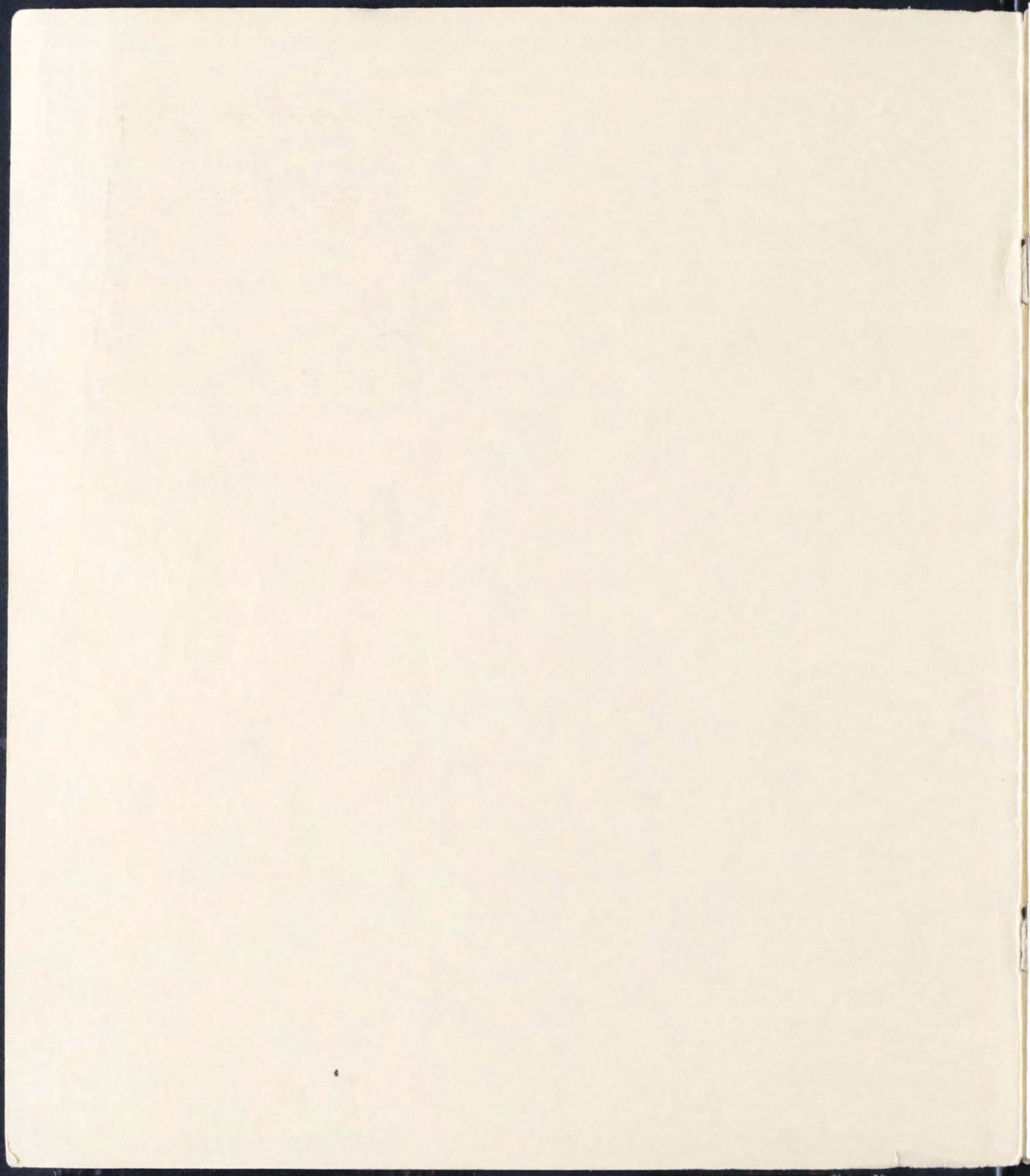




cañada
college

71-72
catalog



Cañada
College
Catalog
71-72

*Cañada College, a community college
within the San Mateo Junior College District, is accredited
by the Western Association of Schools and Colleges.*

4200 Farm Hill Boulevard, Redwood City, California 94061

Phone (415) 364-1212

Table of Contents

| | |
|---|----|
| Calendar for 1971-72 College Year | 3 |
| Board of Trustees | 4 |
| Administration | 5 |
| Faculty | 6 |
| General Information | 10 |
| Admissions Information | 12 |
| Registration | 14 |
| Grades and Scholarship | 15 |
| Academic Standards | 16 |
| Student Obligations | 17 |
| Student Personnel Services | 18 |
| Graduation Requirements | 21 |
| Career Planning | 26 |
| State Colleges, Universities | 28 |
| Suggested Curricula | 28 |
| Announcement of Courses | 41 |
| Evening College—General Information | 86 |
| Index | 87 |
| Campus Layout (map) | 91 |

Calendar for 1971-1972

June 21- July 30

6 weeks Summer Session

June 21-August 13

8 weeks Summer Session

FALL SEMESTER
September 3, 7, 8

Registration

September 4

Registration, special students

September 6

Labor Day holiday

September 9

Admission Day holiday

September 13

Day and Evening classes begin

September 17

Last day to add new classes

September 24

Last day to drop a class without penalty

October 4

Census Day

October 15

Applications available for spring semester

October 25

Veterans' Day holiday

November 5

Mid-term grade reports due

November 25-26

Thanksgiving Recess

November 29

Last day to drop a class without dean's approval

November 29-December 17

Counseling for continuing students

December 10

Last day to apply for graduation

December 20-31

Winter recess

January 17-21

Registration, continuing students

January 17-25

Final examinations

January 21

Evening College classes close

January 25

Day College classes close

SPRING SEMESTER
January 26-31

Registration, new and returning students

February 1

Registration, special students

February 7

Day and Evening classes begin

February 11

Lincoln Day holiday

February 14

Last day to add new classes

February 18

Last day to drop a class without penalty

February 21

Washington Day holiday

February 28

Census Day

March 15

Applications available for fall semester

March 27-31

Spring recess

April 7

Mid-term grade reports due

April 14

Last day to apply for graduation

April 28

Last day to drop a class without dean's approval

May 29

Memorial Day holiday

June 7-15

Final examinations

June 9

Evening College classes close

June 15

Day College classes close

June 16

Commencement

Board of Trustees

Eleanore D. Nettle

(Since 1956)

Housewife

Francis W. Pearson, Jr.

(Since 1963)

Certified Public Accountant

Robert A. Tarver

(Since 1953)

Attorney

James R. Tormey, Jr.

(Since 1971)

Attorney

Carl E. Ward

(Since 1960)

Bank Executive

Administration

District Chancellor-Superintendent
Clifford G. Erickson

Assistant Superintendent for Business Affairs
Matteo V. Fasanaro

CANADA COLLEGE STAFF

President
James W. Duke

Dean of Instruction
George A. Mangis

*Associate Dean of Instruction,
Continuing Education*
Leland H. Mahood

*Assistant Dean, Vocational-Technical
Education and Evening College*
Frederick L. Gilman

Chairman, Library and Audio Visual
Amerigo T. Ciani

Assistant for Community Education
Ruth K. Nagler

Dean of Students
William J. Walsh

Dean of Men
Robert C. Fryckman

Dean of Women
Patricia Pallister

Head, Student Development Program
Lester S. Campbell

Assistant for Information Services
Drucilla A. Anderson

Assistant for Registration
Lynn E. Carlyle

Manager of Services
John H. Rhoads

CHAIRMEN, DAY DIVISIONS

Business
Louis E. Yaeger

English and Foreign Languages
Robert Stiff

Fine Arts
John Krueger

Life Sciences and Health Education
John C. Forsythe, Jr.

Mathematics & Engineering
James R. Loughrey

Physical Education and Recreation
Gordon M. Gray

Athletic Director
Samuel J. Nicolopoulos

Physical Sciences
Ross W. Westover

Social Sciences
Melvyn E. Pratt

Faculty 1971-1972

(Date of appointment to San Mateo Junior College District follows name.)

- Aarons, Bernard L.** (1960)
Geology, Geography
B.S., Pennsylvania State College
M.S., University of Calif., Berkeley
- Anderson, Richard W.** (1970)
Physical Education
B.A., San Jose State
M.A., Stanford University
- Andrew, Alan** (1968)
Mathematics and Physics
B.S., University of Nebraska
M.S., California Institute of Technology
Ph.D., California Institute of Technology
- Ashley, Lyman C.** (1968)
Physical Education
B.S., California State Polytechnic College
M.A., California State Polytechnic College
- Batch, Robert W.** (1965)
Chemistry
B.S. Tufts University
M.S. Northeastern University
- Berdon, Jean D.** (1969)
Mathematics
B.S., Tufts University
M.S., University of Connecticut
- Blanton, Donald J.** (1964)
Biology, Botany
B.A., Aquinas College
M.S., University of Michigan
- Branstrom, Marvin J.** (1970)
Biology/Health Education
B.A., M.A., San Jose State College
- Campbell, Lester S.** (1969)
Head, Student Development Program
B.S., Bethune Cookman
M.A., San Francisco State College
- Chan, Florence M.** (1968)
Library
B.A., University of British Columbia
M.L.S., Univ. of California, Berkeley
- Ciani, Amerigo T.** (1965)
Chairman, Library and Audio-Visual Services
A.B., M.A., M.L.S., Ph.D., Univ. of California, Berkeley
- Cline, Alec O.** (1968)
Food Technology, Instructor-Chef
- Coleman, Gaylord W.** (1969)
Counselor
A.B., Northwest Missouri State College
M.A., Stanford University
- Collins, James E.** (1954)
Economics, Counselor
A.B., Syracuse University
A.M., Stanford University
- Cory, Genevieve H.** (1968)
Home Economics
B.S., University of Nevada
M.A., Univ. of California, Berkeley
- Crockett, R. Kent** (1965)
Speech, English
B.A., M.A., San Jose State College
- Crowley, Evelyn M.** (1948)
College Nurse, Health Education
R.N., Philadelphia General Hospital
B.S., Ohio State University
M.S., Univ. of California, Berkeley
- Crystal, Thomas L.** (1968)
Geography
B.S., U.S. Military Academy
M.A., Columbia University
- Curtis, Robert M.** (1967)
English
B.A., M.A., San Francisco State College
- Custodio, James G.** (1969)
Counselor, Student Development Program
B.A., M.A., San Francisco State College
- Damon, Rosemary W.** (1970)
Business
B.S. U.C., Berkeley
MBA Stanford University
- de la Rocha, Gilberto P.** (1968)
Cooperative Education, English
A.A., Grant Technical College
B.A., Sacramento State College
- Del Gaudio, Joan A.** (1965)
Business, Counselor
B.S., Cen. Connecticut State College
M.Ed., Boston University
- Denison, Frank G.** (1964)
Engineering
S.B., Mass. Institute of Technology
M.S., A.E., California Institute of Technology

- D'Epiro, Pasquale S.** (1961)
Librarian
B.A., Hunter College
M.A., Denver University
- Drever, Jerard D.** (1968)
Physical Education
A.A., College of San Mateo
A.B., San Jose State College
- Eakin, J. David** (1968)
Spanish, French
A.B., M.A., University of Oregon
- Earnhardt, Eldon D.** (1969)
Anthropology
B.A., M.A., San Francisco State College
- Easter, Stanley E.** (1969)
Music, Counselor
B.M., University of Rochester
M.M.Ed., University of Oklahoma
Ed.D., Columbia University
- Ellett, Melvin K.** (1952)
Drama
A.B., M.A., Ph.D., Stanford University
- Fahey, Frank M.** (1956)
History
A.B., University of Washington
A.M., Ph.D., Stanford University
- Festa, Angelo R.** (1966)
Physical Education
B.S., Michigan State University
M.S., Southern Illinois University
- Forsythe, John C., Jr.** (1957)
Chairman, Life Sciences and Health Education Division, Counselor
A.B., A.M., Stanford University
- Foster, Sandra M.** (1964)
Business
B.S., M.S., Western Illinois Univ.
- Friesen, John B., Jr.** (1963)
English
A.B., M.A., U. of California, Berkeley
- Fryckman, Robert C.** (1969)
Dean of Men and Student Activities
B.A., Baptist Bible College
M.A., University of Colorado
- Gilman, Frederick L.** (1956)
Assistant Dean of Instruction
B.S., University of Calif., Berkeley
M.A., San Francisco State College
- Giuntoli, Mervin A.** (1966)
Biology, Zoology
B.A., M.A., San Jose State College
- Glessing, Robert J.** (1968)
Journalism, English
B.A., Marquette University
M.A., University of Calif., Berkeley
- Gray, Gordon M.** (1958)
Chairman, Physical Education Division and Recreation
B.A., Univ. of California, Santa Barbara
M.A., San Francisco State College
- Hancock, John C.** (1968)
Music
A.B., San Francisco State College
M.A., San Jose State College
- Hancock, Michael P.** (1969)
Police Science, Sociology
B.A., San Francisco State College
M.S.W., San Francisco State College
- Harris, Donald C.** (1969)
Spanish
B.A., Howard University
M.A., San Francisco State College
- Heidsiek, Richard C.** (1968)
Art
B. of Art Ed., M.F.A., California College of Arts and Crafts
- Hein, Mark W.** (1969)
English, History
B.A., San Francisco State College
M.A., Claremont Graduate School
- Hergert, Loretta J.** (1969)
Physical Education
B.A., M.A., University of Colorado
Ph.D., University of Utah
- Hoffman, Craig R.** (1965)
English
B.A., University of Calif., Berkeley
M.A., San Francisco State College
- Holle, Frederic A.** (1968)
Art
B.A., M.A., San Diego State College
- Hurley, Gale E.** (1968)
Business
A.B., San Jose State College
M.A., San Francisco State College
- Ienni, Philip C.** (1969)
Music
B.S., M.S., Juilliard School of Music
- Jacques, Lois S.** (1967)
Physical Education
B.A., University of Nevada
M.A., San Jose State College
- Jeppson, Joseph** (1963)
History
B.S., J.D. Univ. Utah
M.A., Stanford Univ.
- Jost, Erwin** (1955)
English, German
A.B., San Jose State College
A.M., Stanford University
- Katz, Arthur J.** (1968)
Business, Accounting
B.B.A., Adelphi College, New York
M.B.A., Univ. of California, Berkeley
- Kennedy, Kenneth D.** (1967)
Political Science, History
A.A., College of San Mateo
B.A., M.A., San Francisco State College

- Kenney, William C.** (1968)
English
A.A., College of San Mateo
B.A., Stanford University
M.A., San Jose State College
- Keys, Elijah James** (1969)
English, Counselor
B.S., University of Minnesota
M.A., San Francisco State College
- Kilpack, Bennett B.** (1969)
Sociology, Education
B.S., M.S., Southern Oregon
College
- Kirby, Sheldon E.** (1969)
Art
B.A., Pomona College
M.F.A., Claremont Graduate
School
- Krueger, John H.** (1968)
Chairman, Fine Arts Division
B.S.M.E., University of Cincinnati
B.M., Cincinnati Conservatory of
Music
M.A., Colorado College
- La Berge, Robert R.** (1969)
Police Science
B.A., M.A., San Jose State College
- Lepisto, Martin M.** (1968)
Drama
B.S., Midland College
M.A., Northwestern University
- Loughrey, James R.** (1963)
Chairman, Math-Engineering
B.S., St. Michael's College,
Vermont
M.S., Rensselaer Polytechnic Inst.
- Mahood, Leland H.** (1964)
Associate Dean of Instruction
B.A., Whittier College
B.D., University of Chicago
- Mahgis, George A.** (1946)
Dean of Instruction
B.S., Univ. of Calif., Los Angeles
M.A., San Francisco State College
- Manning, Patrick** (1968)
Social Science, History
B.S., California Inst. of
Technology
M.S., Ph.D., Univ. of Wisconsin
- Marchi, Joseph J.** (1968)
Counselor
B.A., San Francisco State College
M.A., Columbia University
Teachers College
- Messner, Gerald M.** (1964)
English
A.B., Stanford University
M.A., Los Angeles State College
- Nicolopoulos, Samuel J.** (1968)
*Physical Education, Athletic
Director*
A.A., College of San Mateo
B.A., San Jose State College
M.A., Stanford University
- Nissen, Robert M.** (1969)
Art
A.B., San Jose State College
M.A., Stanford University
- Norman, Timothy H.** (1968)
Mathematics
B.A., St. Procopius College
M.S., University of Notre Dame
- Owyang, Walter M.** (1970)
School Psychologist, Psychology
A.B., U.C. Berkeley
M.A., San Jose State College
Ph.D., Univ. Nebraska
- Pagels, Guerd G.** (1956)
English
A.B., Western Washington College
A.M., Ed.D., Stanford University
- Pallister, Patricia** (1968)
Dean of Women, Counselor
B.A., Mich. State Univ.
M.A., Univ. of Maryland
- Paresa, Robert F.** (1969)
Police Science
A.A., College of San Mateo
B.S., San Jose State College
- Plunkett, Charles R.** (1965)
English
A.B., Stanford University
M.A., San Francisco State College
- Pratt, Melvyn E., Jr.** (1954)
*Chairman, Social Sciences
Division*
A.B., Stanford University
B.D., Yale University
Ph.D., Stanford University
- Ramos, Richard M.** (1967)
Spanish
A.A., Yuba Junior College
B.A., University of Pacific
M.A., Stanford University
- Raney, Donald C.** (1953)
Chemistry
A.B., San Jose State College
A.M., Stanford University
- Reed, Cheryl J.** (1968)
Physical Education
B.A., San Jose State College
M.A., San Francisco State College
- Reller, Theodore L., Jr.** (1968)
Political Science, History
A.B., M.A., Univ. of Calif.,
Berkeley
- Rodriguez, Ernest** (1970)
Counselor, Student Development
A.B., San Francisco State College
M.A., San Francisco State College
- Schey, Robert E.** (1970)
Counselor
B.A., San Francisco State
M.A., San Francisco State
- Simmons, Gordon T.** (1964)
Anatomy, Biology
B.S., D.V.M., Univ. of Calif.,
Davis
- Siringer, Norman W.** (1969)
English
B.A., M.A., Western Reserve Univ.

- Sitton, Carl V.** (1968)
Music
B.Mus., Texas Wesleyan College
M.A., Mills College
- Skinner, Byron R.** (1968)
Social Sciences, History
B.A., Western Michigan University
M.A., Illinois State Teachers College
- Smart, Francis A.** (1954)
Business Administration
B.S., Univ. of California, Berkeley
LL.B., Hastings College of Law
- Smith, Eileen M.** (1969)
Home Economics, Psychology, Education
B.A., Univ. of Calif., Berkeley
M.A., San Francisco State College
- Smith, Kurtwood L.** (1969)
Drama
A.A., College of San Mateo
B.A., San Jose State College
M.F.A., Stanford University
- Smith, Pamela D.** (1969)
English
A.B., M.A., Univ. of Calif., Berkeley
- Spangenberg, Ruth B.** (1968)
Psychology, Counselor
B.A., Pomona College
M.A., Stanford University
- Stegner, Paul F.** (1970)
Psychology
B.S., Pennsylvania State University
M.A., Fresno State College
Ph.D., Washington State
- Stiff, Robert** (1961)
Chairman, English and Foreign Languages Division
A.B., M.A., San Francisco State College
- Stoney, James M.** (1959)
Bacteriology, Biology
B.A., M.A., San Francisco State College
- Stringari, Lawrence T.** (1969)
Psychology
B.A., M.A., San Francisco State College
- Sutherland, Kenton** (1970)
English
B.A., Univ. of Americas
M.A., U.C. Los Angeles
- Sweatt, Maurice L.** (1966)
Biology
A.B. Univ. of California, Berkeley
M.S., University of Oregon
- Swenson, Jack S.** (1964)
English
B.A., University of Minnesota
M.A., San Francisco State College
- Szabo, Rosalee** (1969)
English
B.S., Cornell University
M.A., University of Rochester, N.Y.
- Tovissi, Joseph A.** (1965)
Mathematics and Counselor
B.S., Kent State University
A.M., Stanford University
M.S., Purdue University
- Turner, Ella E.** (1969)
Asst. Head, Student Development Program
B.S., Southern University, Louisiana
M.S., University of Nebraska
- Upton, James M.** (1968)
Mathematics, Philosophy
A.B., A.M., Gonzaga University
M.S., Seattle University
- Varner, Harold W.** (1970)
Psychology, Sociology
B.A., Morehouse
B.D., Chicago Lutheran
- Vial, Silvano A.** (1964)
Physical Education
B.S., University of Idaho
A.M., Stanford University
- Walsh, William J.** (1956)
Dean of Students
A.A., Glendale College
A.B., Univ. of California, Berkeley
M.S., Northwestern University
- Wesseling, Diane** (1968)
English
A.B., Douglass College
M.A., Univ. of California, Berkeley
- Westover, Ross W.** (1962)
Chairman, Physical Sciences
B.S., Brigham Young University
M.S., Syracuse University
- Whitmore, Amy D.** (1968)
English
A.B., Southern University
M.A., North Carolina College
- Widmeyer, Dianne M.** (1970)
Home Econ., Psychology
B.S., M.S., Purdue
- Workman, Gilbert B.** (1968)
History
B.A., Yale University
M.A., San Jose State College
- Wortz, Eleanor T.** (1964)
Business
B.S., Catawba College
M.A., San Jose State College
- Yaeger, Louis E.** (1955)
Chairman, Business Division; Counselor
B.S., Southwestern Institute of Technology of Oklahoma
M.S., Univ. of Southern California
- Young, Frank C.** (1969)
Philosophy
B.A., University of Florida
M.A., San Francisco State College
- Zingales, Thomas J.** (1964)
French, German
B.A., University of Notre Dame
A.M., Stanford University

General Information

The College

Cañada College is one of three community colleges within the San Mateo Junior College District. It enrolls students from the entire District, although its chief service area is the Sequoia Union High School District.

Cañada College (and its unidentical twin, Skyline College in San Bruno) originated from the realization in 1963 that the College of San Mateo would reach its designed capacity by 1966. In another sense, its destiny was determined when Sequoia Union High School District annexed to the Junior College District in 1961, at which point the master plan of the District was amended to provide for a college in the south part of San Mateo County.

The magnificent 131-acre site for Cañada College was selected in 1962. The site, which is partly in Redwood City and partly in the Town of Woodside, was chosen because of its location along the Junipero Serra Freeway and because it ideally serves all parts of the south County.

Financing for Cañada College was provided by a bond issue for \$12,800,000 in March, 1964. Intensive educational planning and architectural design proceeded through 1964-65. Grading of the site began in 1966 and a construction contract was awarded in April, 1967. The campus opened in September, 1968. In its present stage it represents an investment of \$13 million, and provides 241,000 square feet of usable space.

The College takes its name from Cañada Road, the highway which borders the site on the west. The Spanish word "cañada" means long valley.

The District

San Mateo Junior College first offered classes in 1922 at the Baldwin Campus in downtown San Mateo—with an initial enrollment of 35.

At first the District included only San Mateo Union High School District, but it grew to include Jefferson Union High School District and Half Moon Bay (now Cabrillo Unified School District) in 1937, Sequoia Union High School District in 1961, and South San Francisco Unified School District in 1966. At present the only portion of San Mateo County outside the District is the La Honda-Pescadero Unified School District.

Enrollment and offerings of the San Mateo Junior College expanded slowly in the first 25 years, with a

maximum of 1650 students. Classes were offered at first in central San Mateo, at the Baldwin Campus and in Central Park, and after 1939 were also given on the Delaware Avenue Campus.

World War II veterans returned after 1947 in such large numbers as to require a major expansion of the College. At this time Coyote Point facilities were acquired to supplement other locations and for a time a "three-campus era" resulted.

The Junior College became College of San Mateo in 1954 and along with the change in name came a transformation of the role of the institution to serve the rapidly expanding Peninsula. Awareness of the need for long-range development led to the adoption of a master plan in 1957 and the passage of a bond issue which funded a campus in west San Mateo for College of San Mateo.

The events of 1963-64 which created Cañada and Skyline Colleges also led to the acquisition of a fourth site along the coast south of Half Moon Bay. The District is now in a position to satisfy the community college needs of its residents for at least the remainder of the 20th Century.

Philosophy of the College

Cañada College holds that these beliefs and concepts are vital to the fulfillment of our objectives:

(1) We believe that the individual possesses dignity, and we encourage him to recognize his worth and to make his own unique contributions to our society.

(2) We believe that we must exert educational leadership in identifying and serving the educational needs of the community.

(3) We recognize that each discipline has its own integrity and that the College has a responsibility to achieve a balance between specialization and generalization in the organizing and presenting of subject matter.

(4) We think it is important to include all members of the College community in the shaping of class content, curriculum and College policy.

(5) We recognize that students come to us with a variety of expectations and that they possess different degrees and kinds of intelligence and skills.

(6) We believe the heart of the College to be the student and believe that close student-faculty relationships contribute to learning and to the kind of atmosphere in which learning can be reciprocal.

Objectives of the College

Specifically, Cañada College provides its students with:

(1) Courses which will enable them to complete the first two years of college work, in order to satisfy the lower-division requirements of four-year institutions.

(2) Training in and improvement of skills which will qualify them for employment in business and industry and in careers with public service agencies.

(3) Counseling, tutoring and special programs which enable them to recognize and to deal with their special abilities, interests and needs so that they can make independent and mature decisions.

(4) Classes and resource facilities in which all persons in the community may broaden their educational and vocational potential and enhance their cultural development.

In all of these courses and programs, we believe that we have the obligation to help each student:

To develop useful skills,

To think critically,

To learn how to learn, which, in addition to seeking answers, involves asking thoughtful questions,

To be responsive to persons and things in his immediate environment and to increase his skills in human relationships,

To appreciate and enjoy our pluralistic cultural heritage, and

To re-examine constantly, in the light of increased knowledge and changing circumstances, his own and society's basic assumptions and objectives.

To assist each student to profit most from his education, the College helps him to explore his aptitudes, to choose his lifework and to plan an educational program which will prepare him for that work. It offers this assistance through a formal program of guidance and counseling, and through informal student-teacher relationships, which are among the most distinctive and valuable of its services. The College recognizes the educational value of the organized student activities and encourages student and faculty participation in these activities.

Cañada College is a part of a colorful community which, situated as it is, close to San Francisco and to several fine colleges and universities, enjoys many cultural advantages. Many graduates will transfer to the University of California, Stanford University and the nearby state colleges. The needs of these students who transfer to upper division work are carefully provided for in the curriculum. Many Cañada College students, having terminated their formal education with the Associate in Arts degree, will find employment in business and industry.

