontal and overhead). Special emphasis on control of heat and distortion.

110 BLUEPRINT READING FOR WELDERS 2 Units

Prerequisite: Welding Technology 101 or consent of instructor
Lecture: 2 hours

Designed to develop in the student the ability to interpret shop drawings and blueprints common to the welding trades.

130 MAINTENANCE WELDING 2 Units

Prerequisite: Welding Technology 103
Lecture: 1 hour
Laboratory: 3 hours

Special techniques used in building up shafts, pins, gears, housings, frames, logging bunks; fabrication repair and sheet metal.

145 METAL FABRICATION 3 Units

Prerequisite: Welding Technology 103 and Welding Technology 110
Lecture: 1 hour
Laboratory: 6 hours

Project-oriented course designed to give students experience in building or modifying frames, chassis and support equipment. Aspects of layout, quality control, appearance and utility will be emphasized, as well as cost estimation.

160 PRACTICAL LABORATORY 1 Unit

Prerequisite: Welding Technology 103
Laboratory: 3 hours

The student shall gain practical experience by working on an individual project (including certification projects). Emphasis on quality, appearance and function.

May be repeated one time.

WORK EXPERIENCE

73 GENERAL WORK EXPERIENCE 1-3 Units

Prerequisite: Employment must be approved by Work Experience Coordinator. Concurrent attendance at Work Experience orientation sessions during first three weeks of the term is required. Must be enrolled in at least seven units including Work Experience. During Summer Session must be enrolled in at least one other course.
75 hours paid employment equals 1 unit of credit
60 hours unpaid employment equals 1 unit of credit

Provides students an opportunity to experience supervised employment in order to acquire desirable work habits and attitudes to develop career awareness. The student's employment need not be related to the college program or occupational goal.

Offered for Credit/No Credit only.
May be repeated for no more than a total of 6 units of credit.

170 OCCUPATIONAL WORK EXPERIENCE (Alternate Term Plan) 1-8 Units

Prerequisite: Employment approved by Work Experience Coordinator. Must have successfully completed 7 units of other course work at Columbia College prior to enrollment. Between each reenrollment in the Alternate Term Plan and before transferring from a regular Work Experience Program to the Alternate Term Plan an additional 7 units of other course work must be completed.
75 hours of paid employment equals 1 unit of credit
60 hours of unpaid employment equals 1 unit of credit

Provides students with vocational learning opportunities through semesters of full-time employment alternated with semesters of instruction. The student employment must be related to educational or occupational goals.

Offered for Credit/No Credit only.
May be repeated for no more than a total of 16 units of credit less any units earned in Work Experience 73, 175, 176, or 177.

175 OCCUPATIONAL WORK EXPERIENCE: BUSINESS, TRADE AND TECHNICAL 1-4 Units

Prerequisite: Employment must be approved by Work Experience Coordinator. Concurrent attendance at Work Experience orientation sessions during the first three weeks of the term is required. Must be enrolled in at least seven units including Work Experience. During Summer Session must be enrolled in at least one other course.
75 hours paid employment equals 1 unit of credit
60 hours unpaid employment equals 1 unit of credit

Provides students an opportunity to experience supervised employment in Business, Trade, or Technical occupations. The student's employment must be related to educational or occupational goal.

Offered for Credit/No Credit only.
May be repeated for no more than a total of 16 units of credit less any units earned in Work Experience 73, 170, 176, or 177.

176 OCCUPATIONAL WORK EXPERIENCE: HUMAN SERVICES: 1-4 Units

Prerequisite: Employment must be approved by Work Experience Coordinator. Concurrent attendance at Work Experience orientation sessions during the first three weeks of the term is required. Must be enrolled in at least seven units including Work Experience. During Summer Session must be enrolled in at least one other course.
75 hours paid employment equals 1 unit of credit
60 hours unpaid employment equals 1 unit of credit

Provides students an opportunity to experience supervised employment in Human Services Occupations. The student's employment must be related to educational or occupational goal.

Offered for Credit/No Credit only.
May be repeated for no more than a total of 16 units of credit less any units earned in Work Experience 73, 170, 175, or 177.