Role of the Faculty and Students

Cañada College is governed by policies approved by the Board of Trustees of San Mateo Junior College District. These policies encourage maximum autonomy and therefore delegate many responsibilities to the individual colleges within the District.

Cañada College seeks the counsel of its faculty and students through a system of permanent committees and through informal or short-term bodies. The regular committees are organized under the Faculty Senate, which operates through a Governing Council (elected by the teaching faculty) and through the following committees: Instruction, Faculty-Student Relations, Professional Personnel and Salary. Student members of the first two of the listed committees are appointed by the Associated Students Council.

Accreditation

Cañada College is approved by the Office of the Chancellor of the California Community Colleges and by the Veterans Administration, and is fully accredited by the Western Association of Schools and Colleges, the recognized local agency which is affiliated with the Federation of Regional Accrediting Commissions of Higher Education.

Evening College

Cañada Evening College offers a wide range of classes including lower-division collegiate work leading to the completion of an Associate in Arts degree and/or transfer to a four-year institution, and classes designed to meet the specific needs and interests of adults.

An Evening College catalog and schedule may be obtained from the College upon request. Copies are also available at public libraries shortly before the beginning of each semester.

Summer Session

San Mateo Junior College District offers summer sessions at colleges within the District. Further information may be obtained by calling Cañada's Evening College office.

Summer session also affords the opportunity for superior high school students after completing their junior year, to take a number of selected college courses. Further information may be obtained by contacting the high school counselor.

College Library

With a dramatic reading room which affords a panoramic view toward the wooded slopes of Skyline ridge, the library provides students with excellent facilities for the use of books, periodicals, and audio-visual materials.

The library is housed in the westernmost section of the lower two floors of the Campus Center. The lower floor includes a stack area for books, a reading room, the main circulation desk, periodical and reference areas, a typing room, and library offices and work areas. On the second floor are the language laboratory and listening rooms, a conference room, and audio-visual circulation and service areas.

No effort has been spared to make the library an inviting and easily accessible place for study, research and browsing. There are 90 carrels for individual study and some 150 seats at tables. The present collections comprise over 25,000 carefully selected volumes, some 400 periodicals and over 1500 reels of microfilm. In the audio room there are 86 stations for listening to music, to

language and to other recordings. The language laboratory has 12 stations for recording and for listening.

Cañada College students have the privilege of using all library facilities of the College of San Mateo with its 85,000 volumes and large collections of microfilms, phonodiscs and tapes; they may also use the facilities of Skyline College.

Parking

Parking for students is provided on the campus in clearly designated areas. Certain parking places are reserved for handicapped students, for visitors who have guest permits, and for faculty and staff who hold permanent parking permits.

Admissions Information

High School Graduates

Normally, graduation from high school or other schools of equivalent rank is a prerequisite for admission.

Persons over 18 years of age who are legal residents of San Mateo Junior College District may be admitted to classes even though they are not high school graduates if, in the opinion of the President, they can profit from the experience.

(Any person who is not a legal resident of California or who is a legal resident of another junior college district in California, please see Residence Requirements for Admission.)

Transfer From Four-Year Institutions

Transfer students from four-year institutions are welcome. Academic records will be evaluated by the Registrar, and credit allowed for lower division work completed in other accredited institutions. At the time of evaluation, the Academic Standards Policy of Cañada College will be applied. (See Academic Standards.)

Transfers From Other Junior Colleges

Students who have previously attended another junior college and are in good standing are eligible to enroll at Cañada College subject to residence requirements. Students who have been disqualified by another junior college will not be admitted in the semester immediately following their attendance at that junior

college. After one semester's absence, such students may be admitted, subject to the Academic Standards Policy.

Veterans and Veterans' Dependents

Cañada College is listed by the Veterans Administration as qualified to receive students under Chapter 34 (veterans), Chapter 35 (veterans' dependents) and Chapter 31 (rehabilitation). All students, except those under Chapter 31, buy their own books and supplies. Those interested in attending Cañada College under any of these chapters should contact the Veterans Administration Office at 49 Fourth Street in San Francisco or 590 Hamilton Street in Redwood City to determine eligibility for benefits. After eligibility is determined, the veteran should bring his Certificate of Eligibility and receipt of registration to the Registrar's Office for processing.

Veterans will receive six units of credit for Health Education, First Aid and Physical Education upon presentation of discharge papers showing honorable discharge and active service of one year or more in the United States armed forces. They may receive additional credit for work satisfactorily completed under the training program of the armed forces upon presentation of proof of such work. These units will be posted to the student's record at the time of graduation.

Students in the six-month Reserve training programs are not eligible for this credit. This is in accordance with the recommendations of The American Council on Education, issued September, 1957.

The state of California provides a program for children of veterans who are deceased or disabled from service-connected causes. Application should be made to the California Department of Veterans Affairs at 350 McAllister Street in San Francisco.

Adult Students

All regular day or credit classes are open to adults who wish to attend. Adults are expected to assume the obligations and responsibilities of regular junior college students, but those 21 years of age or over are exempted from Physical Education requirements. For the Evening College classes, see the Evening College catalog.

Special Students

(One or Two Courses Only)

A student taking one or two courses only is designated "Special." Special students must submit applications during filing dates but are not required to submit transcripts.

Counseling is available to special students upon request.

Foreign Students

Cañada College offers a well-developed program for students from other countries. The college provides a counselor with specialized experience to assist them with personal and academic problems, and a Community International Students Committee offers excursions and programs to acquaint them with other aspects of American life.

Applicants from outside the United States must:

- 1) Have completed the equivalent of an American high school education with satisfactory grades.
- 2) Demonstrate sufficient command of English to profit from instruction at the college.
- 3) Present evidence that they have the necessary funds to take care of tuition and all living expenses while attending Cañada College.

Transfer Credit

Credit will be allowed for lower-division work done in other accredited institutions. All work presented will be evaluated by the Registrar.

Advanced Placement Credit

Students who have taken the Advanced Placement Test in English and who have scored three may receive credit for English 1b; those who have scored four or five will receive credit for English 1a and 1b. Test scores and a written petition for this credit should be filed in the Registrar's Office.

Residence Requirements for Admission

The right to attend any one public junior college in California is, in addition to the academic requirements, conditioned by certain residence qualifications.

The legal residence of any unmarried minor student is that of the father or mother, or court-appointed guardian.

An applicant who is a resident of the San Mateo Junior College District needs only to declare his residence and complete admission requirements.

An applicant who is a resident in a part of California not included in a district which maintains junior college classes may attend Cañada College. A permit signed by the County Superintendent of Schools of the county of residence will be obtained by the Registrar.

An applicant who is a legal resident of another junior college district applying for admission as a day student must be a graduate of a high school, or be 21 years of age or older, and must submit a written permit from the superintendent of his district of residence granting him permission to enroll in Cañada College.

An applicant whose legal residence is in a state other than California or from a foreign country, must be a graduate of a high school or be 21 years of age or older, and have an academic record or test scores which indicate a potential for success. Such students will be charged a non-resident fee.

Tuition (Non-Resident Fee)

No tuition is charged to legal residents of San Mateo Junior College District or to students from other parts of California who qualify for admission.

Out-of-state residents pay a non-resident fee of \$900 for the academic year 1971-72. This fee is payable at the time of registration at the rate of \$450 per semester or \$30 per unit. Residence status will be determined by the Registrar. Detailed regulations governing non-resident fee and admission requirements will be distributed to students who apply for admission.

Costs to Students

While there is no tuition at Cañada College for students whose legal residence is in the San Mateo Junior College District, there are living and incidental costs which should be anticipated. These, together with their normal expectable amounts will include:

| | |
|--|-----------------------|
| Books and supplies | \$50 per semester |
| Student activity card | \$5 per semester |
| Room and board | \$100-\$140 per month |
| Transportation | \$20 per month |
| Personal expenses (laundry, recreation, medical) | \$30 per month |

Choice of College

Residents of the District may elect to attend Cañada College, College of San Mateo or Skyline College. In the event the capacity of any college is reached, students will be diverted to one of the other two colleges. Major course of study and date of application will be taken into consideration if such diversion becomes necessary.

Application for Admission

(See 1971-72 Calendar for application filing dates.)

Registration

Counseling Appointments

Upon completion of admission requirements, all regular students will meet individually with a counselor for assistance in program planning prior to registration. (See Calendar at the front of the catalog.) Regular students register only after receiving program approval from a counselor. Late registration after the first day of instruction will not ordinarily be permitted.

Unit Load Limitations

A normal class load will be 15 units plus Physical Education. No student should take more than 17 units without the special approval of his counselor.

Students enrolling in 12 or more units are classified as full-time students.

Students working full time or those in the military service should limit their programs to 10 or fewer units. Combinations of work and school should be carefully discussed with the counselor.

Auditing is not permitted in any course offered for credit.

Physical Education Requirements

All regular students are required to take Physical Education, in accordance with the State Education Code, except those who are excused for those reasons indicated below. Men and women must devote two hours per week to Physical Education throughout the period of attendance

Prospective students applying for admission to Cañada College are required to:

1. File a written application for admission upon forms supplied by the College.
2. Submit two complete transcripts of records from the high school of graduation, or last attended, and each college attended. (Veterans should file similar copies of their military record and of their special training courses so that they may obtain proper college credit.)

as undergraduates. Failure to register in and regularly attend Physical Education will result in cancellation of registration. The following students may be excused from the P. E. requirement:

1. Junior college or four-year college graduates.
2. Students who are 21 years of age or older.
3. Students taking eight units or less in Day College.
4. Veterans, exclusive of six-month Reserve trainees.
5. Students excused for medical reasons (requires physician's statement on file in the Physical Education division office).

Every student who is exempt from Physical Education must obtain a clearance signature from the Physical Education division on his study card before completing registration.

Program Changes

A program once entered by signing up for any given set of classes may not be changed in any way, unless written permission to do so is granted a student by his counselor, and the student completes the prescribed change-of-program procedure.

Changes of programs will be permitted only for students who have valid reasons for such requests.

A student may not add a new class after the fifth day of the semester.

A student may drop a course, whether passing or failing, at any time through the 10th calendar day of a semester without incurring a penalty of a semester grade of "F"—failed. After this date, if a student drops a course in which he is failing, he may receive a semester grade of "F." Ordinarily a student will not be permitted to drop a

course after the 11th week of a semester without receiving a final grade of "F." In cases of serious verified illness, induction or other emergency, students should request that the situation be reviewed by their counselor and the Dean of Men or Dean of Women to prevent unjust application of this regulation.

Grades and Scholarship

Units of Work and Credit

A "unit" represents one hour weekly, during one semester, in lecture or recitation with the necessary preparation time, or three hours in laboratory or other exercises not requiring home work for preparation.

A normal schedule of 15 college units presupposes that the average student will devote approximately 45 hours per week to class attendance and preparation.

Grades and Grade Points

A number of major changes in the Cañada College policy on grades are under study. If a revision is approved for 1971-72, students will be informed.

Once a subject has been made a part of a student's program of attendance, his record for the subject will be reported to the Registrar by one of the following symbols:

| | |
|--------------------------|---|
| A—Excellent | 4 grade points per unit |
| B—Above average | 3 grade points per unit |
| C—Average | 2 grade points per unit |
| D—Passing; below average | 1 grade point per unit |
| F—Failed | 0 grade points per unit |
| INC—Incomplete | 0 grade points per unit |
| CR—Credit | Not considered in determining grade point average |
| NCR—No credit | Not considered in determining grade point average |
| W—Withdrawn | Not considered in determining grade point average |

A grade of "Incomplete" may be given only if the student is unable to take the final examination or complete a major course assignment due to illness or extreme per-

sonal emergency. In this case, it is the student's obligation to give the instructor notification of the reason for his inability to complete the course requirements and to make arrangement for completion of the work. The Incomplete must be removed by the end of the next semester. Additional time may be provided upon approval of the instructor and the registrar. If the course is satisfactorily repeated, the student may petition to have a grade of Incomplete removed.

A grade of "W," meaning withdrawn from class, indicates that the subject so marked has been cancelled from the student's study list and is, therefore, not to be awarded a final grade. No credit can be counted in subjects for which a "W" is recorded.

A student may repeat any course in which he has received a final grade below "C." He may not, however, repeat such courses more than twice except with the approval of the Appeals Committee and his counselor. In addition, however, he may repeat for credit, regardless of grade earned, those courses so designated in the catalog.

Upon satisfactory completion of a repeated course, the student must petition the Registrar to remove the units attempted, units completed and grade points for the previous course from the cumulative totals on his permanent record. Upon approval of the petition, all units and grades attempted or earned will appear on the permanent record, but only the last grade will be included in determining academic standing and grade point average, and only those units will be counted toward graduation. The g.p.a. (grade-point average) is determined by dividing the total number of grade points earned by the total number of units attempted. The evaluation of transfer credit from another institution may also be adjusted in this manner upon receipt of adequate documentation proving the

parallel content of the transfer course and the Cañada course. Petitions which are not approved will be reviewed by the Committee on Instruction at the request of the student.

Grade Reports

A student is held responsible for his own academic progress. Grade reports are sent directly to each student at mid-semester. Following final examinations at the end of the semester, the student is sent the report of his final semester grades, which serve as the basis for computing the student's standing.

Scholastic Honors

A Dean's List of students who achieve academic honors is published at the end of each semester containing the name of each student who has completed 12 units or more of work during that semester at Cañada College with a grade-point average of 3.0 ("B") or above.

Academic honors are awarded to students at graduation who have attained a 3.0 ("B") cumulative grade-point average.

Cañada College is affiliated with the State Junior College Honorary Scholarship Society, Alpha Gamma Sigma.

Transcripts

Official transcripts will be sent to employers, colleges and other institutions upon written request by the student. Only courses taken at Cañada College will appear on the transcript. Transcripts from high schools and other colleges will not be forwarded. Two transcripts will be sent without charge. Subsequent copies will be sent for one dollar per copy.

Personal Recommendations

Personal recommendations should be a part of each student's permanent record file. Students should request these recommendations from their instructor; recommendation forms are available from the Office of Admissions and Registration.

Personal recommendations are used to provide information on students' personal characteristics to prospective employers or colleges to which students may transfer.

Academic Standards

Grade-Point Deficiency

A number of major changes in Cañada College probation and disqualification standards are under study. If a revision for the 1971-72 school year is approved, students will be informed.

The Academic Standards Policy of Cañada College is based on a cumulative grade-point average of "C," the minimum standard of progress toward graduation or transfer.

All units and grade points are on a cumulative basis. At all times, a student must maintain a cumulative grade-point total that is double the total units undertaken (C average). (Example: If a student undertakes 12½ units in one semester and 15½ in a second semester, his cumulative units are 28, requiring a grade-point total of 56.)

Any grade-point total less than twice the attempted units is regarded as deficient.

Cañada College credit-no credit courses will not affect a student's grade-point deficiency, disqualification or dismissal.

Disqualification

A student will be disqualified, if at any time, his deficiency amounts to 12 or more grade points. A disqualified student must ordinarily remain out of Cañada College day and evening classes for one semester.

A disqualified student may present a written appeal to the Faculty-Student Appeals Committee requesting immediate reinstatement if his disqualification has resulted from unusual, emergency circumstances.

Dismissal

A previously disqualified student who incurs a deficiency in any subsequent semester will be dismissed and ordinarily will not be permitted to return to Cañada College for day or evening classes. However, if a student has not increased his total deficiency after disqualification, he may petition the Faculty-Student Appeals Committee for permission to continue in college.

Immediate readmission of a dismissed student is not considered. Only after the lapse of at least two semesters may a dismissed student petition for readmission; then

consideration is given only on the basis of evidence of academic work or other constructive achievement during the student's absence from college.

Transfer Students

Students who have been placed on probation or disqualified by another junior college will not be admitted in the semester immediately following their attendance at that junior college. Such students may be admitted, subject

to the Academic Standards Policy of Cañada College, after one semester's absence. This Academic Standards Policy will be applied to transfer students from other junior colleges on admission. These students must complete all admission requirements.

The Academic Standards Policy of Cañada College will be applied to transfer students from other colleges and universities on admission. These students must complete all admission requirements.

Student Obligations

Conduct

The principle of personal honor is the basis for student conduct. The honor system rests on the sincere belief that the college student is mature and self-respecting, and can be relied upon to act as a responsible and ethical member of society. Each individual has the obligation of knowing and upholding College rules. These rules are given in the **Student Guide** which is included in the packets supplied to each student at the time of registration.

Social or other functions using the name of the College are thereby identified as College functions and become subject to the same high standards of conduct and of supervision, whether conducted on or off the campus.

Social or other functions for which no patrons are listed from the membership of the faculty are not school functions. Further, no off-campus organizations may use the College name or imply College sponsorship in any publicity or other information.

Secret Organizations

Sororities and fraternities and other secret organizations are banned under the Education Code of the State of California.

Fines

Fines are assessed for failure to comply promptly with library and other campus regulations, and students are required to pay for careless or unnecessary damage to College property. Students who are delinquent in their financial obligations to the College may not receive grades, reports or other records of their work until such delinquencies have been adjusted to the satisfaction of the College authorities.

Attendance Regulations

Regular attendance in class and laboratory sessions is an obligation assumed by every student at the time of his registration. By being absent from class, the student misses both the content of the particular session and the continuity of the course as developed in a single period of work. When a student's failure to attend class places his success in jeopardy, the instructor may drop the student from the class.

The following regulations regarding attendance have been approved by the Board of Trustees and will be enforced:

A student may be dropped from class whenever his total hours of absence from class equal twice the number of hours the class meets in one week. Absence means non-attendance, and includes non-attendance for illness, participation in school-sponsored activities or personal emergency.

Any student dropped from any class because of this regulation may appeal in writing to the Faculty-Student Appeals Committee within five school calendar days of such drop if he feels there are extenuating circumstances beyond his control which justify his remaining in class. A student making such an appeal may, with the permission of the instructor, remain in class until the decision of the Faculty-Student Appeals Committee is reached. The Faculty-Student Appeals Committee will make a recommendation to the instructor after considering such an appeal. In all cases the decision of the instructor is final.

Emergency Leave of Absence

Absences for medical reasons of less than one week need not be reported to the College.

Students who will be absent from any class or classes

for one week or longer for any health reason are required to request emergency leave from the Student Health Center. Students should report to the Health Center for a clearance before returning to classes.

Students who will be absent from any class or classes for one week or longer for other personal emergencies are required to request an emergency leave from the Dean of Women or Dean of Men.

If medical or personal emergency requires absence of as much as two weeks, it will be necessary for the student to consult with his counselor before returning to classes.

Withdrawal From College

A number of major changes in the Cañada College regulation concerning withdrawal are under study. If a revision for the 1971-72 College year is approved, students will be informed during fall registration.

A student finding it necessary to withdraw at any time after registration must obtain a petition for withdrawal from his counselor. Special students (taking one or two courses only) should report to the Dean of Men or Dean of Women for a withdrawal petition. The completed form must be returned within five college days to the Dean of

Men or Dean of Women. Failure to comply with the procedure may result in penalty grades of "F."

At any time through the 10th College calendar day a student may withdraw, whether passing or failing in courses, without incurring penalty grades of "F." A student who withdraws after the deadline may receive the penalty "F" for any course in which he is failing.

After the 10th College calendar day, a student who drops classes with his counselor's approval will ordinarily be given a grade of "W" if passing the course and a grade of "F" if failing the course.

Students withdrawing after the 11th week of the semester may receive final grades of "F." In cases of serious verified illness, military induction or other emergency, students should request that the situation be reviewed by their counselor and the Dean of Men or Dean of Women to prevent unjust application of this regulation.

Absence Without Leave

To avoid possible academic penalty, a student who leaves College at any time during a semester must complete a formal withdrawal within a period of one week.

Student Personnel Services

Program Planning, Counseling and Psychological Services

One of the primary responsibilities of Cañada College is to assist each student in the effective utilization of his capabilities. To accomplish this, the college provides professional counselors to assist students in clarifying or establishing appropriate educational and vocational goals, or to work out problems of a social or personal nature.

These counselors are available by appointment during the registration period and throughout the academic year to consult with students. They assist students in planning programs of study, approve the final program for each semester and are consulted about program changes. The counselor's function, however, is an advisory one. Ultimately the responsibility for knowing program requirements and enrolling in proper courses rests with the student.

Students are encouraged to bring to the attention of their counselor employment, financial or other personal problems which affect their success in college.

The office of the Dean of Students will schedule appointments for students who cannot meet with their counselors during scheduled office hours.

When a student receives an academic deficiency notice indicating unsatisfactory work, he is to see his counselor concerning reasons for his lack of progress.

All faculty members are an important part of this College's advising program. Students should feel free to approach counselors and other faculty members for information.

Psychological Services are available to all students at the College. Appointments may be made through a counselor, the Office of the Dean of Students or directly by the student with the school psychologist.

Student Development Program

The Student Development Program was inaugurated by the College in the fall of 1969 to provide supporting services to students who had not been able to participate fully in the educational and cultural experience of the

community. The program was designed principally for minority students, although all students are welcome to participate.

The Student Development Center, located in the lower floor of Building 16, is operated by several full-time faculty members. This staff is prepared to offer intensive academic, vocational and personal counseling, assistance in obtaining scholarships and financial aids, and, in conjunction with community agencies, to secure housing, transportation, employment and other needed assistance.

The Director of the Student Development Program works closely with local high schools to encourage graduating seniors, particularly students of color, to consider furthering their education at Cañada College.

SPEED

(Student Program for the Educationally and Economically Disadvantaged)

The SPEED program was conceived and organized by a group of students who felt that a segment of the community were not able to take advantage of the College because of special problems. They were particularly concerned about divorced or widowed mothers, individuals who were unemployed because of cutbacks, and others who had recently been paroled from prison. The program tries to provide financial aid in the form of grants and payment for volunteer work done in the community. A portion of the time of a Cañada counselor is devoted to working with SPEED students in the areas of housing, transportation, child-care, employment, vocational planning and adaptation to college.

Testing

The Office of the Dean of Students maintains a service in psychological and vocational testing which is available to all registered students. Through this service, students may receive assistance in assessing their aptitudes and interests so that they may better plan their educational and vocational goals. Students may obtain additional information about the testing program in room 206 of the Administration Building.

College Orientation

The counseling staff teaches several guidance classes designed to help a student in his over-all adjustment to college. They provide the framework for better self-understanding, a general orientation to college, assistance with study habits, skills required for more effective learning, and a chance for exploration of occupational goals. Special interest discussion groups are provided on topics of common concern to students.

Health Service

Counseling on health problems is available at the

Student Health Center, located in room 212 of the Campus Center.

Report of a recent health examination, given by the student's personal physician, should be turned in to the Health Center at time of registration by all entering students.

First aid is given in cases of injury. The student is then referred to his physician.

Student Health Insurance Program

The College offers accident and health insurance coverage to its students on a voluntary basis. Most students are over 18 years of age and are no longer covered by their parents' group insurance policies. Additional information and literature can be obtained in the Student Health Center.

Placement Services

The College maintains a placement office to assist students currently enrolled and in good standing to secure part-time employment. This service is also available to graduating and former students who wish to secure full-time employment.

Housing

The Dean of Women will assist students in finding housing in the community. All arrangements are made between the owner and the student. Dormitories or College-sponsored housing facilities are not available. Some opportunities exist for students to earn their room and board in private homes.

Financial Aids

Cañada College participates in federal and state scholarship, loan, grant and work-study programs. In addition, the San Mateo College Foundation administers funds from private sources which are available to students as scholarships and loans.

The Associated Students have made a limited loan fund available to students who have purchased a student body card and have an emergency need. Students desiring further information should contact the Dean of Men's Office. For all other financial aids, they should apply to the Financial Aids office.

Scholarships

Cañada College provides a scholarship program to recognize and honor outstanding students and provide them with financial assistance in furthering their academic pursuits. The Scholarship Committee, consisting of three faculty, two honor students, and chaired by the Dean of Women, meets each spring to review applications and select recipients for many scholarships provided by interested individuals and organizations for the following school year.

Applications and requests for information should be directed to the Dean of Women.

Student Activities

There will be an organization known as "The Associated Students of Cañada College" whose purpose will be:

- (1) To promote the general welfare of the students.
- (2) To guarantee equality of opportunity among the students.
- (3) To offer an experience in practice of American democratic government.
- (4) To encourage student participation in planning and direction of student activities (and other college committees) as permitted under the Education Code of the State of California and the policies of the Board of Trustees.

During the past (3 years) students at Cañada have made substantial progress in formulating a student budget that reflects their relevant interests. They are currently modifying their student government structure to insure that it becomes a truly responsive and responsible instrument of student interests and concerns. Students are urged to visit the Activities Office and participate in the co-curricular program.

With the assistance of faculty advisers, Student Council directs and supervises all student activities and intramural sports in which the College is represented. Because the direct financial support for activities comes from purchase of Activity Cards, each student is expected to purchase his card as a part of his registration.

Student Organizations

In order to secure the most from his college life, a student is encouraged to participate in one or more of the many clubs organized within the Associated Students. Such clubs offer many and diversified opportunities to students for both social and educational contacts. Each club elects its officers and plans its own program for the semester.

Student Publications

The **Newspaper**, a weekly publication, provides full coverage of activities on campus and offers invaluable experience to journalism students.

The **Student Guide** contains information to incoming students about college rules, student rights, student disciplinary due process procedures, the college's governance structure, staff, student organizations, and services of the college together with a complete calendar of events.

The **Student Bulletin**, a mimeographed publication, is prepared and distributed by the Activities Office three days a week to announce activities, news events and items of interest to the faculty and students of the College. The

deadline for submission of items for publication is 9 a.m. on the preceding day.

Athletics

Cañada College sponsors sports within the Camino Norte Conference for the benefit of those students interested in team competition.

Cañada College adheres to the California State Athletic Code and the Camino Norte Conference eligibility rules and regulations. Final decisions rest with the Camino Norte Conference Commissioner or the California State Athletic Committee.

The following basic principles pertain to all matters of eligibility.

1. No student may represent his college in any athletic contest unless he is enrolled in and is passing at all times in a minimum of 10 units of work in addition to Physical Education (if required) in a regular or special course as defined in the curricula of his institution.
2. In meeting the units-of-work requirement, subjects which have been failed may be repeated, but those that have been completed with a passing mark may not ordinarily be repeated and included in meeting this requirement.
3. In order to be eligible, a student who has previously attended college must have completed, in his last term or semester of attendance, at least 10 units of work in addition to Physical Education (if required).

Intramural Activities

The Physical Education and Recreation Education Division, in cooperation with the Student Council, offers a wide range of Intramural Activities for men and women that include flag football, volleyball, basketball, table tennis, softball, tennis, soccer, dance, badminton, and bicycling.

Additionally, sports days are scheduled with neighboring colleges, universities, and community colleges.

Graduation Requirements

(Associate in Arts Degree)

Graduation from Cañada College with the Associate in Arts degree is based upon the completion of 60 units of lower-division college-level work, including the requirements listed below, the last 12 units of which must be completed at this institution. A student is required to have an overall grade-point average of 2.0 (or a 2.0 grade-point average on his last 60 units of work). At the beginning of the final semester, it is the responsibility of each candidate to file an application for graduation in accordance with directions to be announced by the Registrar.

Here are the requirements in brief, followed by explanatory paragraphs:

| SUBJECTS | UNITS |
|--|-------|
| American Institutions—National..... | 3 |
| American Institutions—State and Local..... | 2-3 |
| English..... | 6-8 |
| Health Education and First Aid..... | 2-3 |
| Physical Education..... | 4 |
| Major (terminal students only)..... | 20 |
| General Education..... | 6 |
| Electives..... | 12-20 |
| TOTAL UNITS | 60 |

American Institutions

This requirement may be satisfied in two different ways: (a) by completing at least one of the listings in group 1 below and one of the listings in group 2, or (b) by completing one of the listings in group 3.

Group 1—American History and Institutions

- a. History 17a—United States History (3 units), or
- b. History 17b—United States History (3 units), or
- c. Political Science 21—American Government (3 units), or
- d. History 4c—American Civilization (4 units), or
- e. History 8a—History of the Americas (3 units), or
- f. Political Science 7—Survey of Constitutional Principles (3 units), or
- g. Social Science 2—Introduction to the Social Sciences (3 units)

Group 2—California State and Local Government

- a. Political Science 23—California State Government (2 units), or
- b. Political Science 24—California Urban Government (2 units), or
- c. Political Science 28—School Governance (2 units), or
- d. History 22—20th Century United States (3 units), or
- e. History 26—20th Century United States (3 units), or
- f. History 31—History and Government of San Mateo County (3 units), or
- g. Social Science 1—Introduction to the Social Sciences (3 units)

Group 3—American National and Local Institutions

- a. Political Science 25—National, State, and Local Institutions (5 units), or
- b. Political Science 27—American Society (5 units)

Recommended Sequences:

- History 17a—History 22 Western History Emphasis
 History 17b—History 26 Modern History Emphasis
 History 4c—Political Science 23/24 Cultural History Emphasis
 History 8a—History 22 Mexican-American Emphasis
 Social Science 1—Social Science 2 Current Problems Emphasis
 Political Science 7—Political Science 23/24 Constitutional Emphasis
 Political Science 21—Political Science 23/24 American Government Emphasis (or Political Science 25 combination)
 History 17a and b—Political Science 23/24

(History 17a and b are required by some upper-division majors and may also be taken at Cañada with an American Studies emphasis—see American studies.)

English

The student must complete at least two semester courses in English or Speech (a minimum total of 6 units) not to be taken concurrently. One of these shall be English 50a, English 1a or English 57a. Other courses shall be selected from the following:

English: 1a, 1b, 23, 24, 25, 26, 27, 28a, 30, 36, 41, 42a-b, 43, 44, 45, 46a-b, 50b, 57b.

Speech: 1a, 1b, 10, 30a, 30b, 57a, 57b.

Health Education and First Aid

All students are required to take Health Education I. In addition, each student must show that he has completed an acceptable course in First Aid. Most students who have graduated from a public high school in California since 1952 have completed the First Aid requirement.

Veterans may receive credit for these courses by presenting to the Registrar their discharge papers showing honorable discharge and active service of one year or more in the United States armed forces. These units will be posted to the student's record at the time of graduation.

Physical Education

A minimum of 1 unit each semester for two hours of Physical Education taken each week throughout the period of junior college attendance prior to graduation is required under the State Law of California, unless the student is legally exempted therefrom as indicated under "Registration, P.E. Requirement" in this catalog. The student must receive a passing grade for each required semester of P.E.

Major

A student's major consists of at least 20 semester hours in a specified field of study. A field of study is understood to be a specific subject with such supporting subjects as may properly be used to round out the training in preparation for a major or for some particular occupation. For students planning to transfer to four-year institutions, fulfillment of lower-division requirements for the institution of their choice will be considered a major.

General Education

General Education is the part of a program of studies which introduces the student to areas of study that develop breadth of outlook and contributes to his balanced development. This training is complementary to, but different in emphasis from, the specialized training he receives for a job, a profession or high scholastic attainment in a particular field of study.

The purpose of the program in General Education is to assist the student in moving toward the following goals:

1. Developing a sound moral and spiritual code for his personal and civic life as a responsible citizen in a democracy.
2. Developing critical and constructive thinking for problem solving and value discrimination.
3. Maintaining good mental and physical health for himself, his family and his community; developing balanced

personal and social adjustment, satisfactory home and family life, and vocational adjustment.

4. Using basic mechanical, mathematical and communication skills to solve everyday problems; understand ideas of others and express his own ideas effectively.
5. Understanding his cultural heritage and his interaction with his biological and physical environment.
6. Understanding the creative activity of others and participating to some extent in creative activity of his own.

The General Education program for the transfer student:

The transfer student should complete the lower-division requirements of the institution to which he plans to transfer. In the case of students who plan to attend one of the California State Colleges, recent legislation permits Canada and other community colleges to certify that the General Education requirements have been met.

These requirements are as follows:

CALIFORNIA STATE COLLEGE GENERAL EDUCATION REQUIREMENTS

Canada College will certify that the general education requirements of the California State Colleges have been met for those students who complete a minimum of 40 units, which include two courses in each of the areas I, II, III and IV listed below:

I NATURAL SCIENCES

(A course in Life Science and a course in Physical Science—one of which must have a laboratory.)

Life Sciences

| | |
|-------------|-----|
| *Anatomy | 1 |
| *Anatomy | 62a |
| *Anatomy | 62b |
| Anthro. | 1 |
| #Anthro. | 3 |
| *Bacty. | 1 |
| Bacty. | 10 |
| *Biol. | 1 |
| Biol. | 2 |
| *Biol. | 15 |
| *Biol. | 40 |
| *Botany | 1 |
| Botany | 10 |
| Conserv. | 1 |
| #Environ. | 1 |
| Forestry | 1 |
| Home Econ. | 9 |
| *Home Econ. | 15 |
| Life Sci. | 10 |
| *Physiology | 1 |
| *Zoology | 1 |

Physical Sciences

| | |
|---------|----|
| Astron. | 10 |
| *Chem. | 1a |
| *Chem. | 1b |

| | |
|-------------|-----|
| Chem. | 10 |
| *Chem. | 10L |
| *Chem. | 30a |
| *Chem. | 30b |
| #Environ. | 1 |
| Geog. | 1a |
| *Geology | 1a |
| *Geology | 1b |
| Geology | 10 |
| Meteorology | 1 |
| *Music | 9 |
| Phy. Sci. | 10 |
| *Physics | 2a |
| *Physics | 2b |
| *Physics | 4a |
| *Physics | 4b |
| *Physics | 4c |
| *Physics | 9 |
| Physics | 10 |
| Physics | 62 |

II SOCIAL SCIENCES

(Must meet American

Institutions requirement)

| | |
|------------|-----|
| Anthro. | 2 |
| #Anthro. | 3 |
| Anthro. | 36 |
| Econ. | 1a |
| Econ. | 1b |
| Econ. | 7 |
| Econ. | 10 |
| Econ. | 11 |
| Econ. | 14a |
| Econ. | 27 |
| Environ. | 2 |
| Geog. | 1b |
| Geog. | 4 |
| Geog. | 5a |
| Geog. | 5b |
| Geog. | 5c |
| #Hist. | 4a |
| #Hist. | 4b |
| Hist. | 4c |
| Hist. | 5 |
| Hist. | 6a |
| Hist. | 6b |
| Hist. | 8a |
| Hist. | 8b |
| #Hist. | 9a |
| #Hist. | 9b |
| Hist. | 17a |
| Hist. | 17b |
| Hist. | 22 |
| Hist. | 26 |
| Hist. | 31 |
| Hist. | 33 |
| Home Econ. | 6 |
| Home Econ. | 35 |
| Home Econ. | 36 |
| Poli. Sci. | 1 |
| Poli. Sci. | 2 |
| Poli. Sci. | 3 |
| Poli. Sci. | 7 |

| | |
|------------|----|
| Poli. Sci. | 21 |
| Poli. Sci. | 23 |
| Poli. Sci. | 24 |
| Poli. Sci. | 25 |
| Poli. Sci. | 27 |
| Poli. Sci. | 28 |
| Psych. | 1a |
| Psych. | 1b |
| Psych. | 4 |
| Psych. | 5 |
| Psych. | 6 |
| Psych. | 10 |
| Psych. | 12 |
| Psych. | 33 |
| Psych. | 40 |
| Sociology | 1 |
| Sociology | 2 |
| Sociology | 3 |
| Soc. Sci. | 1 |
| Soc. Sci. | 2 |
| Soc. Sci. | 6 |
| Soc. Sci. | 35 |
| Soc. Sci. | 36 |

III HUMANITIES

(At least 2 courses from
2 different areas)

Fine Arts

| | |
|------------|-----|
| Art | 1a |
| Art | 1b |
| Art | 2a |
| Art | 2b |
| Art | 3 |
| Art | 10 |
| Art | 19 |
| Art | 44 |
| Drama | 10 |
| Drama | 14 |
| Drama | 16 |
| Drama | 17 |
| Drama | 20 |
| Home Econ. | 40 |
| Home Econ. | 41 |
| Music | 1 |
| Music | 6 |
| Music | 8 |
| Music | 10 |
| Music | 11 |
| Music | 19a |
| Music | 19b |
| Music | 19c |
| Music | 19d |
| Music | 22 |
| Music | 23 |
| Music | 33 |
| Music | 34 |
| Music | 36 |
| Music | 43 |
| Music | 44 |
| Music | 51 |

Literature

| | |
|-------|----|
| Drama | 1a |
|-------|----|

| | |
|---------|-------|
| Drama | 1b |
| Drama | 24 |
| Drama | 25 |
| English | 23 |
| English | 24 |
| English | 25 |
| English | 26 |
| English | 27 |
| English | 28a |
| English | 30 |
| English | 36 |
| English | 41 |
| English | 42a/b |
| English | 43 |
| English | 44 |
| English | 45 |
| English | 46a/b |

Philosophy

| | |
|---------|-----|
| Philos. | 6a |
| Philos. | 6b |
| Philos. | 20a |
| Philos. | 20b |
| Philos. | 20c |
| Philos. | 23 |
| Philos. | 24a |
| Philos. | 24b |
| Philos. | 28 |
| Philos. | 35 |

Foreign and Ethnic Culture

| | |
|-----------|-----|
| French | 3,4 |
| French | 25a |
| French | 25b |
| German | 3,4 |
| Spanish | 3,4 |
| Spanish | 25a |
| Spanish | 25b |
| #Hist. | 4a |
| #Hist. | 4b |
| #Hist. | 9a |
| #Hist. | 9b |
| Soc. Sci. | 33 |
| Soc. Sci. | 34 |

IV BASIC SUBJECTS

| | |
|------------|----|
| English | 1a |
| English | 1b |
| French | 1 |
| French | 2 |
| German | 1 |
| German | 2 |
| Health Ed. | 1 |
| Math. | 10 |
| Math. | 13 |
| Math. | 16 |
| Math. | 17 |
| Math. | 19 |
| Math. | 20 |
| Math. | 21 |
| Math. | 28 |
| Math. | 29 |
| Math. | 30 |

24 / *Graduation Requirements (cont.)*

| | |
|-----------|-----|
| Math. | 31 |
| Philos. | 12 |
| Soc. Sci. | 10 |
| Soc. Sci. | 11 |
| Spanish | 1 |
| Spanish | 2 |
| Speech | 1a |
| Speech | 10 |
| Speech | 30a |
| Speech | 30b |
| Stat. | 1 |
| Stat. | 2 |

V ELECTIVES

| | |
|------|-----|
| Bus. | 35 |
| Bus. | 51 |
| Bus. | 55 |
| Bus. | 58 |
| Bus. | 60 |
| Bus. | 63 |
| Bus. | 64 |
| Bus. | 66 |
| Bus. | 83a |

| | |
|-------------|-----|
| Bus. | 84 |
| Mgmt. | 61 |
| Mgmt. | 65 |
| Mgmt. | 85 |
| Mgmt. | 97 |
| Bus. | 92a |
| Bus. | 92r |
| Bus. Adm. | 1a |
| Bus. Adm. | 18a |
| Drama | 15 |
| Engineering | 10 |
| French | 30 |
| German | 30 |
| Home Econ. | 7 |
| Home Econ. | 20a |
| Home Econ. | 20b |
| Home Econ. | 20c |
| Home Econ. | 22 |
| Home Econ. | 24 |
| Home Econ. | 52 |
| Library | 1a |
| Music | 40 |
| PE | 20a |

| | |
|---------|-----|
| PE | 20b |
| PE | 20c |
| PE | 20d |
| PE | 30a |
| PE | 30b |
| PE | 30c |
| PE | 30d |
| PE | 40 |
| PE | 42 |
| PE | 50a |
| PE | 50b |
| PE | 50c |
| PE | 50d |
| Psych. | 11a |
| Psych. | 11b |
| R. Ed. | 40 |
| R. Ed. | 41 |
| R. Ed. | 42 |
| Spanish | 30 |
| Guid. | 1 |
| Guid. | 2 |
| Guid. | 3 |
| Guid. | 4 |

*Indicates Lab Course

#Indicates Course is listed in two areas.

The General Education program for the terminal student:

1. P.E., Health Education and First Aid.
2. Two semesters of English (6 units).
3. American Institutions, and State and Local Government.
4. A total of six units outside his area of concentration, including at least one course in science or mathematics and one course in the humanities or personal growth. In satisfying this six-unit requirement, the student must select courses from the list which follows. Students will confer with counselors to determine courses best suited to meet individual needs.

**GENERAL EDUCATION COURSES
IN MATHEMATICS AND SCIENCE
FOR THE TERMINAL STUDENT**

Anthropology

- *1 Physical Anthropology (3)

Astronomy

- 10 Introduction (3)

Biology

- *1 General Biology (4)
15 Essentials of Nutrition (3)

Botany

- †1 General Botany (5)
10 Plants and Man (3)

Bacteriology

- 10 Microbes and Man (3)

Business

- 50 Business Arithmetic (2)
51 Business Mathematics (3)
66 General Accounting (4)
or
1a Principles of Accounting (4)

Chemistry

- *10 Survey (3)
10L Survey Lab (1)
†51 Elementary Chemistry (4)

Conservation

- 1 Essentials of Conservation (3)

Data Processing

- 60 Introduction (3)

Forestry

- 1 Introduction (3)

Environment

- 1 Introduction to Physical and Biological Aspects (3)

Geology

- 10 Survey of Geology (3)
†1a General Geology (4)

Geography

- 1a Physical Geography (3)

Life Science

- *10 Intro. to Life Sciences (3)

Mathematics

- *10 Intro. to Mathematical Concepts (3)
*16 Basic Concepts (3)

- 11 Elementary Algebra (5)
- 12 Plane Geometry (5)

Meteorology

- *1 Elementary (3)

Physical Science

- *10 Introduction to Physical Science (3)

Physics

- *10 Introduction to Descriptive Physics (3)

*Courses suitable for non-science majors.

†Has an accompanying laboratory.

GENERAL EDUCATION COURSES
IN THE HUMANITIES AND
PERSONAL GROWTH

Anthropology

- 2 Cultural (3)
- 36 Indians of North America (3)

Art

- 1a History of Art (3)
- 1b History of Art (3)
- 2a Form and Composition (3)
- 3a Form and Color (3)
- 6a Oil Painting (3)
- 10a Introduction to the Arts (3)
- 13a Pencil Drawing (3)
- 19 Art of Our Times (3)
- 57a Photography (3)

Business

- 35 Personal and Family Finance (3)
- 55 Introduction to Business (3)
- 58 Human Relations (3)
- 63 Business Economics (3)
- 64 Business Law (3)
- 66 General Accounting (4)
- 92a Beginning or Refresher Typewriting

Business Administration

- 18a Commercial Law (3)

Drama

- 10 Intro. to Theatrical Arts (3)
- 13a-b Stage Production (2-2)
- 14a-b Theory and Practice of Acting (2-2)
- 15 Play Production (2)

Economics

- 1a-b Principles of Economics (3-3)
- 7 Survey of Economic Problems (3)
- 27 Problems of Underdeveloped Areas (3)

English

- 23 Introduction to Poetry (3)
- 24 Modern Drama (3)
- 25 Shakespeare (3)
- 26 Modern Novel (3)

- 27 Contemporary Literature (3)
- 28a Film Study (3)
- 30 American Lit. (3)
- 36 Science Fiction (3)
- 41 Afro-American Poetry (3)
- 42a-b Masterpieces of Classical and Euro. Lit. (3-3)
- 43 Afro-American Lit. (3)
- 44 Mexican-American Lit. (3)
- 45 Russian Novel (3)
- 46a-b English Lit. (3-3)

Geography

- 1b Cultural Geography (3)
- 5a-b-c Environmental Studies (3-3-3)

Guidance

- 1 Introduction to College (1)
- 2 Effective Learning (1)
- 3 Occupational Planning (1)
- 4 Special Interest Discussion Groups (1)

History

- 4a-b Western Civ. (3-3)
- 5 History of England (3)
- 6a-b African Civ. (3-3)
- 8a-b History of Amer. (3-3)
- 9a-b Asian Civilization (3-3)
- 22 California History (3)
- 26 20th Century American History (3)
- 33 Afro-Amer. Hist. (3)

Home Economics

- 6 Consumer Market Place (2)
- 7 Home Management (2)
- 9 Nutrition (2)
- 20a Beg. Clothing (3)
- 22 Textiles (2)
- 24 Fashion Analysis (2)
- 40 Housing & Int. Decor. (3)
- 41 Interior Design

Journalism

- 1 Introduction (3)

Music

- 3 History and Appreciation (3)
- 6 Literature and Appreciation (3)
- 22 Orchestra (1)
- 23 Band (2)
- 33 A Cappella Choir (2)
- 27 Ensemble (Instrumental) (1)
- 35 Oratorio Chorus (1)
- 36 College Chorale (1)
- 37 Musical Production (1-3)

Philosophy

- 6a General Introduction to Philosophy (3)
- 20c Hist. of Philosophy (3)
- 23 Ethics (3)
- 24a-b Introduction to Religion (3-3)

Political Science

- 2 Comparative Government (3)
- 3 International Relations (3)

Psychology

- 1a General Psychology (3)
- 4 Courtship, Marriage and the Family (3)
- 10 Psychology in Practice (3)
- 33 Psychology of Adjustment (3)

Social Science

- 33 Afro-American Culture (3)
- 34 Mexican-American Culture (3)

Sociology

- 1 Principles of Sociology (3)
- 2 Social Problems (3)

Speech

- 10 Contemporary Dialogue (3)
- 30a-b Oral Expression and Interpretation (3-3)

Career Planning

The following programs, designed to assist the student to select subjects to meet vocational or professional goals and fulfill graduation requirements at Cañada College, may be materially changed by the student in conference with a counselor to meet particular objectives.

The student should be aware that course prerequisites, graduation requirements and changes in educational goals may require a longer period than the usual two years. It is necessary that he assume responsibility for his program and make his own decisions with a counselor's assistance. If he elects to transfer to a four-year college or university, he should consult the catalog for the institution of his choice.

Courses are described under "Announcement of Courses" in this catalog. A schedule of classes, available each semester, gives information regarding time and location of courses offered.

| | |
|-----------------------------|-------|
| Afro-American Studies | 29 |
| Agriculture | 28 |
| American Studies | 29 |
| Anatomy | 29 |
| Anthropology | 29 |
| Art | 29-30 |
| Asian Studies | 30 |
| Bacteriology | 30 |
| Biochemistry | 30 |
| Biology | 30 |
| Biophysics | 30 |

| | |
|-------------------------------------|----------------|
| Botany | 30 |
| Business Administration | 30 |
| Business | 30-31 |
| Business Administration | 32-33 |
| Clerk-Typist | 31 |
| Credit and Finance Management | 32 |
| General Clerical | 31 |
| Merchandising | 33 |
| Secretarial | 31 |
| Chemistry | 33 |
| Cooperative Education | 33 |
| Criminology | 33 |
| Dental Hygiene | 33 |
| Dentistry | 33 |
| Dramatic Arts | 33-34 |
| Ecology | 34 |
| Economics | 34 |
| Education | 34 |
| Education Research Assistant | (See brochure) |
| Engineering | 35 |
| English | 35 |
| Entomology | 35 |
| Environmental Technology | 35 |
| Ethnic Studies | 35 |

| | | | |
|-----------------------------------|----------------|-------------------------------|----|
| Food & Lodging Technology | 36 | Parasitology | 38 |
| Foreign Language | 36 | Pharmacy | 39 |
| Forestry | 36 | Pre-Optometry | 38 |
| Genetics | 36 | Philosophy | 39 |
| Geography | 36 | Physical Education | 39 |
| Geology | 36 | Physical Sciences | 39 |
| History | 36 | Physical Therapy | 39 |
| Home Economics | 36 | Physics | 39 |
| Humanities | 37 | Physiology | 39 |
| International Relations | 37 | Police Science | 39 |
| Journalism | 37 | Probation | 40 |
| Law (Pre-Legal) | 37 | Psychology | 40 |
| Liberal Arts | 37 | Public Health | 40 |
| Librarianship | 37 | Radiologic Technology | 40 |
| Mathematics | 37 | Recreation Education | 40 |
| Medical Illustration | 37 | Social Science | 40 |
| Medical Science | 37 | Social Service | 40 |
| Mental Health Assistant | (See brochure) | Social Work | 40 |
| Mexican-American Studies | 38 | Sociology | 40 |
| Microbiology | 38 | State Colleges | 28 |
| Military Science (R.O.T.C.) | 38 | Theatre Arts | 40 |
| Music | 38 | Universities | 28 |
| Nursery School | 38 | Pre-Veterinary Medicine | 40 |
| Nursing | 38 | Wildlife Conservation | 40 |
| Nutrition | 38 | X-Ray Technology | 40 |
| Occupational Therapy | 38 | Zoology | 40 |
| Paleontology | 38 | | |

State Colleges, Universities

Transfer of Credit

A student expecting to transfer to a state college, private college or university can usually complete the first two years of his work at Cañada College. If all requirements have been met, students transferring to higher institutions may graduate in two years of further study. The student may decide to spend more than two years at Cañada College or transfer to a four-year institution with less than junior standing. In any event, it is important that he consult with his counselor in order to arrange a program which will meet the requirements for transfer to the institution of his choice.

College catalogs are on file in the Library. A comprehensive Occupational Library is available. The student

may write directly to the registrar or dean of the institution of his choice to obtain catalogs, circulars of information and other data concerning required subjects.

The earlier the student makes a decision regarding a higher institution to which to transfer, the better are his chances for meeting all requirements without delay. If he is unable to make this decision when he enters Cañada College he may elect to follow the requirements shown in the curriculum of the California State Colleges.

High school subject deficiencies may be made up at Cañada College in order to meet course prerequisites at college level. In some instances the student may qualify for transfer to the college of his choice by maintaining an acceptable grade-point average at Cañada College without having met high school deficiencies.

Suggested Curricula

Agriculture

Transfer Program

Recommended High School Preparation: Chemistry, Physics, Elementary Algebra, Intermediate Algebra, Geometry, Trigonometry, Mechanical Drawing, two years in one foreign language.

The program outlined below is typical of requirements for transfer in junior standing to a four-year college or university.

The student should refer to the catalog of the college of his choice for special requirements.

| | Units |
|---|-------|
| English 1a-1b—Reading and Composition | 6 |
| Chemistry 1a-1b—General | 10 |
| Physics 2a-2b—General | 8 |
| Botany 1—General | 5 |
| Zoology 1—General | 5 |
| Chemistry 8—Elem. Organic | 3 |
| Social Science | 9 |
| Health Education | 2 |

| | |
|---|---|
| Physical Ed. (One course each semester) | 4 |
| Electives | 8 |

Electives will be used to complete the particular requirements of the transfer school. For example: U.C. Forestry requires Math. 30, Engin. 1a-1b, Econ. 2 (Statistics).

Included in the possible fields of emphasis are the following:

| |
|---|
| Agricultural Economics |
| Agricultural Education |
| Agricultural Production |
| Irrigation Science |
| Agromony (Plant Science) |
| Floriculture |
| Genetics (Plant Science) |
| Landscape Management (Plant Science) |
| Plant Pathology (Plant Science) |
| Pomology (Plant Science) |
| Vegetable Crops (Plant Science) |
| Viticulture (Plant Science) |
| Animal Science: |
| Animal Husbandry |

| |
|--|
| Animal Physiology and Genetics |
| Poultry Husbandry |
| Entomology and Parasitology |
| Farm Management |
| Food Science: |
| Dairy Industry Program |
| Food Technology Program |
| Home Economics |
| Preforestry |
| Preveterinary Medicine |
| Range Management |
| Soil Science: |
| General Soil Science Program |
| Soil Management and Conservation Program |

Afro-American Studies

For courses available in this area see the special brochure "Ethnic Studies" available from the Registrar's office.

American Studies

The transfer program in American Studies at most four-year colleges is the same as that listed under "Liberal Arts" with the following exception:

The six-unit English requirement and the National American Institutions requirement may be met by taking the specially labeled American Studies actions of English 1a-b and History 17a-b.

Anatomy / Anthropology

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Art

The student who intends to transfer a major in Art should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements of the college, university or art school to which he wishes to transfer. Students can plan their course in any of the following areas: Fine Arts and Commercial Art.