177 OCCUPATIONAL WORK EXPERIENCE: HEALTH OCCUPATIONS 1-4 Units

Prerequisite: Employment must be approved by Work Experience Coordinator. Concurrent attendance at Work Experience orientation sessions during the first three weeks of the term is required. Must be enrolled in at least seven units including Work Experience. During Summer Session must be enrolled in at least one other course.
75 hours paid employment equals 1 unit of credit
60 hours unpaid employment equals 1 unit of credit

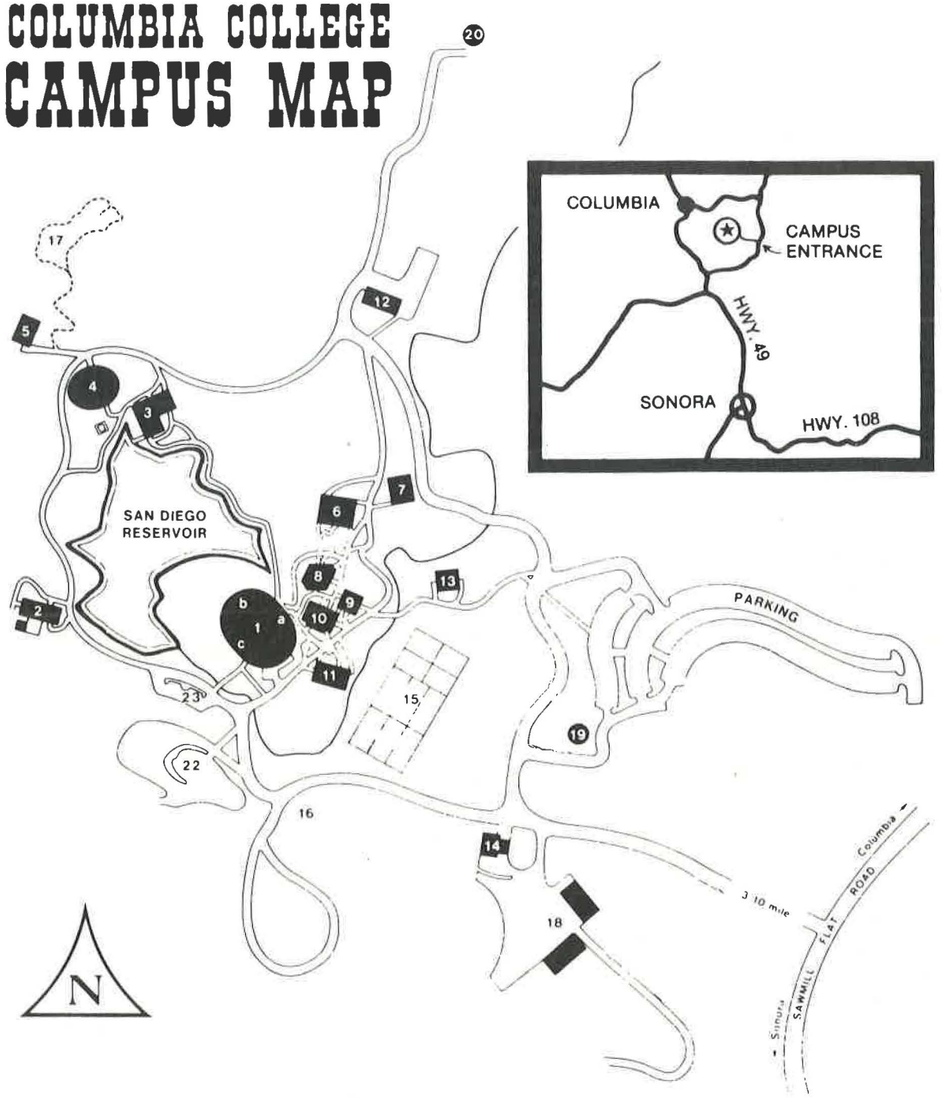
Provides students an opportunity to experience supervised employment in Health Occupations. The student's employment must be related to educational or occupational goals.

Offered for Credit/No Credit only.
May be repeated for no more than a total of 16 units of credit less any units earned in Work Experience 73, 170, 175, or 176.