An Associate in Arts degree is awarded with a major in Art in any of the following suggested program plans:

Art (Commercial)

Associate in Arts Degree with a Major in Commercial Art

Recommended High School Preparation: Design, Drawing, Painting and Poster Service.

| Freshman Year | Units | |
|-----------------------|-------|---|
| | F | S |
| Art 1a—History of Art | 3 | 3 |

| | | |
|-------------------------------------|-------|-------|
| Art 2a—Form and Composition | 3 | - |
| Art 4—Perspectives | - | 2 |
| Art 5a—Design | 3 | - |
| Art 10—Introduction to Related Arts | - | 3 |
| Art 12—Lettering | - | 2 |
| English by Eligibility | 3 | - |
| Polit. Sci. 24—Calif. Urban Govt. | 2 | - |
| Health Education 1 | 2 | - |
| Life Science 10 | - | 3 |
| Speech 1a | - | 3 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 17 | 17 |

Sophomore Year

| | Units | |
|--|-------|-------|
| | F | S |
| Art 3—Color | - | 3 |
| Art 6a—Painting 1 | 3 | -* |
| Art 7a—Watercolor | 3 | 3* |
| Art 19—Art of Our Times | 3 | - |
| Physics 10—Intro. to Descriptive Physics | 3 | - |
| Polit. Sci. 21—American Institutions | - | 3 |
| Philosophy 6a or b (or Eng. Lit.) | 3 | - |
| Electives, Gen. Ed. | - | 2 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 16 | 12 |

*Art 6b and 7b are interchangeable.

Suggested Electives

Art 5b—Design (3)
Guid. 1, 2, 3 or 4—Guidance Class (1)
Bus. 120—Advertising (2)
Art courses not listed above

CAREER OPPORTUNITIES

Commercial artists may be employed in advertising, manufacturing, public relations or communications. Experienced artists frequently specialize in a particular product or field such as fashion, industrial art, advertising, story illustration or interior design.

Art (Fine Arts)

I—Associate in Arts Degree with a Major in Fine Arts, Painting

| Freshman Year | Units | |
|-------------------------------------|-------|-------|
| | F | S |
| Art 1b—History of Art | - | 3 |
| Art 2a-2b—Form and Composition | 3 | 3 |
| Art 13a-13b—Drawing | 3 | 3 |
| Art 10—Introduction to Related Arts | - | 3 |
| English by Eligibility | 3 | - |
| Polit. Sci. 21—Amer. Government | 3 | - |
| Life Sci. 10 | 3 | - |
| Speech 1a | - | 3 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 16 | 16 |

| Sophomore Year | Units | |
|--|-------|----|
| | F | S |
| Art 3—Color | - | 3 |
| Art 6a-6b—Painting | 3 | 3* |
| Art 7a-7b—Watercolor | 3 | -* |
| Art 15—Life Drawing | 2 | - |
| Art 19—Art of Our Times | - | 3 |
| Physics 10—Intro. to Descriptive Physics | 3 | - |
| Philosophy 6a or 6b (or Eng. Lit.) | 3 | - |
| Polit. Sci. 24—Calif. Urban Govt. | 2 | - |
| Health Education I | - | 2 |
| Electives, General Education | - | 1 |
| Physical Education | 1 | 1 |
| | 17 | 13 |

*Art 6b and 7b are interchangeable.

Suggested Electives

Art 1a—History of Art (3)
 Art courses not listed above
 Guid. 1, 2, 3 or 4—Guidance Class (1)

II—Associate in Arts Degree with a Major in Fine Arts, Sculpture

| Freshman Year | Units | |
|---------------------------------|-------|----|
| | F | S |
| Art 1a-1b—History of Art | 3 | 3 |
| Art 2a—Form and Composition | 3 | - |
| Art 5b—Design | - | 3 |
| Art 13a-13b—Drawing | 3 | 3 |
| English by Eligibility | 3 | - |
| Polit. Sci. 21—Amer. Government | 3 | - |
| Life Sci. 10 | - | 3 |
| Speech 1a | - | 3 |
| Physical Education | 1 | 1 |
| | 16 | 16 |

| Sophomore Year | Units | |
|--|-------|----|
| | F | S |
| Art 15—Life Drawing | 2 | - |
| Art 19—Art of Our Times | 3 | - |
| Art 22a-22b—Sculpture | 3 | 3 |
| Physics 10—Intro. to Descriptive Physics | 3 | - |
| Philosophy 6a or 6b (or Eng. Lit.) | 3 | - |
| Polit. Sci. 24—Calif. Urban Govt. | 2 | - |
| Health Education I | - | 2 |
| Electives, General Education | - | 7 |
| Physical Education | 1 | 1 |
| | 17 | 13 |

Suggested Electives

Art 10—Introduction to Related Arts (3)
 Guid. 1, 2, 3, or 4—Guidance Class
 Art 3—Color (3)
 Art courses not listed above

III—Associate in Arts Degree with a Major in Fine Arts, Ceramics

Substitute 5a for 5b in Sculpture
 Substitute Art 20b for Art 22b
 Add Art 12a—Lettering

Asian Studies

For courses available in this area see the special brochure "Ethnic Studies" available from the Registrar's Office.

Bacteriology / Biochemistry / Biology Biophysics / Botany

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Business Administration

Transfer Program

Recommended High School Preparation: Elementary Algebra, Plane Geometry, Natural or Physical Science.

The lower division requirements for Business Administration majors transferring to state colleges are Business Administration 1a-1b, Economics 1a-1b, Business Administration 18a.

Students planning to transfer to San Jose State College should also take Math 13 (Finite Math.), Statistics 2, Logic or Ethics, and Speech 1a.

The remainder of the student's work should be courses to be applied toward the completion of the 40-unit general education requirement for state college.

Students planning to transfer to a university should consult the catalog for that school.

Students graduating with a major in the field of Business Administration must achieve a percentile rating of 70 on the mathematics section of the Iowa test of Educational Development or 35 or over on the quantitative part of the SCAT test, or complete Bus. 50 with a grade of "C" or better. It is recommended that Bus. 50 be completed by the end of the second semester.

Business

Terminal Programs

The following major programs are designed to qualify a student, upon completion of a curriculum, for employment in an area of specialization. The development of business skills which can be utilized for immediate employment is emphasized, with general courses offered to provide a background for future promotion in the chosen occupational area.

Students graduating with a major in the field of

Business must meet the following subject requirements:

Twenty units in Business courses.

Business 50 or 51, or a satisfactory score on a Business Mathematics competency exam.

Business 55—Introduction to Business.

Business (General Clerical)

Associate in Arts Degree with a General Clerical Major (Recommended Program)

| Freshman Year | Units | |
|----------------------------|-------|----|
| | F | S |
| Health Education | 2 | 2 |
| Bus. 92a, b or c | 3 | - |
| Bus. 91—Bus. English | 3 | - |
| English | 4 | - |
| General Education Elective | 3 | - |
| Bus. 50 or 51—Bus. Math. | 3 | - |
| Bus. 56—Bus. Corres. | 3 | - |
| Bus. 58—Human Relations | 3 | - |
| Bus. 55—Intro. to Bus. | 3 | - |
| Bus. 63—Bus. Econ. | 3 | - |
| Physical Education | 1 | 1 |
| | 16 | 16 |

Sophomore Year

| Sophomore Year | Units | |
|-----------------------------------|-------|----|
| | F | S |
| Bus. 60—Intro. to Data Processing | 3 | - |
| Bus. 93—Calculating Machine | 3 | - |
| Soc. Sci. | 3 | 3 |
| Bus. 100—Office Procedures | 3 | - |
| General Education Elective | 3 | - |
| Business Elective | 3 | - |
| English | 4 | - |
| Business 92b or c—Typing | 3 | - |
| Bus. 66 or Bus. Adm. 1a | 4 | - |
| Physical Education | 1 | 1 |
| | 17 | 17 |

Suggested Electives

- Guid. 1, 2, 3 or 4—Guidance Class (1)
- Bus. 35—Personal Finance (3)
- Psychology 10, or 1a (3)
- Business 64—Bus. Law (3)
- Business 36a—Credit Management (3)
- Business 83a—Prin. of Real Estate (3)

CLERK-TYPIST CERTIFICATE PROGRAM

Remedial Courses (if required by testing)

| Core Courses | Units |
|-----------------------------------|-------|
| Bus. 92a-b-c—Typing (through 92c) | 3-9 |
| Bus. 100—Office Procedures | 3 |
| Bus. 55—Introduction to Business | 3 |
| Bus. 93—Calculating Machines | 3 |
| Bus. 50 (if required by testing) | 3 |
| Related Courses | 3 |
| Business English | 3 |
| Electives | 3 |

24-30

Business (Secretarial)

Associate in Arts Degree with a Secretarial Major (Recommended Program)

| Freshman Year | Units | |
|-----------------------------------|-------|----|
| | F | S |
| Health Education | 2 | 2 |
| Bus. 92a or 92b—Typing | 3 | - |
| Bus. English | 3 | - |
| English | 3 | - |
| Bus. 66—Gen. Acc't. | 4 | - |
| Bus. 50 or 51—Arith. | 3 | - |
| Bus. 93—Mach. Calculation | 3 | - |
| Bus. 55—Intro. to Bus. | 3 | - |
| Bus. 90a-b or c—Shorthand (Gregg) | 5 | - |
| General Education Electives | 3 | - |
| Physical Education | 1 | 1 |
| | 17 | 17 |

Sophomore Year

| Sophomore Year | Units | |
|-------------------------------|-------|----|
| | F | S |
| English | 3 | - |
| Bus. 92b or 92c—Typing | 3 | - |
| Bus. 90b, c—Shorthand (Gregg) | 7 | 5 |
| Bus. 100—Office Procedures | 3 | - |
| Social Science Requirement | 5 | - |
| General Education Electives | 3 | - |
| Bus. 56—Bus. Correspondence | 3 | - |
| Physical Education | 1 | 1 |
| | 17 | 17 |

See Business section for division requirements for all Business majors.

Suggested Electives

- Guid. 1, 2, 3 or 4—Guidance Class (1)
- Bus. 35—Personal and Family Finance (3)
- Bus. 63—Bus. Econ. (3)
- Bus. 58—Human Relations (3)
- Bus. 64—Bus. Law (3)
- Bus. 81—Security Investments (3)

SECRETARIAL CERTIFICATE PROGRAM REQUIREMENTS

| Core Courses | Units |
|---|-------|
| Bus. 92a-b-c—Typing (through 92c) | 3-9 |
| Bus. 90a-b—Shorthand (through 90b) | 7-12 |
| Bus. 100—Office Procedures | 3 |
| Bus. 55—Introduction to Business | 3 |
| Bus. 93—Machine Calculation | 3 |
| Business Elective | 3 |
| Bus. 50—Arith. (if required by testing) | 3 |
| Business English | 3 |
| Business Correspondence | 3 |

31-42

Business Administration**(Two-Year Program)****Associate in Arts Degree in Business
with an Emphasis in Business Administration**
(20 units in Business required.)

(Recommended Program—This curriculum is for the Business student who does not wish to specialize.)

| | Units | |
|---|-------|-------|
| | F | S |
| Bus. 63—Bus. Econ | 3 | - |
| Health Education | - | 2 |
| Bus. 92—Typing | - | 3 |
| English—by Eligibility | 4 | - |
| Bus. 66—Gen. Acc't. or Bus. Admin. 1a | 4 | - |
| Bus. 50 or 51—Basic Math | 3 | - |
| Social Science Requirement | - | 2 |
| Bus. 64/18a—Bus. Law | - | 3 |
| Bus. 55—Int. to Business | - | 3 |
| Bus. 60—Introduction to Data Processing | - | 3 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 15 | 17 |

| | Units | |
|-----------------------------------|-------|-------|
| | F | S |
| Bus. 91—Bus. Eng. | 3 | - |
| American Institutions | 3 | - |
| Bus. 93—Machine Calculation | - | 3 |
| General Education Electives | 3 | 3 |
| Bus. Elective | 3 | - |
| Mgt. 92—Tech. of Supervision | - | 3 |
| Bus. 58—Human Relations | 3 | - |
| Bus. 56—Bus. Corres. | - | 3 |
| Bus. 65—Small Business Management | - | 3 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 16 | 16 |

Suggested Electives

- Bus. 35—Personal and Family Finance (3)
- Bus. 110—Fundamentals of Salesmanship (3)
- Bus. 116—Retail Merchandising (3)
- Bus. 47—Cooperative Education (1-3)
- Bus. 36a-b—Credit Management (3-3)
- Bus. 81—Security Investment (3)
- Guid. 1, 2, 3 or 4—Guidance Class (1-1-1-1)

**BUSINESS ADMINISTRATION
CERTIFICATE PROGRAMS****Business Administration Certificate Requirements**

| | |
|-------------------------------|----------|
| Core requirements | 15 units |
| One group of Business options | 15 units |

REQUIRED CORE COURSES
(common to any of the Business options)

| | Units |
|----------------------------------|-------|
| Bus. 50/51—Business Arithmetic | 3 |
| Bus. 55—Introduction to Business | 3 |
| Bus. 58—Human Relations | 3 |

| | |
|--|-------|
| Business Elective | 3 |
| Bus. 47a/b—Cooperative Education (Recommended) | 3 |
| Bus. 91/63—Bus. Eng./Bus. Econ. | 3 |
| | <hr/> |
| | 15 |

BUSINESS OPTIONS
(in addition to core courses)**Credit and Finance Management Option**

| | |
|--|---------------------|
| Bus. 64/18a—Business Law | 3 |
| Bus. 35—Personal and Family Finance or Bus. 37—Prin. of Bank Operations | 3 |
| Bus. 36a—Credit Management | 3 |
| Bus. 36b—Credit Management | 3 |
| Bus. 66/1a—Accounting | 3-4 |
| | <hr/> |
| | 15-16 |
| | (plus core courses) |

Merchandising Option

| | |
|-----------------------------------|---------------------|
| Bus. 65—Small Business Management | 3 |
| Bus. 110—Salesmanship | 3 |
| Bus. 116—Retail Merchandising | 3 |
| Bus. 120—Advertising | 3 |
| Bus. 124—Marketing | 3 |
| | <hr/> |
| | 15 |
| | (plus core courses) |

Home Furnishings—Merchandising Option

| | |
|---|---------------------|
| Art 3a—Form and Color | 3 |
| Home Ec. 40—Housing and Interior Decoration | 3 |
| Home Ec. 41—Interior Design | 3 |
| Bus. 65—Small Business Management | 3 |
| Bus. 116—Retail Merchandising | 3 |
| | <hr/> |
| | 15 |
| | (plus core courses) |

Business Administration—General Option

| | |
|---|---------------------|
| Any combination of course options as listed above | 15 |
| | (plus core courses) |

Students are encouraged to work for an AA degree in addition to the Business Administration Certificate. Refer to the appropriate curriculum for the AA degree program for suggested electives.

Business (Credit and Finance Management)**Associate of Arts Degree****with a Credit Management Major**

(Recommended Program—20 units in Business required)

| | Units | |
|---|-------|-----|
| | F | S |
| Bus. 35—Pers. & Fam. Finan. or Bus. 37—Bank Oper. | - | 3 |
| Bus. 50 or 51—Bus. Arith. | 3 | - |
| Bus. 63 or Econ. 1a—Bus. Econ./Prin. of Econ. | 3 | - |
| Bus. 55—Intro. To Bus. | 3 | - |
| Bus. 58—Human Relations | - | 3 |
| Bus. 66 or 1a—Accounting | - | 3-4 |

| | | |
|-------------------------|----|----|
| Bus. 91—Bus. English | 3 | - |
| English | - | 3 |
| General Educ. Electives | - | 3 |
| Health Education | 2 | - |
| Physical Education | 1 | 1 |
| | 15 | 17 |

Sophomore Year

| | Units | |
|-------------------------------|-------|----|
| | F | S |
| Bus. 36a—Credit Mgmt. | 3 | - |
| Bus. 36b—Credit Mgmt. | - | 3 |
| Bus. 56—Bus. Correspon. | - | 3 |
| Bus. 64 or 18a—Bus. Law | - | 3 |
| Mgmt. 92—Tech. of Supervision | 3 | - |
| Elective | 3 | - |
| English | 3 | - |
| General Educ. Elective | - | 3 |
| Social Science | 3 | 3 |
| Physical Education | 1 | 1 |
| | 16 | 16 |

Suggested Business Electives

- Bus. 92—Beginning Typing (3)
- Bus. 93—Machine Calculation (3)
- Bus. 47—Cooperative Education (1-3)
- Mgmt. 80—Personnel Mgmt. (3)
- Bus. 37—Prin. of Bank Operations (3)
- Mgmt. 52—Report Writing (3)
- Data Proc. 60—Intro. to D.P. (3)
- Bus. 65—Small Bus. Mgmt. (3)
- Bus. 116—Retail Merchandising (3)

Business (Merchandising-Management)**Associate in Arts Degree in Business with Specialization in Merchandising**

(Recommended Program—20 units in Business required.)

This program is planned to prepare men and women for responsible positions in the merchandising and management field. Store organization, management, merchandise control, buying and selling, sales promotion, accounting and control, and problems inherent in the operation of a progressive retail business are included.

Freshman Year

| | Units | |
|-------------------------------|-------|----|
| | F | S |
| Bus. 50 or 51—Bus. Arithmetic | 3 | - |
| Bus. 55—Intro. to Bus. | 3 | - |
| Mgmt. 92—Supervision | - | 3 |
| Bus. 120—Advertising | - | 3 |
| Bus. 58—Human Relations | - | 3 |
| Bus. 110—Salesmanship | 3 | - |
| English by Eligibility | 4 | 4 |
| Health Education | 2 | - |
| Elective | - | 3 |
| Physical Education | 1 | 1 |
| | 16 | 17 |

Sophomore Year

| | Units | |
|-------------------------------|-------|----|
| | F | S |
| Bus. 116—Retail Merchandising | 3 | - |
| Bus. 124—Marketing | - | 3 |
| Bus. 66—Gen Acc't. | 4 | - |
| Bus. 65—Small Business Mgmt. | - | 3 |
| Social Science | 3 | 3 |
| General Education Elective | 3 | 3 |
| Business Elective | 3 | 3 |
| Physical Education | 1 | 1 |
| | 17 | 16 |

Suggested Business Electives

- Bus. 35—Personal and Family Finance (3)
- Bus. 47—Coop. Education (1-3)
- Bus. 60—Introduction to Data Processing (3)
- Bus. 63—Business Econ. (3)
- Bus. 36a/b—Credit Management (6)
- Bus. Ad. 1a—Accounting (4)
- Bus. 56—Bus. Correspondence (3)
- Bus. 64—Business Law (3)
- Bus. 91—Business English (3)
- Bus. 93—Calculating Machines (3)
- Bus. 92a—Beginning Typing (3)

Chemistry

See "Physical Sciences."

Cooperative Education**Criminology**

The student who intends to transfer a major in Criminology should plan his course at Cañada College to meet the general requirements for junior standing as well as the lower division department requirement of the college or university to which he intends to transfer. For Associate in Arts (two-year) program, see Police Science.

Dental Hygiene (See "Medical Science.")**Dentistry** (See "Pre-Dental")

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Drama

The student who intends to transfer a major in Drama should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements of the college, university, or drama school of his choice. The program outlined below is typical of requirements for transfer with junior standing to a state college.

Associate in Arts Degree with a Major in Drama

Freshman Year

| | Units | |
|--|-------|---|
| | F | S |
| English and/or Speech | 3 | 3 |
| Physics 9 or 10 (Phys. Sci. req.) | 3 | - |
| Life Sci. 10 or Environ. 1 (Life Sci. req.) | - | 3 |
| Phys. Ed. | 1 | 1 |

Drama courses:

| | | |
|---|-----------------|-----------------|
| Drama 10—Intro. to Theater | 3 | - |
| Drama 13a—Stage Production | - | 3 |
| Drama 14a-14b—Acting, Practice and Theory | 3 | 3 |
| Drama L14a-L14b—Acting Lab | 2 | 2 |
| Drama 15—Play Production (at least one per year) | 1/2-2 | 1/2-2 |
| | <hr/> 15 1/2-17 | <hr/> 15 1/2-17 |

Sophomore Year

| | Units | |
|---|-------|---|
| | F | S |
| Art 10 or Music 10 (Humanities requirement) | - | 3 |
| Eng/Drama 24—Modern Drama (Humanities requirement) | 3 | - |
| Poli. Sci. 21—American Government | 3 | - |
| Poli. Sci. 24—Calif. Urban Gov't | - | 2 |
| Health Education | 1 | - |
| Phys. Ed. | 1 | 1 |

Drama courses:

| | | |
|---|-----------------|-----------------|
| Drama 1a-1b—Masterpieces of Drama | 3 | 3 |
| Drama 14c-14d—Advanced Acting | 3 | 3 |
| Drama L14c-14d—Acting Lab | 2 | 2 |
| Drama 15—Play Production | 1/2-2 | 1/2-2 |
| Drama 16—Production Shop | - | 1/2-2 |
| Drama 17—Costume-Fashion Design & Prep, Makeup | - | 1/2-2 |
| | <hr/> 16 1/2-18 | <hr/> 15 1/2-20 |

Suggested Electives

| | Units |
|---|-------|
| Drama 13b, 13c, 13d—Stage Production | 3-3-3 |
| Drama 15—Play Production (Repeatable for credit) | 1/2-2 |
| Drama 16—Production Shop (Repeatable for credit) | 1/2-2 |
| Drama 17—Costume-Fashion Design and Prep, Makeup (Repeatable for credit) | 1/2-2 |
| Drama 20—Intro. to Directing (May be repeated for credit) | 3 |
| Drama 25—Intro. to Shakespeare | 3 |
| Drama 33—Voice and Articulation | 3 |
| Drama 49—Special Projects | 1/2-2 |

Other Electives

| | |
|--|-----|
| Art 1a-1b—Hist. of Art | 3-3 |
| Art 2a-2b—Form and Composition | 3-3 |
| Art 4—Perspective | 3 |
| Music 6—Music Apprec. and Survey | 3 |
| Phys. Ed. (Co.-Ed.) 2 Elementary Folk Dance | 1 |
| Phys. Ed. (Co.-Ed.) 2 Elementary Ballet/Modern Dance | 1 |

| | |
|---------------------------------------|---|
| Speech 1a—Basic Public Sp. | 3 |
| Speech 30a—Oral Interp. of Literature | 3 |

Ecology / Economics (See "Social Science.")

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Education

Recommended High School Preparation: History, English (four years), Foreign Language (three years in one language—Spanish is strongly recommended for Elementary teachers in California), Algebra, Geometry, Chemistry or Physics.

Students who plan to qualify for the Standard Teaching Credential with a specialization in elementary teaching or secondary teaching, must present a teaching major. In addition, three courses in English, including a course in English Composition, are required for both credentials.

The following outlined program is typical of requirements for transfer in junior standing to a four-year college or university.

The student should refer to the catalog of the college of his choice for special requirements.

Students desiring an A.A. degree program in Teachers Assisting or a Nursery School Certificate should obtain the special supplements from the Registrar's Office.

| | Units |
|---|-------|
| English 1a-1b—Reading and Comp. | 6 |
| Foreign Language (continuing from high school) | 4-8 |
| Physical Science | 3-8 |
| Life Science | 3-8 |
| History | 6 |
| Polit. Sci. 25 (Amer. Inst.) | 5 |
| Health Education | 2 |
| Psychology 33-1a | 6 |
| Education 1 | 3 |
| Physical Ed. (One course each semester) | 4 |
| Humanities (Art, Music, Literature) | 6 |
| Speech | 3 |
| Audio Visual | 2 |
| Electives | 9 |

All standard elementary teaching credentials now require completion of at least one course equivalent to Math. 16.

Electives will be used to complete the particular requirements of the transfer school. The following are strongly recommended for the Elementary teacher:

| | |
|-------------|----------------|
| Education 2 | Fine Arts 44 |
| Education 3 | Ethnic Studies |

Engineering (Basic Program)

The basic Engineering program detailed below prepares for transfer to the engineering department of many four-year colleges and universities at the end of the sophomore year and meets the requirements for an A.A. degree. The student should refer to the catalog of the college of his choice for special requirements.

Recommended High School Preparation: Mathematics (four years), Chemistry (one year), Physics (one year), Mechanical Drawing (one year).

| Freshman Year | Units | |
|--------------------------------------|-------|----|
| | F | S |
| Math. 30—Anal. Geometry and Calculus | 5 | - |
| Math. 31—Calculus | - | 3 |
| Chem. 1a-1b—General | 5 | 5 |
| Physics 4a—General | - | 4 |
| Engin. 20—Desc. Geometry | 2 | - |
| Engin. 22—Graphics | - | 2 |
| Engin. 10—Engin. Prof. | 2 | - |
| Eng. 1a | 3 | - |
| Eng. 1b or Speech 1a | - | 3 |
| Physical Education | 1 | 1 |
| | 18 | 18 |

| Sophomore Year | Units | |
|---------------------------------|-------|----|
| | F | S |
| Math. 32-33—Calculus | 3 | 3 |
| Engin. 35—Statics | 3 | - |
| Math. 34—Diff. Equations or | - | 3 |
| Engin. 36—Dynamics | - | 3 |
| Engin. 37—Strength of Materials | - | 3 |
| Engin. 38—Circuits and Devices | - | 3 |
| Physics 4b-4c—General | 4 | 4 |
| Polit. Sci. 25—National | - | - |
| State and Local Govt. | 5 | - |
| Health Education | 2 | - |
| Physical Education | 1 | 1 |
| | 18 | 17 |

To meet special requirements of certain transfer colleges, the student may want to substitute one or two of the following subjects offered only at College of San Mateo:

- Engin. 1a—Measurements (3)—for those students whose transfer college requires Surveying (usually only for Civil Engineers)
- Engin. 45—Properties of Materials (3)—which should be taken when the student's transfer course requires it but his transfer college does not offer it as an upper-division subject.
- Math 25—Computer Programming (3)

English / Entomology

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Environmental Technology

See "Environment" under "Announcement of Courses" for current offerings. Certificate, A.A. degree and transfer programs are in the developmental stages. Specialized courses in the several areas of environment technology are planned.

Basic recommended core courses for all first year students:

| | Units |
|------------------------------------|--------|
| Environment 1 & 2 | 6 |
| Chemistry 30a, 30b (or equivalent) | 8 |
| English and/or Speech | 6 |
| P.E. | 2 |
| Math 11 or 11 a, b (Algebra) | 5 or 6 |
| Biology 1 | 4 |
| Total | 32 |

Other options:

| | |
|--|---|
| Social Science (Graduation requirements) | 6 |
| Health Ed. (Graduation requirement) | 2 |
| Physics 2a | 4 |
| Economics | 3 |
| Accounting 66 | 4 |

Ethnic Studies

The Ethnic Studies curriculum at Cañada College is designed to enable students to major in this area and at the same time to complete a more traditional major for transfer to the four-year institutions. The following majors are available:

- Afro-American Studies—Inter-disciplinary
- Afro-American Studies and Social Sciences
- Afro-American Studies—Literature and the Fine Arts
- Mexican-American Studies—Inter-disciplinary
- Mexican-American Studies and Social Sciences
- Mexican-American Studies—Literature and the Fine Arts
- Asian Studies—Inter-disciplinary
- Asian Studies and Social Sciences
- Asian Studies—Literature and the Fine Arts

For a suggested list of courses available in each of these majors see the special brochure "Ethnic Studies" available from the Registrar's Office.

Food and Lodging Technology

Associate in Arts Degree with a Major in Food and Lodging Technology

| First Semester | Units |
|--------------------------------------|-------|
| *English 50a, or 1a | 3-5 |
| *Food Tech. 50a—Food Prep. | 3-4 |
| or | |
| Food Tech. 50b—Food Prep. | - |
| Food Tech. 51a—Food Prep. | 2 |
| *Food Tech. 60a—Food Purch. | 2 |
| Food Tech. 65—Menu Planning | 1 |
| *Food Tech. 68—Sanitation and Safety | 1 |
| Guid. 1, 2, 3 or 4—Guidance Class | 1 |
| *Physical Education | 1 |
| Electives | - |

14-17

| Second Semester | Units |
|------------------------------------|-------|
| *Food Tech. 50b—Food Prep. | 3-4 |
| or | |
| Food Tech. 50a—Food Prep. | - |
| Food Tech. 51b—Quantity Food Prep. | 2 |
| *Food Tech. 60b—Food Purch. | 2 |
| *Health Education | 2 |
| *Physical Education | 1 |
| Bus. 50 or 51—Business Math. | 3 |
| Food Tech. 47—Coop. Ed. | 1-3 |

14-17

*Required.

Second Year: Students should enroll in classes in their specialization.

| Foods | Units |
|--------------------------------------|-------|
| FT 52—Food Preparation Supervision | 3 |
| FT 53—Catering and Special Functions | 2 |
| FT 54—Advanced Food Preparation | 3 |
| FT 55—Baking | 2 |
| FT 70—Food Management Problems | 3 |
| FT 47—Cooperative Education | 1-3 |

| Electronic Data Processing | Units |
|-------------------------------------|-------|
| DP 60—Intro. to Data Processing | 3 |
| DP 63a—Basic Computer Programming | 4 |
| DP 63b—Computer Programming Systems | 4 |
| FT 85—Food Service Computer Systems | 4 |

| Allied Supply Field | Units |
|---------------------------------------|-------|
| Bus. 116—Merchandising | 3 |
| Bus. 110—Fundamentals of Salesmanship | 3 |
| FT 80—Equipment Layout and Design | 4 |

| Food Facilities Engineering | Units |
|-----------------------------------|-------|
| FT 80—Equipment Layout and Design | 4 |
| DT 50—Drafting Fundamentals | 2 |

| Accounting | Units |
|---------------------------------------|-------|
| Bus. Adm. 1a—Accounting | 4 |
| FT 75—Hotel and Restaurant Accounting | 3 |

Suggested Electives

| |
|---------------------------------------|
| Bus. 58a—Human Relations (3) |
| Bus. 50—Business Arithmetic (2) |
| Bus. 55—Introduction to Business (3) |
| Sp. 1a—Elements of Speech (3) |
| Bus. 35—Personal & Family Finance (3) |
| Bus. 65—Small Business Management (3) |
| Bus. 120—Advertising (3) |
| Bus. 124—Marketing (3) |
| Psych. 10—Psychology in Practice (3) |

Students should check under graduation requirements for courses required for the Associate in Arts degree, and with their counselor for 26-unit Certificate requirements. See separate brochure for changes in this program.

Foreign Languages / Forestry Genetics / Geography / Geology History (Also see "Social Science.")

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Home Economics

The student who intends to transfer a major in Home Economics should plan a course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which the student wishes to transfer.

Associate of Arts Degree with a Major in Home Economics

| Freshman Year | Units | |
|-----------------------------|-------|-------|
| | F | S |
| English and/or Speech | 3 | 3 |
| H. Ec. 20a or 20b—Clothing | 3 | - |
| H. Ec. 20b or 20c—Clothing | - | 3 |
| H. Ec. 52—Food Prep. | 2 | - |
| H. Ec. 6—Consumer Ed. | 2 | - |
| H. Ec. 24—Fashion Analysis | - | 2 |
| Psych. 1a—General or | | |
| Psych. 10—Psych. in Prac., | | |
| or | | |
| Psych. 33—Psych. of Adjust. | 3 | - |
| Health Ed. | 2 | - |
| H. Ec. 7—Home Management | - | 2 |
| Physical Education | 1 | 1 |
| Electives | 3 | 2 |
| | <hr/> | <hr/> |
| | 16 | 16 |

| Sophomore Year | Units | |
|---------------------------------|-------|-------|
| | F | S |
| Amer. Institutions | 3 | 3 |
| Psych. 4—Marriage | 3 | - |
| Sociology 2—Soc. Prob. or | | |
| Sociology 3—Minorities or | | |
| Anthropology 2—Cultural | - | 3 |
| H. Ec. 20c—Creative Fashion | 3 | - |
| H. Ec. 9—Nutrition | 3 | - |
| H. Ec. 35—Child in the Home | 3 | - |
| H. Ec. 22—Textiles | - | 3 |
| H. Ec. 40 or 41—Interior Design | - | 3 |
| Physical Education | 1 | 1 |
| Electives | 2 | 3 |
| | <hr/> | <hr/> |
| | 18 | 16 |

Humanities (See "Liberal Arts.")

International Relations (Also see "Social Science.")

Journalism / Pre-Legal

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Liberal Arts

Transfer Program

Recommended High School Preparation: English (three years), Elementary Algebra, Plane Geometry, Intermediate Algebra, Laboratory Science taken in junior or senior year, Foreign Language (two years in same language). (High school Foreign Language and a Laboratory Science are not required for transfer to some institutions.)

The program outlined below is typical of requirements for transfer in junior standing to a four-year college or university. The student should refer to the catalog of the college of his choice for special requirements.

| | Units |
|--|-------|
| English 1a, English 1b or Speech 1a | 6 |
| Physical Science | 3-8 |
| Biological Science | 3-8 |
| Social Science | |
| American Institutions | 4-8 |
| Psych. 1a or Electives | 3-5 |
| Humanities | |
| Literature or Philosophy | 3-6 |
| Music, Art, Drama, Literature, Philosophy | 3 |
| For Major Requirements in specific subject fields confer with a counselor. | |
| Health Education | 2 |
| Physical Education | 4 |
| Foreign Language (Continuing from high school) | 4-8 |

Librarianship

The student who intends to transfer eventually to a graduate library school should plan his course at Cañada College to meet the requirements of the library school to which he intends to transfer.

Mathematics

Cañada College offers a wide variety of courses for the student who wishes to major in Mathematics, enabling him to transfer to a university or four-year college at the end of the sophomore year. The student should consult the catalog of the college of his choice for special requirements.

Recommended High School Preparation: Four years of high school level mathematics, physics (one year), mechanical drawing (one year), two or more years of a foreign language (German, French or Russian).

Medical Illustration

The student who intends to transfer a major in this field should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Medical Sciences

Transfer Program

(Pre-Medical, Pre-Nursing, Medical Lab Technician, Physical Therapy, Dentistry, Dental Hygiene, Pre-Veterinary Medicine, Pre-Pharmacy, Optometry.)

Recommended High School Preparation: Elementary Algebra, Plane Geometry, Intermediate Algebra, Trigonometry, Chemistry, Biology, Physics, Foreign Language.

The program outlined below is typical of requirements for transfer in junior standing to a four-year college or university. The student should refer to the catalog of the college of his choice for special requirements.

| | Units |
|--|-------|
| English 1a, English 1b or Speech 1a | 6 |
| Social Science | |
| American Institutions | 4-8 |
| Psych. 1a or Electives | 3-5 |
| Humanities | |
| Literature, Philosophy | 3 |
| Art, Music, Drama, Literature, Philosophy | 3 |
| Foreign Language (Continuing from high school) | 4-8 |
| Health Education | 2 |
| Physical Education | 4 |
| Major Requirements | 20-30 |
| May include: | |
| Biology 1 | |
| Chemistry 1a-1b, 5, 8, 9, | |

Physics 2a-2b or
Physics 4a-4b-4c,
Zoology 1,
Psychology 33, Anthropology, Anatomy,
Bacteriology, Physiology, Sociology,
Analytical Geometry and Calculus.

Mexican-American Studies

For courses available in this area see the special brochure "Ethnic Studies" available from the Registrar's Office.

Microbiology

The student who intends to transfer a major in this field should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Military Science (Reserve Officers Training Corps)

Military Science is offered to qualified students enrolled on a full-time basis at Cañada College. Classes and leadership laboratory are conducted at San Jose State College under the supervision of the Professor of Military Science, San Jose State College.

Students may complete the first two years of Army ROTC while enrolled at Cañada College and qualify for enrollment in the advanced course (third and fourth year) at degree granting colleges or universities. Completion of ROTC and a baccalaureate degree qualify students for a commission in the United States Army Reserve.

Students may obtain enrollment forms from their counselor or the Department of Military Science, San Jose State College.

Music

The student who intends to transfer a major in Music or Music Education should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements of the college, university or music school to which he intends to transfer. The program outlined below is typical of requirements for transfer with junior standing to a state college:

Associate in Arts Degree with a Major in Music

Recommended High School Preparation: Chorus, or Band or Orchestra, Music Theory, Music Appreciation, private study in performance.

| | Units | |
|----------------------------|-------|---|
| | F | S |
| Music 1—Musicianship | 2 | - |
| Music 2a—Adv. Musicianship | - | 2 |

| | | |
|-----------------------------------|-------|-------|
| Music 4a-4b—Harmony | 3 | 3 |
| Music 6—Appreciation and Survey | 3 | - |
| Applied Music | 1 | 1 |
| 11—Piano* | | |
| 24—Brasses | | |
| 25—Woodwinds | | |
| 26—Strings | | |
| 36—Voice | | |
| Performance Groups | 2 | 2 |
| Music 22—Orch. (2) | | |
| Music 23—Band (2) | | |
| Music 33—Chorus (2) | | |
| English 1a | 3 | - |
| Speech 1a | - | 3 |
| Health Education I | 2 | - |
| Life Science 10 | - | 3 |
| Polit. Sci. 24—Calif. Urban Govt. | - | 2 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 17 | 17 |

Sophomore Year

| | Units | |
|---------------------------------------|-------|-------|
| | F | S |
| Music 2b—Advanced Musicianship | 2 | - |
| Music 5a-5b—Advanced Harmony | 3 | 3 |
| Applied Music | 1 | 1 |
| 11—Piano | | |
| 24—Brasses | | |
| 25—Woodwinds | | |
| 26—Strings | | |
| 36—Voice | | |
| Performance Groups | 2 | 2 |
| Music 22—Orch. (2) | | |
| Music 23—Band (2) | | |
| Music 33—Chorus (2) | | |
| Physics 9—Sound and Music | 3 | - |
| Polit. Sci. 21—American Govt. | 3 | - |
| Music 10—Introduction to Related Arts | - | 3 |
| Philosophy 6a or 6b (or Lit. course) | - | 3 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 15 | 13 |

*All Music Majors should study piano, Music 11, at least two units.

Suggested Electives

Guid. 1, 2, 3 or 4—Guidance Class (1)
Music courses not listed above

Nursery School

Students desiring to pursue a career in this area should obtain the special Nursery School supplement from the Registrar's Office.

Nursing (Also see "Medical Sciences.")

Nutrition (Also see "Home Economics.")

Occupational Therapy

Pre-Optometry (Also see "Medical Sciences.")

Paleontology / Parasitology

Pharmacy (See "Medical Sciences.")

Philosophy (See "Social Science.")

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Physical Education

Transfer Program

Recommended High School Preparation: Foreign Language, Elementary Algebra, Plane Geometry, Intermediate Algebra, Biology, Chemistry, competency in aquatics, rhythms and dance, games and relays, individual and dual sports, team sports, gymnastics and (for men) combatives.

Physical Education majors should take P.E. Competencies (P.E. 20, or P.E. 30, or P.E. 50) each semester rather than a general service section of Physical Education.

The program outlined below is typical of requirements for transfer in junior standing to a four-year college or university. The student should refer to the catalog of the college of his choice for special requirements.

| | Units |
|--|---------|
| English 1a, English 1b or Speech 1a | 6 |
| Social Science | |
| American Institutions | 4-8 |
| Psych. 1a and Electives | 3-5 |
| Humanities | |
| Literature, Philosophy | 3-6 |
| Art, Music, Drama, Literature, Philosophy | 3 |
| Foreign Language (continuing from high school) | 4-8 |
| Health Education | 2 |
| Physical Education (general service) | 4 |
| Phys. Ed. 40—(Co-ed) | 2 |
| Phys. Ed. 20a, b, c, d (women) | 2-8 1/2 |
| (may replace general service requirements in P.E.) | |
| Phys. Ed. 30a, b, c, d (men) | 2-8 |
| (may replace general service requirements in P.E.) | |
| Major Requirements | 20-30 |
| May also include: | |
| Biology 1, Anatomy 1, Physics 10, Physiology 1, | |
| Bacteriology, Chemistry 1a, and Electives. | |

Physical Sciences (Chemistry, Physics)

Transfer Program

Recommended High School Preparation: Four years of high school level mathematics, chemistry, physics, and two or more years of a foreign language (German, French or Russian).

The program outlined below is typical of requirements for transfer in junior standing to a four-year

college or university. The student should refer to the catalog of the college of his choice for special requirements.

| | Units |
|---|-------|
| English 1a, English 1b or Speech 1a | 6 |
| Social Science | |
| American Institutions | 4-8 |
| Psych. 1a and Electives | 3-5 |
| Humanities | |
| Literature, Philosophy | 3-6 |
| Art, Music, Drama, Literature, Philosophy | 3 |
| Health Education | 2 |
| German (continued from high school) | 4-8 |
| Physical Education | 4 |
| Major Requirements | 20-30 |
| May also include: | |
| Chemistry 1a, 1b, 5, 12a | |
| Math. 30, 31, 32, 33, 34 | |
| Physics 4a, 4b, 4c | |
| Electives | |

Physical Therapy

Physics (Also see "Physical Sciences.")

Physiology

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Police Science

Associate in Arts Degree with a Major in Police Science

Freshman Year

| | Units | |
|----------------------------------|-------|----|
| | F | S |
| English—by Eligibility | 3 | 3 |
| Police Sci. 9—Introduction | 3 | - |
| Social Science 40 | 3 | - |
| Police Sci. 50—Patrol and Report | - | 3 |
| Police Sci. 60—Traffic | - | 3 |
| Health Education | - | 2 |
| Elective | 3 | 3 |
| Political Sci. 21 or 7 | 3 | - |
| Political Sci. 24 | - | 2 |
| Physical Education | 1 | 1 |
| | 16 | 17 |

Sophomore Year

| | Units | |
|--|-------|----|
| | F | S |
| Police Sci. 51a—Criminal Investigation | 3 | - |
| Social Sci. 29—Juv. Proc. | - | 3 |
| Police Sci. 52—Criminal Law | 3 | - |
| Police Sci. 55—Criminal Evidence | - | 3 |
| Police Sci. 70—Organization | 2 | - |
| Social Sci. 38—Community Relations | 3 | - |
| Police Sci. 47—Internship | - | 2 |
| Electives | 3 | 7 |
| Physical Education | 1 | 1 |
| | 15 | 16 |

Recommended General Education Electives

| |
|---|
| Psychology 33, 10, or 1a (3) |
| Sociology 1—Introduction (3) |
| Sociology 2—Social Problems (3) |
| Chemistry 10—Survey (3) |
| Physics 10—Survey (3) |
| Life Science 10—Introduction (3) |
| Physical Science 10—Intro. (3) |
| Police Science 51b—Criminal Investigation (3) |

Probation (Also see "Social Service.")

Psychology (Also see "Social Service.")

Public Health

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

**Radiologic Technology
(X-Ray Technology)****Associate in Arts Degree
with a Major in Radiological Technology**

Completion of the program enables the student to write the examination given by the American Registry of Radiological Technologists and become verified as a registered technologist. Basic science and General Education courses are given on the Cañada campus, with the clinical courses taught at one or more of the affiliating hospitals. Job opportunities exist in physicians' offices, hospitals, and clinics.

Prerequisites: High school graduation or equivalent; completion of a recent course in algebra, biology is recommended. A grade of "C" or better is necessary for progression in the sequence.

(Recommended Program)

| | Units | |
|----------------------|-------|-------|
| | F | S |
| Anatomy 62a-b | 3 | 3 |
| Physics 62 | 4 | - |
| Psychology 1a, 5 | 3 | 3 |
| Social Science 1, 2 | 3 | 3 |
| English 1a | 3 | - |
| Health Education | - | 2 |
| Nursing 62 | - | 3 |
| Radiological Tech. 1 | - | 2 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 17 | 17 |

| | Units | |
|-------------------------|-------|-------|
| | F | S |
| Radiological Tech. 3, 4 | 6 | 6 |
| Speech 1a | 3 | - |
| Humanity Elective | - | 3 |
| Physical Education | 1 | 1 |
| | <hr/> | <hr/> |
| | 10 | 10 |

Summer Session (Ten Weeks)

| | |
|--------------------|---|
| Radiologic Tech. 2 | 6 |
|--------------------|---|

Second Summer Session (12 Weeks)

| | |
|---------------------|---|
| Radiologic Tech. 5a | 6 |
|---------------------|---|

Fall Semester—Third Year (24 Weeks)

| | |
|---------------------|---|
| Radiologic Tech. 5b | 6 |
|---------------------|---|

Recreation Education

(Also see "Physical Education.")

Social Science

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Social Service

Students desiring an A.A. degree program for a career as a community worker in probation, social work or mental health should obtain the special brochure, "The Community Worker," from the Registrar's Office. Those interested especially in psychology should also investigate the Mental Health Assistant program.

Social Work (See "Social Service.")**Sociology** (See "Social Science.")**Theatre Arts** (See "Liberal Arts.")**Pre-Veterinary Medicine** (See "Medical Sciences.")**Wildlife Conservation / Zoology**

The student who intends to transfer a major in one of these fields should plan his course at Cañada College to meet the general requirements for junior standing, as well as the lower division departmental requirements, of the college or university to which he wishes to transfer.

Announcement of Courses

Practically all courses numbered from 1 to 49 are accepted by colleges and universities as transfer courses, assuming satisfactory grades. Certain colleges will accept, as transfer credit, units earned in many courses numbered 50 and above; such courses generally, however, are intended primarily as terminal courses.

The following courses have been approved for all instructional departments:

"47" Courses - COOPERATIVE EDUCATION (1-3)

"48" Courses - SPECIAL TOPICS (1-2)

"49" Courses - INDIVIDUAL PROJECTS (1-2)

Courses numbered "10" are specifically designed for General Education.

The credit value of each course in semester units is indicated by a numeral in parentheses following the title. A semester unit of credit is based upon one hour of the student's time at the College per week in lecture or recitation throughout one semester, together with the time necessary in preparation thereof, or a longer time in laboratory or other exercises not requiring outside preparation.

Generally, in the following course descriptions, both semesters of a year's course are listed together if the first semester course is a prerequisite to the second semester course.

Evening College courses are described in a separate Evening College catalog-schedule. Many regular day college courses are also offered in the Evening College.

Specific information concerning class hours will be found in the Schedule of Classes for the semester

Anatomy

1 ANATOMY (4)

Three lecture hours and one three-hour lab period per week.

Prerequisite: Biology 1 or high school Biology with Grade B or better.

Designed to familiarize the student with the structure of the human body. Laboratory study and dissection of the human and higher mammals. Primarily intended for students of nursing, physiotherapy, hygiene and physical education. Elective for pre-dental, pre-medical and pre-veterinarian students.

51 BODY STRUCTURE AND FUNCTION (2)

Two hours of lecture per week.

Designed to meet the requirements of the Vocational Nurse program and for students majoring in Medical Assisting. This course is integrated with the course in Medical and Surgical Nursing. It covers the normal body structure and function of the following systems: skeletal, muscular, circulatory, digestive, endocrine, respiratory and nervous. The anatomy of the special sense organs, the eye and ear, is also covered.

62a-62b ANATOMY FOR X-RAY TECHNOLOGISTS (3-3)

Two lecture hours and three lab hours per week.

Prerequisites: 62a-Concurrent registration in the X-Ray technology program; 62b-Prerequisite is 62a.

A general survey of the anatomy and physiology of the human organism with emphasis directed primarily toward recognition of tissue by radiographs. Laboratory aids would include the human cadaver, preserved cat, radiographs and other pertinent material. Physiological aspects would center on the use of live material, and whenever possible the students would involve themselves.

Anthropology

1 PHYSICAL ANTHROPOLOGY (3)

Three lecture hours per week.

The relationship of *Homo sapiens* to lower animals, the evidence of man's evolution, genetics, human racial stocks and man's early prehistory. (Course can be counted toward science requirements of some four-year colleges.)

2 CULTURAL ANTHROPOLOGY (3)

Three lecture hours per week.

Study of culture as the man-made environment of particular societies: pre-historic, historic and contemporary. Cross-cultural comparisons of child-training, personality, kinship and family, economy, politics, religion and relationships between these in specific societies and sub-cultures, including contemporary ethnic groups in the United States.

3 ARCHEOLOGY (3)

Three lecture hours per week.

Prerequisite: Anthropology 1 or 2 or consent of instructor.

Man's evolution during the period before written records. Prehistory bridges the gap between the natural history of man and the period of the first written records.

36 INDIANS OF NORTH AMERICA (3)

Three lecture hours per week.

An in-depth look at some of the life-ways of six distinct North American Indian cultures that are found in different geographical areas of North America. Stress will be in the area of cross-cultural comparisons of cultural and social phenomena which includes religious and world view systems, subsistence systems and political systems. Each of these cultures lived in vastly different ecological areas, which when examined carefully, shows the adaptation processes the cultures made to the different environments. The cultures are: Eskimo, Huron, Cheyenne, Washo, Aztecs, peasant group of Tepoztlan.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in Anthropology and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Art

For Art majors, see program outlined in "Suggested Curricula." While intended primarily for regular students taking the semi-professional or pre-major curriculum in Art, the courses marked with an (x) are especially recommended for any member of the community interested in adult education and effective use of leisure time.

1a (x) HISTORY OF ART (3)

Three lecture hours per week.

A survey of prehistoric, ancient, classic, early Christian and medieval art.

1b (x) HISTORY OF ART (3)

Three lecture hours per week.

Prerequisite: None.

A survey of art from the late Middle Ages through the 19th Century, with emphasis on the development of painting.

2a (x) FORM AND COMPOSITION (SURFACES I) (3)

Three lecture hours per week.

Prerequisite: Concurrent enrollment in Art 99 (Studio Hours).

Fundamentals of perceptual (subject matter) and conceptual (idea) composition, emphasizing line, shape, mass, value, space organization and texture.

Approximate cost of materials: \$20.

2b FORM AND COMPOSITION (SURFACES II) (3)

Three lecture hours per week.

Prerequisites: Art 2a and concurrent enrollment in Art 99 (Studio Hours).

Advanced course in composition. Problems concerned with four major aesthetic points of departure: (1) color-field composition, (2) mono-field composition, (3) classical abstraction, (4) figurative composition.

Approximate cost of materials: \$30.

3 COLOR (3)

Three lecture hours per week.

Consideration of color theory and practice. The relationship of color and form as applied to contemporary painting and design.

Approximate cost of materials: \$25.

4 PERSPECTIVES (2)

Two lecture hours per week.

Development of skills in freehand perspective applied to Fine Art and Commercial Art areas. Problems will involve one- and two-point perspective, and reverse and creative perspective. Not offered as a substitute for mechanical or architectural drafting.

Approximate cost of materials: \$15.

5a-5b DESIGN (3-3)

Three lecture hours per week.

Prerequisites: 5a—None; 5b-5a or 2a. Concurrent enrollment in Art 99 (Studio Hours).

Study of spatial organization through color, line, shape and mass with emphasis on the conceptual process of composing: (1) designs on two-dimensional surfaces, and (2) development of three-dimensional forms. Course is related to practical application of design.

Approximate cost of materials: \$25.

6a-6b (x) PAINTING (3-3)

Three lecture hours per week.

Prerequisite: None; recommended Art 2a-b. Concurrent enrollment in Art 99 (Studio Hours).

Development of perceptual awareness of the optical effects of the painted surface. Acrylics, oil paint and other media are used to encourage individualized expression. Study of contemporary painting forms. (May be repeated for credit.)

Approximate cost of materials: \$25.

7a-7b (x) WATER COLOR (3-3)

Three lecture hours per week.

Prerequisite: 7a-2a; 7b-7a.

Exploration and application of watercolor media, emphasizing the experimental and interpretative. (May be repeated for credit.)

Approximate cost of materials: \$25.

10 (x) INTRODUCTION TO RELATED ARTS (3)

Three lecture hours per week.

A study of the basic elements of visual arts, music and theatre. An investigation of motivations, functions and inter-relationships of the arts.

12 LETTERING (2)

Two lecture hours per week.

Development of proficiency in freehand lettering with pen and brush. Imaginative interpretations of lettering styles.

Approximate cost of materials: \$15.

13a (x) DRAWING I (3)

Three lecture hours per week.

A fundamental course in drawing. Emphasis on perception development, through specific drawing exercises to develop an orderly approach, a disciplined perception and an increased attention span. Dry media, pencil, charcoal and Conte crayon.

Approximate cost of materials: \$15.

13b (x) DRAWING II (3)

Three lecture hours per week.

Prerequisite: 13a.

Continued development of visual perception and technique, emphasizing direct response to visual stimuli and personal interpretation of subject matter. Mixed media.

Approximate cost of materials: \$15.

15 LIFE DRAWING (2)

One and one-half lecture hours per week. One and one-half hours per week of drawing laboratory.

Prerequisite: 13a-b.

Study of the gesture, contour, surfaces and aspects of anatomy of the human figure. Psycho-aesthetic factors, personal interpretation and symbolic transformation of the figure. Diverse media. (May be repeated for credit.)

Approximate cost of materials: \$15.

17a (x) PRINTMAKING I (2)

One and one-half lecture hours per week plus 1 1/2 laboratory hours per week.

Prerequisites: 2a, 13a.

An introduction to printmaking involving processes of relief printing (woodcut, collagraphy) and intaglio etching.

Approximate cost of materials: \$25.

17b (x) PRINTMAKING II (2)

One and one-half lecture hours per week plus 1 1/2 laboratory hours per week.

Prerequisite: 17a.