COLUMBIA COLLEGE PHOTO

—NOTES—

COLUMBIA COLLEGE
CAMPUS MAP



KEY

1 Learning Resource Center, Rms. 100-110*
a) Admission Information b) Library c) President's Office
2 Creative Arts Center, Rm. 200*
3 Physical Science Center, Rms. 300-302*
4 Biological Science Center, Rms. 350-360*
5 Forestry and Natural Resources Center, Rms. 310-312
6 Interdisciplinary Center, Rms. 400-403*
7 Health Occupations Center, Rms. 500-501*
College Nurse
8 Forum, Rm. 600
9 Seminar Building, Rms. 610-611
10 General Education, Rms. 620-622
11 Business Education Center, Rms. 700-702*
12 Heavy Equipment Center, Rm. 800*
13 Physical Education Center, Rm. 900*
14 Fire Science Center, Rms. 1000-1001*
15 Tennis Courts
16 Judge Ross Carkeet Community Park
17 Nature Trail
18 Warehouse, Shipping, Receiving, and Maintenance
19 Mi-Wok Cultural Center
20 Astronomy Dome
21 Career Center—Job Placement (Building #1 lower floor)
22 Staff Parking
23 Handicapped Parking

* Restrooms in building

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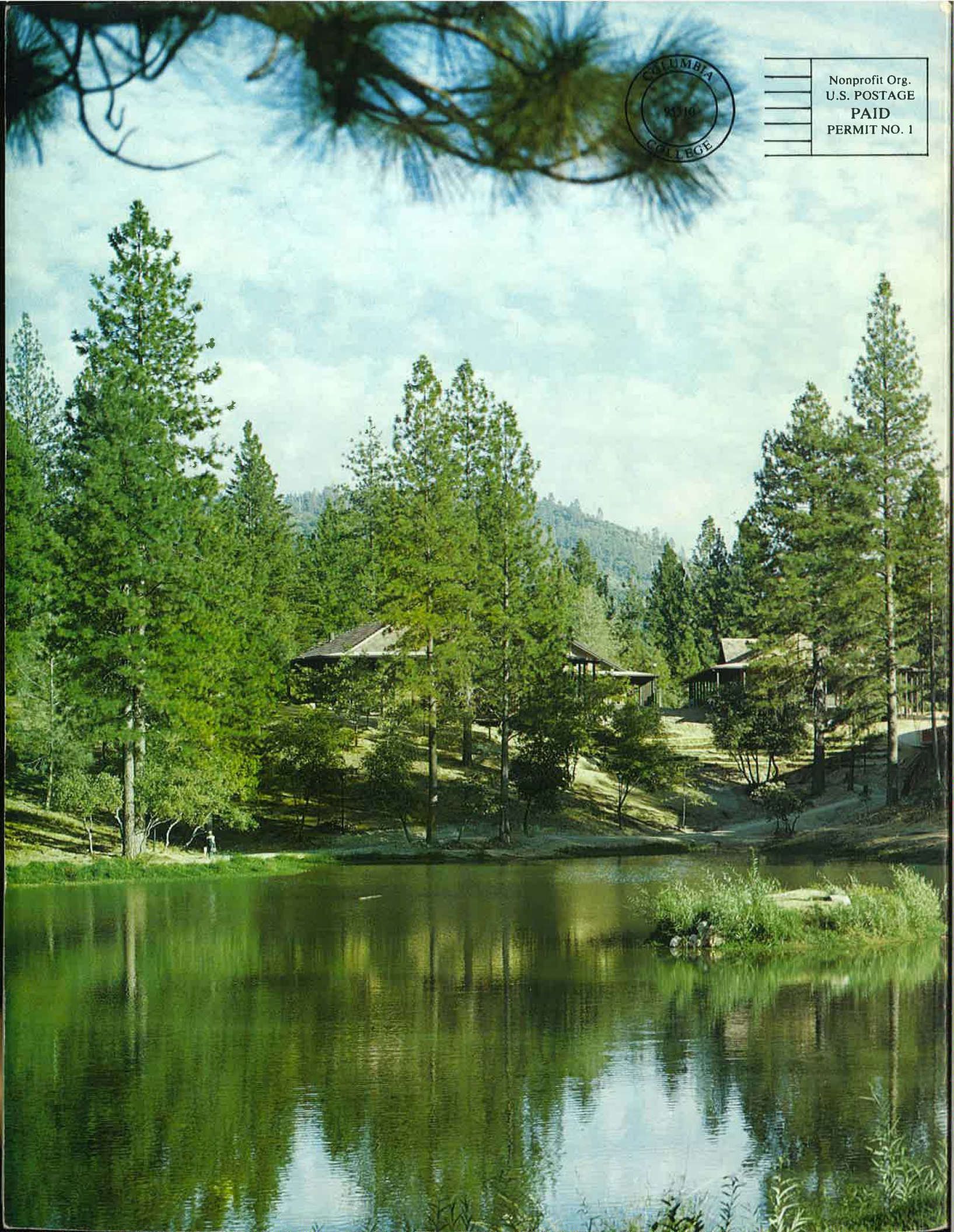

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