An advanced course in etching. Concentrated study of various intaglio processes such as drypoint, engraving, aquatint and lift grounds.

Approximate cost of materials: \$25.

19 (x) ART OF OUR TIMES (3)

Three lecture hours per week with assigned reading and reports.

A survey of architecture, painting and sculpture of the 20th Century.

22a-22b (x) SCULPTURE (3-3)

Three lecture hours per week.

Prerequisite: 22a—none; 22b—22a. Concurrent enrollment in Art 99 (Studio Hours).

A basic course in figurative and non-objective structural forms using plastic, fiberglass, metal and other media. (May be repeated for credit.)

Approximate cost of materials: \$30.

44 FINE ARTS FOR CHILDREN (3)

Three lecture hours per week.

Prerequisites: None.

For parents and teacher aides. A study of methods and materials useful in teaching the pre-school and primary grade child understanding and self-expression in art and music. Involves art and folk music, finger painting, clay modeling, and elementary painting and drawing.

49 INDIVIDUAL PROJECTS (1-2)

Hours by arrangement.

Prerequisites: Sophomore standing and permission of Chairman of the Fine Arts Division.

Special projects in such fields as experimental media or tours of world art centers.

Astronomy

10 INTRODUCTION TO ASTRONOMY (3)

Three lecture hours per week.

Prerequisites: High school Algebra and Geometry or permission of instructor.

A survey of astronomy including study of the earth, planets, comets, meteors, the sun, stars, the Milky Way system and galaxies, their motions and physical properties. The methods employed by astronomers in gathering information will be introduced. (This course meets the General Education requirements for physical science at many colleges and universities.)

Bacteriology

1 GENERAL BACTERIOLOGY (5)

Three lecture hours and six lab hours per week.

Prerequisite: One semester of college chemistry and one laboratory course in college biological sciences. Not open to first semester freshmen.

History, morphology and physiology of micro-organisms with the main emphasis on bacteria, the disease process and human interests. The laboratory exercises include media making, isolation and identification of bacteria, and some of the standard methods employed in water and milk analysis. (Recommended for Agriculture, Biochemistry, Home Economics, Nursing, Sanitary Engineering, Physical Education and other Life Science majors.)

10 MICROBES AND MAN (3)

Three lecture hours per week.

(Not open to students with previous credit in the Biological Sciences.)

Characteristics of the major groups of microbes, their destruction, transmission of diseases, typical soil microbes, biology of spoilage, food preservation and sewage treatment.

Biology

1 PRINCIPLES OF BIOLOGY (4)

Three lecture hours and one three-hour lab period per week.

Biological principles including cellular organization, heredity, molecular components, evolution, reproduction, differentiation, and ecology.

2 GENETICS (3)

Three lecture hours per week.

Prerequisite: One course in the Biological Sciences or consent of instructor.

Introduction to the principles of heredity in plants and animals with specific reference to human inheritance and biochemical genetics. The importance of heredity in its evolutionary concepts is included.

15 ESSENTIALS OF NUTRITION (3)

Two lecture hours and one three-hour lab period per week.

Prerequisite: College course in chemistry.

Basic principles of nutrition. Utilization of food by the body, with emphasis on the role of nutrients in development and maintenance of body processes.

20 MARINE BIOLOGY (3)

Two lecture hours and one three-hour lab period per week.

Prerequisite: Biology I, Zoology I or Botany with a grade of C or better.

Introduction to physical oceanography, marine animals, marine plants and marine ecology. Major emphasis is given to the natural history of marine forms, including their taxonomy, morphology and physiology. Bays, estuaries and oceans are described as habitats.

40 NATURE STUDY (3)

One hour of lecture and two three-hour lab periods per week, with frequent field trips.

Prerequisite: Sophomore standing (24 units) with one course in the Biological Sciences or consent of the instructor.

Lecture, laboratory and field study of selected, common organisms, both plant and animal; natural history and distribution of Bay Area organisms.

49 INDIVIDUAL PROJECTS (1 or 2)

Hours by arrangement.

Prerequisites: Open only to students who have completed, or are currently enrolled in one of the following: Zoology I, Biology I, or Botany I. Permission of the advising instructor is required.

A problem is chosen by the student in order to lay a foundation for future research in one of the fields of Biological Science. The problem is developed into a regular scientific report.

Botany

1 GENERAL BOTANY (5)

Three lecture hours and six hours of lab per week.

Prerequisite: Biology I with a grade of C or better, or high school Biology with grade B or better.

Principles of Biology as illustrated by plants with emphasis on structure, physiology and reproduction in green plants.

4 TAXONOMY OF VASCULAR PLANTS (3)

Two lecture hours and three hours of lab per week.

Prerequisite: Botany I, or permission of the instructor.

Survey of the classification of the vascular plants, laboratory and field work with collection and identification practice; taxonomy of the groups of vascular plants. Field trips will be scheduled on weekends.

10 PLANTS AND MAN (3)

Three lecture hours per week.

An introduction to modern Biological Science, the scientist and scientific research in modern society. Basic principles of the living state as exemplified by the plants inhabiting our earth, interrelationships of both structure and function of plants, biotic interrelationship, genetics and evolution. Plants and the development of human civilizations will also be treated, as well as the role plants play in the population problems of the world.

Business

Business courses, with the exception of Business 50, are accepted by the state colleges as elective credit in Business; however, they are principally designed to prepare the student for employment.

Students graduating with a major in the field of Business must meet the following subject requirements:

Business 50 or 51, or a satisfactory score on a Business Mathematics competency exam.

Business 55—Introduction to Business.

35 PERSONAL AND FAMILY FINANCE (3)

Three hours per week.

Develops understanding and skill in dealing with family and personal finance problems. Topics include: financial planning, consumer purchasing, borrowing money, savings institutions, insurance, introduction to investments, estate planning, real estate and taxes.

36a CREDIT MANAGEMENT (3)

Three lecture hours per week - Fall Semester.

The economic and social concepts of credit, Management and analysis of consumer credit from viewpoint of the creditor. Investigation of retail and cash loan credit. Collection policy and practice.

36b CREDIT MANAGEMENT (3)

Three lecture hours per week - Spring Semester.

Prerequisite - Any one of the following: Bus. 36a, Bus. 55, Bus. 63, or Econ 1a.

Familiarization with various credit instruments. Investigation into the business use of commercial credit including criteria and method of granting credit. Commercial credit collection policies and practices.

47 COOPERATIVE EDUCATION (3)

Eight class sessions (including field trips).

Prerequisites: Completion of or enrollment in Business 55, concurrent enrollment in another Business course, or approval of instructor; and employment in business 10-15 hours per week.

Activities include supervised work experience, group discussion based on individual and group job problems, and selected field trips.

50 BUSINESS ARITHMETIC (3)

Three hours per week.

Prerequisite: For students with a percentile below 70 on the Math section of Iowa test of educational development or below 35 on the quantitative part of SCAT entrance examination.

(See Business Division requirement for Business Mathematics.)

Fundamental arithmetic operations including fractions, decimals and percentages used in ordinary problems of business.

51 BUSINESS MATHEMATICS (3)

Three hours per week.

Prerequisite: A percentile of 70 or more on the Mathematics section of the Iowa test of educational development, or 35 or over on the quantitative part of the SCAT test, or completion of Business 50 with a grade of C or better.

Finding required quantity by use of fractional equivalents, aliquot parts, equations and formulas, ratio and proportion, formulas in percentage, simple interest, bank discount, present value, periodic payments and depreciation.

55 INTRODUCTION TO BUSINESS (3)

(Credit/No Credit)

(Required of all students majoring in terminal Business programs.)

Three hours per week.

An introductory survey of the nature, organization and structure of the American free-enterprise system. Designed to allow student comparison of the many activities performed in the business community. An aid to selecting a field of vocational specialization.

56 BUSINESS CORRESPONDENCE (3)

Three hours per week - Spring semester.

Prerequisite: Bus. 92a and completion of or enrollment in Business English or completion of English 50a-50b.

Development of necessary writing skills for clear communication with emphasis on business letters and report writing. Stresses interest and readability of writing and persuasive techniques in addition to the prime purpose of transmitting information. Recommended for all terminal business students.

58 HUMAN RELATIONS IN BUSINESS (3)

Three hours per week.

Individual self-improvement through consideration, evaluation and application of basic psychological principles in social and business relationships. Recommended for all Business majors.

60 INTRODUCTION TO DATA PROCESSING (3)

Three hours of lecture per week.

Brief history of data processing; function, principles, and capabilities of punched card and EDP equipment; flowcharting techniques applied to simple business applications; characteristics of computer storage; symbolic programming concepts; basic principles of programming.

63 BUSINESS ECONOMICS(Contemporary Issues)(3)

Three hours per week.

Introduction to the American economy from the point of view of both the businessman and consumer. The role of money and its effect on our economy, production, employment, and income; business fluctuation; economic policies used to stabilize the level of economic activities. Credit for this course will not be given to students who have completed Econ. 1a, 1b or 7.

64 BUSINESS LAW (3)

Three hours per week - Spring semester.

A broad study of the legal aspects of business transactions. The legal system, contracts, sales, security, negotiable instruments and personal property. Provides a background for personal as well as business transactions.

65 SMALL BUSINESS MANAGEMENT (3)

Three hours per week - Spring semester.

Prerequisite: Business 55 or permission of the instructor.

Examination of the opportunities and hazards of small business operation; designed for business students who plan to establish or supervise a small business. Significant areas of vital interest to the prospective independent businessman are explored. Including type of operation, legal form, site location, financing, handling of personnel and over-all management procedures.

66 GENERAL ACCOUNTING (3)

Five hours per week.

Recommended: Completion of or concurrent enrollment in Business 50 or 51.

Application of accounting procedures for a small business using general and special journals, general ledger, subsidiary ledgers, petty cash records and payroll records for cash or accrual basis. Preparation of trial balances, work sheets, adjusting and closing entries, financial statements and individual federal income tax returns.

83a REAL ESTATE PRINCIPLES (BASIC) (3)

Three hours per week.

Prerequisites: Completion of or concurrent registration in Business 50 or 51 is recommended.

Property, contracts, agency, listing and deposit receipts, real estate financing, mortgages and deeds, acknowledgement, recordation, liens and encumbrances, taxes, homesteads, escrows and title insurance, land description, real estate mathematics, California real estate law. Assists toward basic license preparation.

84 REAL ESTATE VALUATION, INVESTMENT AND MANAGEMENT (3)

Three hours per week.

Prerequisite: Completion of or concurrent registration in Business 50 or 51 recommended.

Growth and development of California. Basic real estate principles, measuring changing value of money, the real estate cycle. Estimating: costs, depreciation, taxes, maintenance and insurance, interest costs, return on investment. Leases and property management, percentage and ground leases, selecting tenants. Accounting: rules—capital gains and losses, accelerated methods of calculating depreciation charges. (Personal Use and License Preparation.)

SHORTHAND CLASSES: Students in all shorthand classes are required to schedule two hours per week in the Audio Library Lab.

90a BEGINNING SHORTHAND (5)

Five class hours and two scheduled audio library lab hours by arrangement per week.

Prerequisites: Enrollment in or completion of Business 92a or equivalent and completion of or enrollment in Business English, English 50b, or 1A. Open only to students with no previous training in shorthand.

Foundation course in Gregg Shorthand principles with practice in simple dictation and transcription.

90b INTERMEDIATE SHORTHAND (7)

Ten class hours and two scheduled audio library lab hours by arrangement per week.

Prerequisites: Business 90a or its equivalent and completion of or enrollment in Business 92b or equivalent; completion of or enrollment in Business English, English 50b, or 1a.

Training in vocational application of shorthand through intensive dictation and transcription with emphasis on the integration of specific secretarial skills.

90c ADVANCED SHORTHAND (4-5)

Six class hours and two scheduled audio library lab hours by arrangement per week. - Spring semester.

Prerequisites: Business 90b or its equivalent and completion of or enrollment in Business English or English 1a.

Thorough review of theory principles. Intensive training in the vocational application of specific secretarial skills with emphasis on practical experience. One unit of credit may be earned for office work by arrangement.

90r REFRESHER SHORTHAND (3)

Three class hours and two scheduled audio library lab hours by arrangement per week.

Prerequisites: Enrollment in or completion of Business 92a or equivalent, and completion of or enrollment in Business English, English 50b, or 1a.

For students with insufficient training in shorthand to qualify for Business 90b.

91 BUSINESS ENGLISH (3)

Three hours per week - Fall semester.

Prerequisite: Bus. 92a or equivalent.

Fundamental English preparation for secretarial and clerical majors. Grammar, punctuation, spelling, word usage, vocabulary building and use of the dictionary. Emphasis on English of business through use of business-oriented materials.

92a TYPING (3)

Five hours per week.

Prerequisite: No previous typing instruction.

An elementary course designed to develop correct typing techniques, proper care and operation of the typewriter, and basic skills in typing business letters, simple tables, and manuscripts.

92b TYPING (3)

Five hours per week.

Prerequisite: Business 92a with a grade of C or better or an equivalent proficiency in typewriting.

An intermediate course designed to increase speed and accuracy of typing and improve production rate of typing a variety of business problems.

92c TYPING (3)

Five hours per week - Spring semester.

Prerequisite: Business 92b with a grade of C or better, or satisfactory completion of two years of typing in high school.

Production typing with emphasis on speed and accuracy in the preparation of business letters, legal forms, and financial and statistical reports.

92r REFRESHER TYPING (3)

Five hours per week.

Prerequisite: For students with insufficient training in typing to qualify for Business 92b.

Emphasis on improving keyboard control, correct typing techniques, and developing skill through review of business letters, problems, and business forms.

93 MACHINE CALCULATION (3)

Five hours per week - Spring semester. (Lab work as needed to be assigned by instructor.)

Prerequisite: Business 50, or permission of instructor.

Performance of arithmetic calculations on machines with special emphasis on actual business situations and problems. Operation of rotary-type calculators and touch system of operating printing calculators; familiarization with key-driven calculators. Recommended for all Secretarial, Merchandising and two-year Business Administration majors.

100 OFFICE PROCEDURES AND OFFICE ADMINISTRATION (4)

Six class hours and three scheduled lab hours per week.

Prerequisites: Business 92b or an equivalent proficiency in typing; and completion of or enrollment in Business English, English 50b, or 1a. Not recommended for first semester students except by permission of instructor.

Development of skill in use of transcribing and duplicating machines, use of electric typewriters and duplicating equipment in performing office work; filing, payroll and general office work; study and application of effective procedures for improving performance of office employees.

110 FUNDAMENTALS OF SALESMANSHIP (3)

Three hours per week - Fall Semester.

Covers the role and impact of personal selling in the marketing process of our business community. Considers principles and techniques employed effectively in the direct sales process. Includes practical sales presentations by students.

116 RETAIL MERCHANDISING (3)

Three hours per week - Fall Semester.

Prerequisite: Completion of or concurrent enrollment in Business 50 or Business 51.

Retail processes emphasized include location and layout, merchandise planning and control, buying and receiving, pricing, personnel evaluation, sales promotion and customer services.

120 ADVERTISING (3)

Three hours per week - Spring Semester.

Not open to first semester freshmen.

The role of advertising in our economic life with emphasis on advertising objectives and methods, creation of advertising, media and campaign strategy.

124 MARKETING (3)

Three hours per week - Spring Semester.

Prerequisite: Business 55, and Business 50 or 51.

A broad study of marketing principles and methods applicable to both consumer and industrial goods. Major topics include consumer research, product planning, marketing policies and practices, retailing, wholesaling and price determination.

Business Administration

Students graduating with a major in the field of Business Administration must meet the following requirement:

Mathematics—A percentile rating of 70 or more on the math section of the Iowa test of educational development or 35 or over on the quantitative part of the SCAT test, or completion of Business 50 with a grade of C or better. It is recommended that Business 50 be completed by the end of the second semester.

1a-1b PRINCIPLES OF ACCOUNTING (4-4)

Five hours per week.

Prerequisite: 1a—none. Completion of or concurrent enrollment in Business 50 (if required by test).

1b—Business Administration 1a or equivalent, with a grade of C or higher.

1a—Records, accounts and statements of proprietorship enterprises. Debit and credit theory and generally accepted accounting principles and concepts.

1b—Applications of theory, concepts and principles to partnerships and corporations. Introduction to departmental, cost and manufacturing accounting, budgeting, analysis and management decisions.

5 AUTOMATED ACCOUNTING SYSTEMS

(EVENING COLLEGE) (2)

Prerequisite: Grade of C or better in Business Administration 1a or equivalent, or permission of the instructor. No previous data processing training or experience necessary.

Practical application of the processing of accounting data through an electronic computer system. Guest speakers and a field trip to a computer center.

18a COMMERCIAL LAW (3)

Three hours per week.

Introduction to law applicable to business; the history and philosophy of the law, agencies for enforcement, and court procedures; and the substantive law of contracts, agency, and sales, under the Uniform Commercial Code.

Chemistry

1a-1b GENERAL CHEMISTRY (5-5)

Three lecture hours and two three-hour lab periods per week.

Prerequisites: 1a—Chemistry 51 with a grade of C or better, or high school chemistry with a grade of B or better, and two years of algebra or one year of algebra and one year of geometry. High school physics and trigonometry are recommended. 1b—Chemistry 1a with a grade of C or better.

1a—Principles of inorganic chemistry and an introduction to organic chemistry, for students majoring in Engineering, Physical Science, Pre-Med, Pre-Dental, and other science fields.

1b—Continues the study of principles of chemistry and includes some descriptive chemistry of the elements, ionic equilibria, oxidation-reduction, qualitative analysis and introduction to nuclear chemistry.

5 QUANTITATIVE ANALYSIS (4)

Two one-hour lectures; two three-hour lab periods per week.

Prerequisite: Chemistry 1b (grade of C or better).

A study of the theory, calculations and common analytical procedures of quantitative analysis and the acquisition of related basic skills and techniques. (Required of most students majoring in the physical sciences, engineering, medical sciences, dentistry and some areas of life science.)

8 ELEMENTARY ORGANIC CHEMISTRY (3)

Three one-hour lectures per week.

Prerequisite: Chemistry 1a (grade C or better). Chemistry 1b is strongly recommended.

The basic concepts of carbon chemistry; a study of the

structure, nomenclature and reactions of the important classes of aliphatic and aromatic compounds. (Recommended for students needing only one semester of organic chemistry.)

9 ELEMENTARY ORGANIC CHEMISTRY LABORATORY (3)

Two three-hour lecture-lab periods per week.

Prerequisite: Concurrent enrollment in, or completion of Chemistry 8.

Syntheses of typical organic compounds. Techniques of preparation, purification and identification including unknowns.

10 SURVEY OF CHEMISTRY (3)

Three lecture hours per week.

Not open to students who have had or are taking Chemistry 1a.

A general survey of the more important theories, laws and concepts of chemistry. Chemical properties of inorganic and organic substances; their relation to atomic, molecular and ionic structure of matter; role of chemistry in current problems such as pollution, etc. While concurrent enrollment in Chemistry 10L is not required, it is strongly recommended. (This course meets the general education requirements for physical science at many colleges and universities.)

10L SURVEY OF CHEMISTRY LABORATORY (1)

One recitation hour and two lab hours per week.

Prerequisite: Enrollment in Chemistry 10.

Designed as an optional laboratory period to accompany Chemistry 10. (Chemistry 10 and 10L together satisfy the requirement of several curricula for a laboratory science.)

12a ORGANIC CHEMISTRY (6)

Four lecture hours and two three-hour lab periods per week.

Prerequisite: Chemistry 1b with a grade of C or better.

Same as Chemistry 8 and 9 plus one additional hour of lecture per week. Recommended for students intending to take a second semester of organic chemistry.

30a INTRODUCTORY CHEMISTRY (4)

Three lecture hours and one three-hour lab period per week.

Prerequisite: One year high school algebra.

An elementary course covering fundamental principles of general chemistry with emphasis on applied chemistry rather than theoretical principles. (Not accepted toward physical or life science major, or engineering, but will meet the requirement for many programs in home economics, nursing, environmental tech., etc.)

30b INTRODUCTORY CHEMISTRY (4)

Three lecture hours and one three-hour lab period per week.

Prerequisite: Chemistry 30a or Chemistry 1a.

A continuation of fundamental general chemistry with an emphasis on organic and biochemistry.

51 ELEMENTARY CHEMISTRY (3)

Three one-hour lecture periods and one three-hour lab period per week.

Prerequisite: Mathematics 11, or one year of high school algebra. Concurrent enrollment in Geometry or Intermediate Algebra is strongly recommended.

Introduction to some of the theories, laws, concepts and language of Chemistry. This course should not be elected by students who need a general survey course. It is specifically planned to prepare students for Chemistry 1a. While the relatively few topics studied are developed slowly, the last part of the material covered in each topic is equal in difficulty to material studied in Chemistry 1a.

Conservation

1 ESSENTIALS OF CONSERVATION (3)

Three lecture hours per week.

Consideration of the national resources of the U.S., including forests, grasslands, wildlife, water, marine, soils, minerals and recreational problems and practices in resource management.

Cooperative Education

47 COOPERATIVE EDUCATION (1-3)

(Credit/No-Credit)

(See also Business 47; Education 47; Food and Lodging Technology 47; Home Economics 47; Police Science 47; Psychology 47; Radiologic Technology 1, 2, 3; Social Science 47; Sociology 47).

One unit of credit for each five hours of work per week with a maximum of three units per semester. A student may earn three units of Co-op credit for every 12 units completed from the general course offerings.

Prerequisite: Enrollment in at least one class other than Cooperative Education is required.

The Cooperative Education program provides off-campus, career-related work experience in combination with classroom instruction. Under one plan, students in the program spend alternate semesters in college and industry. Two students hold one full-time work station. While one is in school, the other is learning on the job. A second plan allows students to enroll in a reduced academic load and be employed continuously in a parallel work ex-

50 | Courses: Cooperative Education (cont.) to Drama
experience arrangement.

Through a combined program of work and study, the relationship between theory and practical application is clearly established for the student. Cooperative work stations are available for students majoring in business, technical and liberal arts careers at Cañada College.

Further information about this program is available from your counselor or at the Cooperative Education office located in the Counseling Center at Cañada College.

Data Processing (See Business 60)

Drama

Courses marked with an (x) are especially recommended for adults interested in effective use of leisure time.

1a (x) MASTERPIECES OF DRAMA (CLASSICAL AND RENAISSANCE) (3)

Three class hours per week.

Study of the greatest plays and playwrights from classical Greece through the Elizabethan era in England. Principles underlying dramatic literature in each period will be related to dominant social, intellectual, and artistic forces. Use of motion pictures, filmstrips, recordings, and play attendance, as well as lectures and discussions.

1b (x) MASTERPIECES OF DRAMA (MODERN ERA) (3)

Three class hours per week.

Study of the greatest plays and playwrights from the 17th Century to the present.

10 (x) INTRODUCTION TO THE THEATRE (3)

Three lecture hours per week.

A general education course designed for the beginning student in Drama and the general student to acquaint them with the various approaches to the production of a script. Lecture and demonstrations. Subject matter will include such things as: nomenclature, duties and responsibilities, traditions, script analysis, approach to a script from the director's viewpoint, the designer's viewpoint, the actor's viewpoint, and the audience viewpoint. Special lecturers may discuss publicity, performance, music and dance, motion pictures and T.V.

13a-13b (x) STAGE PRODUCTION (3)

Two lecture hours and three lab hours per week.

Lectures and discussions on the theory and craftsmanship of building, rigging, painting and otherwise preparing theatrical settings. Practical experience executing the technical work of the College's dramatic presentations.

13c-13d ADVANCED STAGE PRODUCTION (3)

Two lecture hours and three lab hours per week.

Prerequisites: Drama 13a and 13b or their equivalent.

Lectures and special projects in stage managing, technical work, sound and lighting.

14a THEORY AND PRACTICE OF ACTING (3)

Four class hours per week.

Theories and techniques of acting and dramatic production, presentation of scenes and oral reading, tape recordings, pantomimes, and improvisations.

14b-14c-14d ADVANCED ACTING (3)

Four class hours per week.

Prerequisite: Drama 14a or equivalent.

Review of basic principles and skills of acting, advanced theories and techniques. Basic introduction to script analysis and directing.

14aL-14bL-14cL-14dL ACTING LABORATORY (2)

Supervised rehearsals of improvisations, pantomimes, oral readings, and short scenes. Forms and styles of acting. Exercises in the use of mind, emotions, voice, and body in acting.

15 PLAY PRODUCTION (1/2 to 2 units per play)

Play rehearsal of seven weeks for each of four major productions per year, the first four weeks of which are from 3-6 p.m. daily and the last three weeks from 7-11 p.m. daily.

Prerequisite: Tryouts.

Problems of actual play production, acting. (May be repeated for credit.)

16 PRODUCTION SHOP (1/2 to 2)

Problems of actual play production, Scene building, lighting, properties, rigging, and stage crew operations. Hours by arrangement. (May be repeated for credit.)

17 (x) COSTUME-FASHION DESIGN AND PREPARATION, MAKE UP (1/2 to 2)

Problems of actual play preparation of costumes and makeup. This course will provide costume and fashion

students the opportunity for practical experience in design and execution of costumes for dramatic productions. (May be repeated for credit.)

20 (x) INTRODUCTION TO DIRECTING

($\frac{1}{2}$ -2 units per play)

Days and hours variable.

Introduction to the theory and practice of play directing for theatre and screen. Analysis of plays to determine suitable acting, and staging styles and methods. Review of theories and techniques of acting. Study of composition, movement, tempo, climax, and the use of sound and music. Preparation of play-production plans and promptbooks. Production of scenes or short plays for stage and television. Observations and analysis of plays in the theatre and on the screen. (May be repeated for credit.)

24 (x) MODERN DRAMA (3)

Three hours per week.

Prerequisite: Eligibility for English 1a.

Study, from a theatrical as well as a literary viewpoint, of the outstanding dramas written between 1880 and the present. Emphasis upon contemporary dramatic trends such as realism, naturalism, symbolism, expressionism, epic theatre, and eclecticism.

25 (x) INTRODUCTION TO SHAKESPEARE (3)

Three hours per week.

Prerequisite: Eligibility for English 1a.

Emphasis upon Shakespeare's poetic and dramatic growth as a writer through a study of representative plays and poems, lectures, reading, discussion, critical papers.

26 THEATRE GRAPHICS (3)

Three lecture hours per week.

Graphic arts used in the theatre. Blueprints, transparencies, perspective, and watercolor. Lighting and painting techniques. Program design, models, projected scenery. Lectures, discussions, laboratory sessions.

33 VOICE AND ARTICULATION (3)

Three class hours per week.

Prerequisite: None.

An exploration of various modes of communicating ideas, emotions and values through a meaningful use of the voice. Lessons in vocal variety, expressiveness, resonance, articulation and pronunciation.

49 INDIVIDUAL PROJECTS (1 to 2)

Special projects in such fields as directing, technical directing, costuming, dramatic literature and the integration of the theatre arts. (May be repeated for credit.)

Ecology

10 INTRODUCTION TO ECOLOGY OF THE WEST (3)

Three lecture hours per week.

Prerequisite: None, but a course in Biology, Botany or Zoology is recommended.

Introduction to the ecology of the West with emphasis on California and the Bay Area. The ecological aspects of the plant and animal groups and their controls by geology, climate, each other and by man.

Economics

1a PRINCIPLES OF ECONOMICS (3)

Three hours per week for lectures and discussion.

The American economy; the price system; the role of resources, machines and men in production; the place of firms in organizing private business; the operation of the banking system and the use of money in guiding economic activity; the overall trends of National Income and factors in its determination; policies for stabilization and growth in advanced and underdeveloped nations.

1b PRINCIPLES OF ECONOMICS (3)

Three hours per week for lectures and discussion.

Prerequisite: None. Economics 1a is recommended.

Supply, demand and price determination in a market economy; the business firm's cost, revenues and price policies under conditions of competition and monopoly; the determination of wages, rent, interest and profits; international trade and finance; taxes, debts and public finance; comparative economic systems of other nations.

7 SURVEY OF ECONOMIC PROBLEMS (3)

Three lecture hours per week.

Non-Theoretical consideration of the major economic problems which confront the citizen today. Students who have completed Economics 1a or 1b or Business 63 will not receive credit for this course.

11 ECONOMIC HISTORY OF THE UNITED STATES (3)

Three hours per week.

The origin and development of the American economy from colonial times to the present. Themes will include the basis for industrial growth, land and resource use, the transportation revolution, the development of money and banking machinery, changing trade patterns, the rise of organized labor, the role of government in aiding economic development and stabilization.

14a LABOR ECONOMICS (3)

Three hours per week for lecture and discussion.

The first half of the course is concerned with the composition of the labor force, the history, structure, philosophy and objectives of the trade union movement and the development of public control of labor relations. The second half is devoted to the economics of the labor market, including problems of labor supply, labor mobility, labor market organization, employment and unemployment, wage determination and economic security.

27 PROBLEMS OF UNDERDEVELOPED AREAS (3)

Three lecture hours per week.

A broad survey of contemporary problems of underdeveloped areas, concentrating on economic problems. The course will investigate the following topics: (1) an introduction to contemporary conditions in Asia, Africa and Latin America; (2) social and economic problems at the local or village level, with case studies; (3) economic and political problems at the national level, with special reference to economic development policy; (4) problems of poverty and underdevelopment in America today.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in economics and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

For Economic Statistics, see Statistics.

Education

1 INTRODUCTION (3)

Three hours of lecture or discussion per week.

This course is designed primarily for those who wish to explore teaching as a possible career and secondarily for general students who are interested in knowing more about American public education. The course considers career opportunities in education, the financial and legal aspects of teaching, the organization of the public school systems, teacher education and teacher certification. Emphasis is placed on career planning for careers in education.

2 THE TEACHER ASSISTANT (2)

Two lecture hours per week.

The basic course for the teacher assistant. The role, responsibilities and ethical considerations of the teacher assistant, his relationship to the professional teacher, the principal and the student; the clerical, supervisory and

teaching aspect of the position.

Field experience (Education 47—Cooperative Education) must be taken in conjunction with this course.

3 READING IN THE PUBLIC SCHOOLS (3)

Three lecture hours per week.

Brief history of reading, physiological and psychological basis of reading, philosophy of reading instruction, individual reading instruction, group reading instruction, acceleration problems in reading, multi-media approach in reading, teacher and teaching assistant variables in reading, facts and fallacies about reading readiness, review of research findings on reading instruction. Purpose: Training course in reading instruction for teaching assistants.

May be taken as English 3.

47 COOPERATIVE EDUCATION (1-3)

By arrangement.

Supervised field experience.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in Education, and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Engineering

Students majoring in Engineering should refer to the two-year program outlined under "Suggested Curricula."

10 THE ENGINEERING PROFESSION (2)

Two lecture hours per week.

Definition of engineering as a profession, its ethics and its scholarship. Description of its branches and functions with their historical development. Relationship of engineers to scientists and technicians. Study of current and future role of engineers in legal, political, social, and ecological aspects of the national and world communities. Course directed to both technical and non-technical majors.

20 DESCRIPTIVE GEOMETRY (2)

Six lab hours per week.

Prerequisite: Concurrent registration in Mathematics 29 or Calculus.

Lectures and drafting-room work orthographically solving engineering problems in three-dimensional space. Introduction to graphic statics, vector properties, Maxwell's diagrams, space-force polygons.

22 ENGINEERING GRAPHICS (2)

Six lab hours per week.

Prerequisites: Engineering 20 and Mathematics 30.

Numerical and graphical calculus. Nomography. Introduction to creative design and the techniques of design optimization. Design project.

35 VECTOR STATICS (3)

Three lecture hours per week.

Prerequisites: Physics 4a and concurrent enrollment in Math. 32. Engineering 20 is recommended.

Plane and space force systems; equilibrium problems covering structures, machines, distributed force systems, friction, and virtual work; analytical and graphical methods.

36 VECTOR DYNAMICS (3)

Three lecture hours per week.

Prerequisites: Engineering 35 and concurrent registration in Mathematics 33.

Relations of motion, work, energy, impulse, momentum, impact. Simple harmonic motion, damped vibratory systems. Curvilinear motion, rigid body rotation, gyrokinematics of rigid bodies. D'Alembert's principle, generalized coordinates, Hamilton's principle, Lagrange's equations, introduction to celestial mechanics. Elementary fluid mechanics.

37 STRENGTH OF MATERIALS (3)

Three lecture hours per week.

Prerequisites: Engineering 22 and 35 and concurrent enrollment in Math 34.

Elastic behavior of crystalline materials, and rudiments of plastic behavior of common engineering materials. Stress and strain relationships. Analysis of the effects of internal and external forces on flexible bodies and structural assemblies. Failure modes. Analytical structural design techniques.

38 CIRCUITS AND DEVICES (3)

Prerequisites: Physics 4b and Math 34 may be taken concurrently.

Introduction to electrical and electronic engineering. Passive circuit elements, network theory, natural and forced responses. Characteristics and circuit models of active electronic devices. Elementary amplifier theory, servo loops, instruments.

English

Students will elect to take either English 1a or English 50a, after receiving their counselor's recommendation based on previous test scores and work in English courses.

Advanced Placement Credit: Students who have taken the Advanced Placement Test in English and who have scored 3 may receive credit for English 1b; those who have scored 4 or 5 will receive credit for English 1a and 1b. Test scores and a written petition for this credit should be filed in the Registrar's Office.

Brochure—Students are urged to obtain a brochure, available at the Registrar's desk, describing the various English courses as they are taught by individual instructors.

1a READING AND COMPOSITION (3)

Three hours per week.

Practice in writing based on a study of primarily non-fiction materials.

1b INTRODUCTION TO LITERATURE (3)

Three hours per week.

Prerequisite: English 1a.

Study of literary types: short story, drama, poetry and the novel. Themes based on reading and class analysis.

English 1a-1b may also be taken through the American Studies Program in conjunction with History 17a-17b.

9a-9b CREATIVE WRITING (3-3)

Three hours per week.

Prerequisites: 9a—English 1a or permission of the instructor. 9b—English 9a.

The craft of writing short stories, sketches and poetry.

23 INTRODUCTION TO POETRY (3)

Three hours per week.

Prerequisite: English 1b or permission of the instructor.

Discovery and study of the experience of a poem. Intensive and extensive reading, discussion, papers.

24 MODERN DRAMA (3)

Three hours per week.

Prerequisite: Enrollment in English 1a or permission of the instructor.

Study, from a theatrical as well as a literary point of view, of the outstanding masterpieces of the modern theatre. Lectures; discussion; recordings by professional actors. (Also listed under Drama.)

25 INTRODUCTION TO SHAKESPEARE (3)

Three hours per week.

Prerequisite: Enrollment in English 1a or permission of the instructor.

Emphasis upon Shakespeare's poetic and dramatic growth as a writer through a study of representative plays and poems. Reading, discussion, critical papers. (Also listed under Drama.)

27 CONTEMPORARY LITERATURE (3)

Three hours per week.

Prerequisite: English 1b or permission of the instructor.

A study of selected fiction, poetry and drama of the 20th Century. Lectures, discussions, related reading, writing of critical papers.

28a FILM STUDY AND APPRECIATION (3)

Two lecture hours and two lab hours per week.

Study of significant motion pictures as an art form with emphasis on structure of film and the technique of film making. Screening of films followed by discussion and/or written analysis relating to appreciation and understanding of film as a communicative medium. Production of films by students optional.

28b MOTION PICTURE PRODUCTION (3)

Two hours lecture and three lab hours per week.

Prerequisite: English 28a or permission of the instructor.

A theoretical and practical course on the art and technique of film making. Working from the conceptual stage, students will prepare scenarios, scripts, and story boards. Using super 8mm. equipment, they will shoot film, edit their footage into a meaningful visual form and ultimately produce short films.

30 MAJOR FIGURES IN AMERICAN LITERATURE (3)

Three hours per week.

Prerequisite: English 1a or permission of the instructor.

Study of the writings of some of the major figures in American literature. Intensive reading, lectures, discussion, papers.

36 SCIENCE FICTION AND FICTION OF FANTASY (3)

Three hours per week.

Prerequisite: English 1a or permission of instructor.

A study of European and American science-fiction and fantasy of the 19th and 20th Centuries. Popular writers will be included as well as established literary figures.

41 AFRO-AMERICAN POETRY (3)

Three hours per week.

A survey of the oral and written tradition in the poetic theory and practice of the black poet in America from 1619 to the present. Recordings of poetry readings, song lyrics; lectures and readings by visiting poets.

42a MASTERPIECES OF CLASSICAL AND EUROPEAN LITERATURE (3)

Three hours per week.

Prerequisite: Enrollment in English 1a or permission of the instructor.

Selections from the literature of ancient Greece through Renaissance Europe will be read, analyzed, discussed and, hopefully, enjoyed. Group work, oral reports, papers.

42b MASTERPIECES OF CLASSICAL AND EUROPEAN LITERATURE (3)

Three hours per week.

Prerequisite: Enrollment in English 1a or permission of the instructor.

Study of selected European novels, short stories and plays from the 17th Century to the present. Reading, analysis and discussion; written reports, oral readings and lectures.

43 AFRO-AMERICAN LITERATURE (3)

Three hours per week.

Historical and literary survey of Afro-American literature emphasizing principal authors and their works from the 19th Century to the present. Lectures and discussions based on readings of poetry, short stories, novels and drama; written reports.

44 MEXICAN LITERATURE IN TRANSLATION (3)

Three hours per week.

Study of the literature of Mexico: the first chronicles, the colonial period, writers of the Independence, the Romantic period, and contemporary authors. Emphasis will be on contemporary literature.

45 RUSSIAN NOVEL AND SHORT STORY (3)

Three lecture hours per week.

Prerequisite: English 1a or permission of instructor.

A study of important Russian writers from Pushkin to Solzhenitsyn. All works will be read in translation. Reading, discussion, papers.

46a SURVEY OF ENGLISH LITERATURE (3)

Three hours per week.

Prerequisite: English 1b or permission of the instructor.

Study of the typical works of major English writers from Chaucer to the end of the 17th Century.

46b SURVEY OF ENGLISH LITERATURE (3)

Three hours per week.

Prerequisite: English 1b or permission of the instructor.

Study of the typical works of representative English writers from the early 18th Century to the present. The 19th Century will be given the most specific survey, and the survey of the 18th and 20th Centuries will be a more general nature. Discussions, lectures, recordings.

49 INDIVIDUAL PROJECTS (1-2)

Hours by arrangement.

Prerequisites: Previous or concurrent work in college English; approval of instructor and the Chairman of the English Division.

Students will present a paper or papers dealing with a specific topic in literature or language, a topic beyond the scope of offered courses.

50a READING AND INTERPRETATION (4)

Four hours per week.

Reading of short stories, informal essays and books of non-fiction; study of vocabulary and spelling; written exercises, quizzes and compositions; class discussions.

50b READING AND INTERPRETATION (4)

Four hours per week.

Prerequisite: English 50a.

Reading and study of plays, novels, poetry, stories. Vocabulary study. Quizzes and short compositions based upon reading.

57a-b ENGLISH AS A SECOND LANGUAGE (5-5)

Five hours per week.

Prerequisites: Assignment by faculty personnel and by in-class test.

Study of English grammar and composition, drill in oral and written vocabulary, sentence structure and English idiom.

(Two semesters of English 57 satisfies the English requirement for the AA degree.)

(May be repeated once for credit.)

67 READING LABORATORY (1)

(Credit/No Credit)

Five hours per week for eight weeks.

Individual and small group work in developmental or remedial reading, with some emphasis on study skills. A variety of programmed materials, aids and machines are available to help improve vocabulary, comprehension and reading rate. Instruction in methods of word attack and practice in developing flexible reading habits. Students successfully completing the course will receive one unit of credit but no letter grade. May be repeated for credit as often as necessary.

68 WRITING LABORATORY (1)

(Credit/No Credit)

Three hours per week.

Work in the development of composition skills, primarily through individual instruction. Various methods are used to improve and stimulate the student's writing, with particular emphasis placed upon organization, quality and support of ideas, effectiveness of language and mechanics of the sentence. Students successfully completing the course will receive one unit of credit but no letter grade. May be repeated for credit as often as necessary.

Environment

1 INTRODUCTION TO THE PHYSICAL AND BIOLOGICAL ASPECTS (3)

Three lecture hours per week.

An introduction to the concept of the natural environment, including the factors of water, atmosphere, geography, biological limiting influences, tolerances, ecology and waste disposal.

Two field trips are required.

2 INTRODUCTION TO THE HUMAN AND SOCIAL ASPECTS (3)

Three lecture hours per week.

A course designed to examine the human and social aspects of the environmental problem. Looking at past, present and future qualities and values of life, this course will examine such issues as: population, operation of governmental agencies, planning, obstacles to change, transportation, housing, inter-personal relations and group relations.

This course is designed as a companion to Environment 1, as a General Education course, and as an introduction to careers in the environmental field.

5a LATIN AMERICA: MAN AND HIS ENVIRONMENT (3)

Three lecture hours per week.

A regional study of man and his culture and its relationship to his physical environment. (May be taken as Geography 5a.)

5b AFRICA: MAN AND HIS ENVIRONMENT (3)

Three lecture hours per week.

A regional study of man and his culture in its relationship to his physical environment. (May be taken as Geography 5b.)

5c ASIA: MAN AND HIS ENVIRONMENT (3)

Three lecture hours per week.

A regional study of man and his culture in its relationship to his physical environment. (May be taken as Geography 5c.)

49 INDIVIDUAL PROJECTS (1-2)

Hours by arrangement.

Prerequisites: Previous or concurrent work in Environment and the consent of the instructor and the Division Chairmen.

Specified individual study or directed research in specific problem areas.

Food and Lodging Technology

Students majoring in Food and Lodging Technology must consult with the department before completing registration.

47 COOPERATIVE EDUCATION (1-3)

Prerequisite: Completion of Food Technology 50 or 51, or approval of instructor.

Credit for supervised work experience in the hospitality business. A minimum of five hours each week of work in a job related to the food services business is required for each unit of credit.

49 FOOD SERVICE RESEARCH (1-2)

(Individual Projects)

Three or six hours per week by arrangement.

Special research into current problems and their relation to the future of the food service industry and its allied suppliers. The problems to be investigated and reported are varied and changing; the specific areas of research will be determined by the industry itself as it grows, plans and changes.

50a-50b QUANTITY FOOD PREPARATION (4-3)

51a-51b QUANTITY FOOD PREPARATION (2-2)

50a—Twelve lab hours each week.

50b—Nine lab hours each week.

51a, b—Two lecture hours each week.

Prerequisite: Students must enroll in both 50a and 51a or 50b and 51b concurrently.

Training and experience in basic quantity food preparation and service. Laboratory hours by assignment (to fit students' prior foods training and outside work requirements). Rotation through all kitchen and cafeteria stations.

52 FOOD PREPARATION SUPERVISION (3)

One hour lecture and six hours lab per week.

Prerequisites: Food Technology 50a and 50b.

Experience in intermediate management. The principles of supervising while being supervised.

54a-54b ADVANCED FOOD PREPARATION (5-5)

One hour lecture and twelve lab hours per week.

Prerequisites: Food Technology 50 and 51 or permission of instructor.

Emphasis on special functions, gourmet item preparation and service.

55 MODERN BAKING (2)

One lecture per week; three lab hours per week.

Prerequisites: Food Technology 50 and 51 or permission of the instructor.

Experience in the methods of baking in most modern food service. (May be repeated once for credit.)

60a-60b QUANTITY FOOD PURCHASING (2-2)

Two lecture hours per week.

Prerequisites: 60a—None; 60b—60a.

Familiarization with the kinds and qualities of foods available, the market, standard purchasing methods and standard methods of receiving and storing of all available foods.

65 MENU PLANNING (2)

Two lecture hours per week - Fall Semester.

The essentials of proper menu planning and menu costing to plan for profit.

68 SANITATION AND SAFETY (1)

Two lecture hours per week for nine weeks.

Required first semester.

The basic knowledge needed to protect the food service worker and the public.

70 FOOD MANAGEMENT PROBLEMS (2)

Two lecture hours per week.

Prerequisite: Sophomore standing in Food Technology Program.

A general course including personnel, financial, public relations and other management problems.

90 FOOD TECHNOLOGY AND ADMINISTRATION (1) *

Two hour lab and seminar per week for all students enrolled in Food Technology Program. Required each semester.

Total food industry aspect covered by guest speakers from purveyors of food equipment and supplies, airlines, industrial, hospital and placement fields allied to the food preparation and service industry.

91 INTRODUCTION TO HOTEL-MOTEL MANAGEMENT (2) *

Two lecture hours per week.

The course offers the beginner basic information on the lodging industry: its size and scope, the nature of the market it serves, types of establishments, how hotels and motels are organized and the purposes and functions of each department, and the importance of the "hospitality attitude."

92 HOTEL-MOTEL ORGANIZATION AND ADMINISTRATION (2) *

Two lecture hours per week.

Traces the transformation of the traditional hotel into a modern business enterprise, evaluates the benefits of professional management and explains the use of effective organization.

93 FRONT OFFICE PROCEDURE (3) *

Two lecture hours and three lab hours per week.

Prerequisites: Food Technology 91 or 92.

Fundamental principles of management. Routine procedures and recording techniques peculiar to the hotel/motel operation. All phases of front office operation: receiving guests, sales and registration procedures, handling mail and information, and checking out guests.

*Not available 1971-72

Forestry

1 INTRODUCTION TO FORESTRY (3)

Three lecture hours per week.

Study of the forest as a biotic system, with emphasis on trees, plants, animals, the forest environment and their ecological relationships. Survey of the forests of the United States and the world.

French

Students enrolled in certain courses in foreign language are asked to make use of the language laboratory. Imitation, response and independent practice are an integral feature of the study of a foreign language at the College.

1 ELEMENTARY FRENCH (5)

Five class hours per week.

Conversation in the language, dictation, reading, study of the fundamentals of grammar and the writing of simple French exercises. The student is urged to make extensive use of the listening facilities in the language laboratory.

2 ADVANCED ELEMENTARY FRENCH (5)

Five class hours per week.

Prerequisite: Completion on the college level of the first semester with a passing grade or assignment by the English-Foreign Language Division.

Conversation, dictation, further study of grammar and sentence structure; study of cognates, derivatives and idioms, reading of short stories. The student is urged to make extensive use of the listening facilities in the language laboratory.

3 INTERMEDIATE FRENCH (5)

Five class hours per week.

Prerequisite: Completion on the college level of the first two semesters with a passing grade or assignment by the English-Foreign Language Division.

Reading of short stories, plays or novels; review of grammar, conversation, composition, dictation. The student is urged to make extensive use of the listening facilities in the language laboratory.

4 ADVANCED INTERMEDIATE FRENCH (3)

Three class hours per week.

Prerequisite: Completion on the college level of the third semester with a passing grade or assignment by the English-Foreign Language Division.

Reading of selections from French literature and reading of a contemporary novel; further practice of conversation and composition; continued review of principles of grammar; analysis of idioms.

8a-8b FRENCH CONVERSATION (2-2)

Two class hours per week.

Prerequisite: French 4, or French 3 with a passing grade and permission of instructor. (Native speakers are ineligible.)

Practice in conversation based on French customs and culture.

25a-25b ADVANCED FRENCH (3-3)

Three class hours per week.

Prerequisites: 25a—Completion of the fourth semester with a passing grade or assignment by the English-Foreign Language Division; 25b-25a.

Reading and discussion of works of French literature. Continued review of principles of grammar.

30 INDIVIDUAL READING (1-2)

Conference periods for oral reports. Time to be arranged. A minimum of three hours of reading per each unit of credit is required weekly.

Prerequisites: French 4 and permission of instructor.

Reading of French classics, contemporary literature or recent periodicals.

Geography

1a PHYSICAL GEOGRAPHY (3)

Four hours per week for lecture, discussion and demonstration.

Prerequisite: High school geometry is highly recommended.

Basic characteristics of maps, the earth's grid, seasons, time, weather and climate, land forms, soil, oceans, natural vegetation and the interrelationship of all these basic factors. Maps and the regional concept are the primary tools for this study.

1b CULTURAL GEOGRAPHY (3)

Three hours per week for lecture, discussion and demonstration.

By using maps and the concept of regions, this course attempts to show and describe the areal distribution of the most important parts of man's culture. Emphasis is placed on the way he makes a living. Consideration is also given to the origin and development of man, races, population distribution and settlement patterns.

4 ECONOMIC GEOGRAPHY (3)

Three hours per week for lecture, discussion and demonstration.

In part, an investigation and description of the basic resources in the different parts of the world. Also, an attempt will be made to evaluate the effects of different cultural and physical environments upon the utilization of these resources. More specifically, this course will deal with the industrialized areas such as the United States and Europe.

5a LATIN AMERICA: MAN AND HIS ENVIRONMENT (3)

Three lecture hours per week.

A regional study of man and his culture in its relationship

to his physical environment. (May be taken as Environment 5a.)

5b AFRICA: MAN AND HIS ENVIRONMENT (3)

Three lecture hours per week.

A regional study of man and his culture in its relationship to his physical environment. (May be taken as Environment 5b.)

5c ASIA: MAN AND HIS ENVIRONMENT (3)

Three lecture hours per week.

A regional study of man and his culture in its relationship to his physical environment. (May be taken as Environment 5c.)

49 INDIVIDUAL PROJECTS (1-2)

Hours by arrangement.

Prerequisites: Previous or concurrent work in geography, and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Geology

Each course in Geology is accepted by the University of California in partial satisfaction of the 12 units required in Natural Science. Geology 1a is for science majors; Geology 10 is for non-science majors.

1a GENERAL GEOLOGY: DYNAMICAL AND STRUCTURAL (4)

Not open to students who are taking Geology 10.

Three lecture hours and one three-hour lab period weekly.

Prerequisite: Elementary chemistry and elementary geometry are highly recommended.

An introduction to the nature and structure of the materials composing the earth and of the various processes which shape the earth's surface.

1b HISTORICAL GEOLOGY (4)

Three lecture hours and one three-hour lab period weekly.

Prerequisite: Geology 1a or Geology 10.

Geological history of the earth and the evolution of its animal and plant inhabitants.

10 SURVEY OF GEOLOGY (3)

Not open to students who have taken or are taking Geology 1a.

Three lecture hours and one section meeting weekly.

Basic principles of igneous, sedimentary and metamorphic geology. Lectures on rocks, minerals and the origin of the

earth, continents and mountains. A brief sketch of the geological history of the earth and evolution of its animal and plant inhabitants. (This course meets the general education requirements for physical science at many colleges and universities.)

49 INDIVIDUAL PROJECTS (1-2)

Admission only by consent of the instructor. Hours to be arranged on an individual basis.

Prerequisites: Geology 1a and Geology 1b.

Field and/or lab and/or library studies centered in a geologic, paleontologic or mineralogic problem of interest to the student.

German

1 ELEMENTARY GERMAN (5)

Five class hours per week.

Study of and practice in the basic forms and patterns of German; development of a satisfactory pronunciation; learning and using vocabulary of high frequency; reading of simple German texts. Students are urged to make use of the listening facilities in the language laboratory.

2 ADVANCED ELEMENTARY GERMAN (5)

Five class hours per week.

Prerequisite: German 1 with a passing grade or assignment by the English-Foreign Language Division.

A continuation of work begun in German 1, with continued practice in listening, speaking, writing and reading (of more difficult texts.) Students are urged to make use of the listening facilities in the language laboratory.

3 INTERMEDIATE GERMAN (5)

Five class hours per week.

Prerequisites: German 2 with a passing grade or assignment by the English-Foreign Language Division.

Reading of modern writers; study of more advanced grammar and syntax; intensive vocabulary work; continued practice in speaking and writing. Students are urged to make use of the listening facilities in the language laboratory.

4 ADVANCED INTERMEDIATE GERMAN (3)

Three class hours per week.

Prerequisite: German 3 with a passing grade or assignment by the English-Foreign Language Division.

The emphasis is on reading; materials covered range from the period of Goethe to recent times. Study of word families, derivatives, compounds, idioms and sentence patterns.

30 INDIVIDUAL READING (1-2)

Prerequisite: Permission of the instructor; the student is expected to have completed at least German 4 or the equivalent.

The student is required to report on 54 hours of reading for each unit of credit; the student's preference largely determines the choice of reading materials.

Guidance

1 INTRODUCTION TO COLLEGE (1)

Two hours per week. (8 weeks or 16 hours per semester)

The new student is helped to know and understand Cañada College so that he might make best use of its resources and activities. A variety of techniques are used for self-appraisal so that the student can make satisfying, intelligent, and realistic decisions in terms of his abilities, interests, needs, values, and future educational and vocational plans. Individual conferences with the instructor are an integral part of this class.

2 EFFECTIVE LEARNING (1)

Two hours per week. (8 weeks or 16 hours per semester)

This course will help a student solve ordinary college study problems. Discussions will be held on topics such as taking notes, remembering what has been read, taking and preparing for examinations, exploring of student-faculty relationships. Study difficulties may be discussed with the instructor on an individual basis.

3 OCCUPATIONAL PLANNING (1)

Two hours per week. (8 weeks or 16 hours per semester)

The class is designed for the student who is undecided about an occupation. Vocational interest tests, various self-appraisal techniques and discussions give the student insights into his abilities, interests, and personality. Occupational trends and ways of learning more about specific occupations will be explored. Individual conferences are available to students for interpretation of class materials and counseling.

4 SPECIAL INTEREST DISCUSSION GROUPS (1)

Two hours per week. (8 weeks or 16 hours per semester)

The student is offered an opportunity to explore and evaluate his personal values, goals, and expectations as they relate to his social and cultural environment. Any group of students with a common concern may meet under the leadership of a counselor to discuss and explore these interests.

Health Education

1 GENERAL (2)

Two class hours per week.

Required of all candidates for graduation.

Study of factors which influence personal, family and community health in the light of current scientific information. Attention given to the value of good health practices, preventive aspects of some of the most prevalent diseases and contemplated experience in social development and marriage.

4 FIRST AID (1)

Two hours per week for eight weeks.

First Aid is the immediate, temporary treatment given in case of accident or sudden illness before the services of a physician can be secured. This course is required of all students not presenting standard Red Cross certificates. Not required of those who have graduated from a California public high school since 1952.

History

4a HISTORY OF WESTERN CIVILIZATION (3)

Three hours per week.

The rise and decline of the civilization of the ancient world, the rise of Christianity, the growth and decline of Medieval society, the Renaissance, the Reformation and the opening of the modern world.

4b HISTORY OF WESTERN CIVILIZATION (3)

Three hours per week.

Prerequisite: None. History 4a is recommended.

The rise of modern Europe: the Enlightenment, the French Revolution and the growth of Liberalism. The emergence of modern society: economic problems of industrialization, development of modern ideologies, and the World Wars and international experiments of the 20th Century.

4c HISTORY OF AMERICAN CIVILIZATION (4)

Three lecture hours and one discussion hour per week.

Prerequisite: None. History 4a is recommended.

The colonial settlement of North America, the Enlightenment, the Age of Revolution and the growth of democracy, the problems of industrialization, the emergence of modern society, the effects of the expansion of the 19th and 20th Centuries upon the culture of America and the role of the United States in the modern world.

History 4c may be used in fulfilling the American Institutions requirement.

5 HISTORY OF ENGLAND (3)

Three lecture hours per week.

A survey, including in its scope the more important political, constitutional, economic, social and cultural phases of the history of the English people. (This course, though especially designed for pre-legal and English majors, is also of great value to the general student interested in international relations or the background of American culture.)

6a AFRICAN AND AFRO-AMERICAN HISTORY (3)

Three lecture hours per week.

The history of Africans and Afro-Americans up to 1880. African culture, African kingdoms, the slave trade, slavery in America, the abolitionist movement, the Civil War, Reconstruction.

6b AFRICAN AND AFRO-AMERICAN HISTORY (3)

Three lecture hours per week.

The period after 1880. In America: The Age of Accommodation, the Harlem renaissance, the Civil Rights movement, Black nationalism. In Africa: Imperialism and European conquest, the colonial period, African nationalism.

8a HISTORY OF AMERICAS (3)

Three lecture hours per week.

A general survey of the history of North and South America, from the times of the pre-Columbian Indian civilizations, through the European conquests, to the ages of the revolutions against the European colonizing powers. Includes a comparison of the U.S. and Latin American constitutions.

History 8a may be used in fulfilling the American Institutions requirement.

8b HISTORY OF AMERICAS (3)

Three lecture hours per week.

Prerequisite: None. History 8a is recommended.

A general survey of the history of Latin America from about 1830 until the present. Emphasis is placed upon the problems of the Western Hemisphere, and also upon the development during the crucial period which began with the outbreak of World War II and has continued until contemporary times.

9a ASIAN CIVILIZATION—INDIA AND SOUTHEASTERN ASIA (3)

Three lecture hours per week.

A general survey of the historical and cultural development of India, Pakistan, and the southeastern Asian coun-

tries—Thailand, Vietnam, Burma, Indonesia and Ceylon. Special emphasis will be on their religious, political and artistic development from ancient to modern times. An attempt will be made to show the common cultural theme among them and how they respond to the impact of the Western and Chinese civilizations.

9b ASIAN CIVILIZATION—EASTERN ASIA (3)

Three lecture hours per week.

A general survey of the historical and cultural development of the Eastern Asian countries—China, Korea and Japan. Special emphasis will be on their philosophical, religious, political and artistic development from ancient to modern times. An attempt will be made to show the common cultural theme among these countries and how they respond to the impact of the Western World.

17a UNITED STATES HISTORY (3)

Three hours per week.

A survey of English colonization along the Atlantic Coast, the westward expansion of the colonists, the Revolution, the formation of the Constitution, the Federalist and Jeffersonian systems, the reign of Andrew Jackson, the slavery issues and Civil War. Economics, political, social and cultural developments of the period are included.

17b UNITED STATES HISTORY (3)

Three hours per week.

Prerequisite: None. History 17a is recommended.

The course continues the work of 17a, developing the reconstruction period, industrial expansion, social and economic development, and the foreign policies of the U.S. through World War II.

History 17a-17b may be used in fulfilling the American Institutions requirement and may also be taken through the American Studies Program in conjunction with English 1a-1b.

22 CALIFORNIA HISTORY (3)

Three hours per week.

A study of the qualities and values of life in California today with inquiry into how and why such social, economic and political qualities have developed out of the past. This course includes an examination of (a) the Indian, Spanish-American and American periods; (b) the environment; (c) the institutions and functions of state and local politics. Where possible, individual research projects, field trips and other forms of student participation beyond the classroom will be encouraged. (This course satisfies the requirement in State and Local Government.)

24 AMERICAN FOREIGN POLICY (3)

Three hours per week.

An historical inquiry into the background of major

Courses: History (cont.), Home Economics/61
problems in foreign policy of our own day. Special attention is given to the period since World War II.

26 20TH CENTURY AMERICAN HISTORY (3)

Three lecture hours per week.

Major economic, political, social and intellectual developments since the United States emerged as a major power in the turn of the century. (History 26 may be used in fulfilling the State and Local Government requirement.)

31 HISTORY AND GOVERNMENT OF SAN MATEO COUNTY (3)

Three lecture hours per week.

Designed to provide the student with (1) an understanding of the social, economic and political development of San Mateo County, and (2) an opportunity to study first-hand the functions and institutions of county and city government. In addition, instruction will emphasize historical research techniques, using local primary sources of information whenever possible.

33 THE AFRO-AMERICAN IN U.S. HISTORY (3)

Three hours per week.

Prerequisite: None, but History 17a or sophomore standing is strongly recommended.

A course dealing with the social, economic and political facts as they relate to the Afro-American. Race relations will be analyzed and special emphasis will be given the history of the Afro-American.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in history and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Home Economics

5 CAREERS IN HOME ECONOMICS (1)

One lecture hour per week.

Exploration of areas of employment opportunities in business, government, public service, and education. Field trips and discussions with home economists in the field. Review of transfer-school strengths. Professionalism and its responsibilities.

6 CONSUMER IN THE MARKET PLACE (2)

Two lecture hours per week. (also Soc. Sci. 6)

A course designed to help the consumer operate in today's complicated market place. Guidelines for intelligent purchasing. Review of consumer protection services, rights, and responsibilities of the consumer.

7 HOME MANAGEMENT FOR EFFECTIVE LIVING (2)

Two lecture hours per week.

Study of the use of time, energy, and resources in household and family management. Problem-solving approach to management. Use, care and repair of equipment and furnishings.

9 NUTRITION (3)

Three one-hour lectures per week.

Basic concepts of nutrition and their relationship to health of people of all ages with application to family meal planning and the food budget.

15 ESSENTIALS OF NUTRITION (3) (also Biol. 15)

Two one-hour lectures and one three-hour lab per week.

Prerequisite: College course in chemistry.

Basic principles of nutrition. Utilization of food by the body, with emphasis on the role of nutrients in development and maintenance of body processes, including a personal nutritional evaluation.

20a BEGINNING CLOTHING (3)

Two three-hour lecture-lab periods per week.

Techniques of clothing construction using professional methods. Emphasis on selection of fabrics and patterns, alterations and fitting. For students with little or no experience in clothing construction.

20b CLOTHING AND TAILORING (3)

Three two-hour lecture-lab periods per week.

Prerequisite: 20a or two years of high school clothing or consent of instructor.

Advanced and custom techniques of tailoring and dressmaking with emphasis on fabric and pattern selection, principles of color, and design. Individuality and creativity encouraged.

20c CREATIVE FASHIONS, CONSTRUCTION AND DESIGNING (3)

Two two-hour lecture-lab hours per week.

Prerequisite: 20b.

Custom techniques of tailoring, fine finishes, detailed study of pattern and fabric compatibility, individual fit and alterations. Elementary designing problems will emphasize originality and creativity in apparel construction.

22 TEXTILES (3)

Three lecture hours per week.

Study of natural and man-made fibers; yarns and fabric construction and finishes. Care, cost and labelling as related to consumer use. Knowledge of the fabrics you live with and use.

24 FASHION ANALYSIS AND APPAREL SELECTION (2)

Two lecture hours per week.

Psychological, sociological and economic aspects of apparel selection and fashion coordination. Principles of creative art and design, guides for purchasing, and motivational research to be examined. Recommended for those interested in personal buying and dress, as well as merchandising, fashion retailing, professional and business students.

35 CHILD IN THE HOME (3) (also Soc. Sci. 35)

Three lecture hours per week.

Prerequisite: Completion of or concurrent enrollment in Psychology Ia.

Emotional, social, intellectual, and physical development of children to six. Understanding the young child, the point of view of a child, individual differences, implications for later behavior and personality growth; emerging resources for coping with the world. Observation of a child in depth; participation in a variety of pre-school experiences and evaluative conference with instructor.

36 THE LIFE CYCLE: INDIVIDUALS AND FAMILIES (also Soc. Sci. 36) (3)

The course stresses understanding of self and social development which affect readiness for adulthood and family interactions. It deals with developmental concerns from birth to death and changes in the family structure, as well as crisis situations, such as unemployment, suicide, alcoholism, drugs, aging, and their affect on individuals.

39 COMMUNICATION IN HOME ECONOMICS (1-3)

One to three lecture hours per week.

Prerequisites: One course in home economics or the consent of instructor.

Students will be given practice and experiences in communication techniques using television (closed and open circuit), radio, film, photography, print medium (news and advertising), and graphics as they apply to home economics in the business world and in the classroom. Individual projects will be selected by student preference for medium.

40 INTERIOR DECORATION AND HOUSING (3)

Three lecture hours per week - Fall Semester.

Experiences involving decorating your own home or future home. Evaluating, purchasing, and creating furnishings with both dollars and aesthetics in mind. Analysis of today's house and its contribution to human growth and satisfactions. Study of home in the environment of neighborhood and community. Review of housing needs and problems today for individual and society.

41 INTERIOR DESIGN AND HOME

PLANNING (3)

Three lecture hours per week - Spring Semester.

Study of environment of today's house, with experiences in use of line, form, color and design. Selection of furniture, surfaces, fabrics and accessories from artistic and practical standpoint. Construction of slipcovers, draperies, bedspreads and simple furniture upholstery is optional as home projects.

47 COOPERATIVE EDUCATION (1-3)

Students working in fashion merchandising; home furnishings merchandising; fashion, home furnishings, or clothing manufacturing; home management, food, and child care employed in individual homes, may enroll for credit and instructional help through supervision.

49 INDIVIDUAL PROJECTS (1-2)

By special arrangement with instructor projects may be developed in television, radio, public relations, journalism, as related to home economics in business today; or public service projects with schools, public agencies, or individuals may be developed with student involvement.

52 FOODS (2)

One two-hour lecture-demonstration per week.

Planning, selection and preparation of foods for meals for optimum health and aesthetic enjoyment. An introductory course designed especially for young adults—men and women.

65a CLOTHING CONSTRUCTION (1)

One three-hour lab per week.

Principles of professional and custom dressmaking designed for the non-major and for part-time students from the community. Pattern and fabric selection, alterations and fitting, and basic techniques will be given to develop individual skills. One garment will be constructed.

65b CLOTHING CONSTRUCTION (1)

Three hours per week.

Prerequisite: 65a or consent of instructor.

Professional tailoring and advanced dressmaking for the more skilled individual, non-majors, and part-time students from the community. Pattern alteration, fabric suitability study, line and design for the individual, color selection. Some custom techniques will be taught. Two garments will be constructed.

Journalism

1 INTRODUCTION TO JOURNALISM (3)

Three lecture hours per week.

A study of the historical background and modern functioning of the press (newspaper, radio, magazine, television) in a democratic society, and the virtues and shortcomings of each. The rights and duties of journalists, and the legal limits of the liberty of the press are studied.

2 NEWSWRITING (3)

Two lecture hours and two lab hours per week.

Prerequisites: Journalism 1 and enrollment in English 1a.

A study of the techniques of news gathering, judging news values, and of writing the news story. For practical experience, the students write for the College paper, thus preparing them for future newspaper work. Since awareness of himself and his environment is essential to the development of any professional journalist, some in-class and out-of-class awareness exercises will be included in this basic newswriting course.

15 NEWSPAPER PRODUCTION (2)

Four hours per week.

Prerequisites: Journalism 2 (may be taken simultaneously) and permission of instructor.

Production of the student newspaper and instruction in principles of responsible editorial decision making. Discussion and criticism of staff organization and newspaper content. (May be repeated for credit.)

50 NEWSPAPER PRODUCTION (1)

Two hours per week.

Prerequisite: Permission of instructor.

Production of the student newspaper and instruction in advanced journalism problems. Discussion and criticism of staff organization and newspaper content. (May be repeated for credit.)

Library

1a INTRODUCTION TO USE OF LIBRARY MATERIALS (2)

Two hours per week.

Through discussions and practical exercises the student becomes acquainted with those library resources which will assist him in completing class assignments more rapidly and effectively; the card catalog, periodical and other indexes, dictionaries, encyclopedias, and other general and specialized reference works.

4 AUDIO-VISUAL MATERIALS AND EQUIPMENT (2)

Two lecture hours per week.

Survey and evaluation of equipment and materials available. Preparation of instructional materials and practice in operation of the equipment.

Life Science

10 INTRODUCTION TO THE LIFE SCIENCES (3)

Open to all students except those who are currently enrolled in or have completed a college course in the Life Sciences. Complementary to Physical Science 10.

A study of the nature of the physical and chemical aspects of life, the concepts of cellular biology, life as it exists on earth today, plant and animal interrelationships and interdependencies, and man's role in the world of living things.

Mathematics

The normal sequence of mathematics courses at Cañada College is 11, 12, 19 or 20, 21, 29, 30, 31, 32, 33, 34. A student who qualifies for a particular mathematics course is eligible for any course lower in the sequence. If the student has not taken a mathematics course during the previous two years, it is strongly recommended that the student enroll in a course below the one for which he would normally be eligible.

In general, eligibility of an incoming freshman for a mathematics course is determined by an evaluation of his transcript.

Prerequisites for the various courses are detailed in the descriptions which follow. Where reference is made to mathematics of high school level, this means college preparatory mathematics beginning with elementary algebra, taken in elementary or secondary school.

A student who wishes to enroll in Mathematics 31, 32, 33, 34 and who has not had the prerequisite course must have the approval of the division chairman. Likewise, questions regarding equivalency of courses, transfer credit and the like, should be referred to the chairman.

10 INTRODUCTION TO MATHEMATICAL CONCEPTS (3)

Three class hours per week.

The basic ideas of mathematics and their historical development; number, function, logic, sets; the relationship of traditional and contemporary mathematical thought. Material presented is non-computational in nature. (Satisfies General Education requirements in part.)

11 ELEMENTARY ALGEBRA (5)

Five class hours per week.

Elementary Algebra through quadratic equations. (Satisfactory completion of this course will fulfill in part the mathematics entrance requirements of the universities.)

11a-11b ELEMENTARY ALGEBRA (3-3)

Three class hours per week.

The two courses, Mathematics 11a-11b, are equivalent to Mathematics 11. (Recommended for those who have not previously had elementary algebra.)

12 GEOMETRY (5)

Five class hours per week.

Prerequisite: Mathematics 11 with a grade of "C" or better, or two semesters of high school level mathematics with grades of "C" or better.

A study of the properties of plane and solid figures, using formal logic and the real number system. Some non-Euclidean, protective and topological elements are included. (Satisfactory completion of this course will fulfill in part the mathematics entrance requirements of the universities.)

13 ELEMENTARY FINITE MATHEMATICS (3)

Three hours of lecture per week.

Prerequisite: Mathematics 11 (or equivalent).

An introduction to finite mathematics with attention to set theory. Boolean Algebra, switching circuits, probability, systems of linear equations, vector and matrix notations and operations. (Required of all Data Processing majors.)

16 BASIC CONCEPTS OF MATHEMATICS (3)

Three class hours per week.

A general education course designed for the liberal arts student who desires an appreciation and understanding of the basic structure of mathematics. Subject matter will include the development of the real number system by intuitive and semi-rigorous methods; discussion of sets, logic, axiomatics, systems of numeration, history and development of arithmetic, arithmetic processes, inductive and deductive reasoning. (Meets requirements of California Administrative Code for the elementary school credential.)

17 INTRODUCTION TO SYMBOLIC LOGIC (3)

Three hours lecture/self-study per week.

Prerequisite: English 1a or consent of instructor.

The course divides into three parts: (1) survey of the traditional Aristotelian logic of the categorical statement and syllogism; (2) fairly complete treatment of modern symbolic propositional logic; (3) brief introduction to (first-order) symbolic predicate logic. (If time permits, some discussion of Russell's paradox, Gödel's incompleteness theorem, and the impact of each on the development of 20th century logic, will be introduced.)

19 INTERMEDIATE ALGEBRA (5)

Five class hours per week.

Prerequisites: Mathematics 11 and Mathematics 12 with grades of "C" or better, or four semesters of high school mathematics with grades of "C" or better.

Extension of fundamental algebraic concepts and operations, binomial expansion, solution of linear and quadratic equations individually and in systems, determinants, radical equations, complex numbers, introduction to theory of equations. Mathematics 19 is designed primarily for those students whose elementary algebra is weak. It allows time for review of elementary algebra and a slower development of new ideas.

20 INTERMEDIATE ALGEBRA (3)

Three class hours per week.

Prerequisites: Mathematics 11 and Mathematics 12 with grades of "B" or better, or four semesters of high school mathematics with grades of "B" or better.

Extension of fundamental algebraic concepts and operations, binomial expansion, solution of linear and quadratic equations individually and in systems, determinants, radical equations, complex numbers, introduction to theory of equations.

21 ANALYTICAL TRIGONOMETRY (3)

Three class hours per week.

Prerequisite: Mathematics 20 (or equivalent) with a grade of "C" or better; or six semesters of high school mathematics with grades of "C" or better.

Trigonometric functions of real numbers and angles, their graphs and periodicity; reduction formulas; functions of multiple angles; identities and equations; radian measure; inverse functions, logarithms; solution of triangles; complex numbers and De Moivre's theorem.

28 COLLEGE ALGEBRA (3)

Three class hours per week.

Prerequisites: Mathematics 21 (or equivalent) with grade C or better; or high school preparation including two years of algebra, one year of geometry and one semester of trigonometry with grades of C or better.

A study of more advanced algebra including such topics as theory of equations, complex numbers, logarithmic and exponential functions, matrices, vectors, binomial theorem, sequences.

29 MATHEMATICAL ANALYSIS (5)

Five class hours per week.

Prerequisite: Mathematics 21 (or equivalent) with a grade of "C" or better; or seven semesters of high school level mathematics with grades of "C" or better.

A unification of college algebra and analytical trigonometry based on the function concept. Topics include properties of the real number system, inequalities, theory of equations, complex numbers, logarithmic and exponential functions, matrices, binomial theorem, sequences, inverse functions.

30 ELEMENTS OF ANALYTICAL GEOMETRY AND CALCULUS (5)

Five class hours per week.

Prerequisite: Mathematics 29 with a grade of "C" or better; or Mathematics 19 or Mathematics 20 with grade of "A" and Mathematics 21 with a grade of "B" or better; or seven semesters of high school level mathematics, each with a grade of "B" or better.

Basic concepts of calculus. Includes plane analytic geometry, differentiation, integration, differentials and anti-derivative; formulas; application.

31-32-33 CALCULUS (3-3-3)

Three class hours per week.

Prerequisites: To enroll in Mathematics 31, completion of Mathematics 30 (or equivalent) with a grade of "C" or better. The student may then progress through this series of three courses if he continues to earn grades of "C" or better.

Further development of the basic theory of differential and integral calculus as applied to circular, hyperbolic, logarithmic and exponential functions; extension of the techniques of integration; polar coordinates; vectors; infinite series; solid analytic geometry; partial differentiation; multiple integration.

34 ORDINARY DIFFERENTIAL EQUATIONS (3)

Three class hours per week.

Prerequisite: Mathematics 33 (or equivalent) with a grade of "C" or better. When approved by the instructor, may be taken concurrently with Mathematics 33.

Differential equations of first, second and higher order; simultaneous, linear, homogeneous equations, solutions by power series, numerical methods, Fourier series, Laplace transform; applications.

49 INDIVIDUAL PROJECTS (1-2)

Hours by arrangement.

Prerequisites: Mathematics 30 or equivalent; permission of the instructor.

Directed individual study of a suitable topic in mathematics, or construction of a model useful in the study or teaching of mathematics.

Meteorology

1 ELEMENTARY METEOROLOGY (3)

Three lecture hours per week.

A basic course in meteorology including physical phenomena associated with weather analysis and prediction. (This course meets the general education requirements for physical science at many colleges and universities.)

Military Science

(Reserve Officers' Training Corps)

1A DEFENSE ESTABLISHMENT IN NATIONAL SECURITY (2)

One lecture hour and one leadership laboratory per week.

Study of the history, mission and organization of ROTC, techniques of marksmanship, causes of war, evolution of weapons, and factors of national power, progressive training in leadership and command.

1b DEFENSE ESTABLISHMENT IN NATIONAL SECURITY (2)

One lecture hour and one leadership laboratory per week.

Study of the principles of war; history, mission and organization of the Department of Defense, and introduction to leadership.

2A BASIC TACTICS (2)

One lecture hour and one leadership laboratory per week.

Prerequisite: MS 1B.

Map and aerial photograph reading. Instruction in military operations and basic tactics. Progressive training in leadership and command.

2B BASIC TACTICS (2)

One lecture hour and one leadership laboratory per week.

Prerequisite: Military Science 2A.

Continuation of Military Science 2A.

Music

The courses of the Music Department are designed to fill the needs of the music major or professional musician as well as the desires of students for general education, avocation and recreation. Professional musicians, private teachers and others qualified are welcome to such theory classes as are desirable. The department will maintain a flexibility which will allow the addition of other courses upon demand of a sufficient number of students. Recitals by students and professional musicians are available. Attendance forms part of the

requirement for music students. Courses marked with an (x) are especially recommended for any member of the community interested in adult education and effective use of leisure time.

Auditions: Students majoring in music will audition before the music faculty to prove necessary competence in the chosen solo performing area. Auditions may be repeated at the end of each semester to display progress.

1 (x) MUSICIANSHIP (2)

Two hours per week.

Prerequisite: Some pianistic ability desirable.

Includes the study of music notation, keys, key signatures, intervals, sight reading and ear training.

2a-2b ADVANCED MUSICIANSHIP (2-2)

Two hours per week.

Prerequisites: 2a—Music 1 or its equivalent; 2b—2a.

A continuation of Music 1. (Six units of Musicianship are recommended for students majoring in Music.) Emphasis is on ear training and sight reading.

4a-4b HARMONY (3-3)

Three hours per week.

Prerequisites: Music concentration, usually taken concurrently with Music 1, 2a. Some piano ability is essential. Music 4a is a prerequisite for Music 4b.

A study of chords and their relation to each other, to develop the ability to harmonize melodies on paper or at the keyboard. 4a-4b carry the student from simple triads through and including chords of the dominant seventh.

5a-5b ADVANCED HARMONY (3-3)

Three class hours per week.

Prerequisite: Music 4a-4b.

Deals with chords of seventh and ninth, altered chords and modulations, and arranging for various vocal and instrumental groups, and original composition.

6 MUSIC APPRECIATION AND SURVEY (3)

Three lecture hours per week and one lab hour per week.

A study of music literature and history with emphasis on the understanding and appreciation of the art. A text, illustrated lectures and directed listening constitute the procedure of the course. One hour per week directed listening in the library is required. Material covered includes instrumental and vocal music from the 14th to the 20th Century. This course is for non-music majors as well as music majors.

8 (x) FUNDAMENTALS OF MUSIC (3)

Three lecture hours per week.

Study in basic musical skills - singing, ear training, reading

music notation, and harmonization of simple melodies. May not be applied toward the degree by the student whose major is music. Suggested for music majors who do not read music easily as a preliminary course to Music 1 and 4. Suggested for the elementary classroom teacher.

9 PHYSICS OF SOUND AND MUSIC (3)

Two lecture hours per week and one three-hour lab.

Prerequisite: None; high school algebra suggested.

Lectures with experimental demonstrations emphasizing the nature of sound, music and related wave phenomena. A weekly laboratory period studying musical instruments, overtones, resonance, pitch and recording techniques. (See Physics 9.)

10 (x) INTRODUCTION TO RELATED ARTS (3)

Three lecture hours per week.

The study of the basic elements of visual arts, music and theatre. An investigation of motivations, functions and relationships of the arts.

11a-11b-11c-11d (x) PIANO (1)

Three hours per week.

Prerequisites: Consent of instructor and concurrent enrollment in Music 99—Studio Hours.

A course in applied music with stress on technical and interpretive skills. Individual attention and advancement. Grades will be determined by jury audition. Required lab hours.

16 ACCOMPANYING (1)

Prerequisite: Advanced ability.

Skills and techniques of playing accompaniments for singers, instrumental soloists and choral groups. Performance is an essential of this course. May be repeated for credit.

19a-19b-19c-19d STUDY OF PERCUSSION INSTRUMENTS (1)

Prerequisites: Concurrent enrollment in Music 22 or Music 23, or consent of instructor. Concurrent enrollment in Music 99 is required.

Techniques of playing the various percussion instruments, including mallet instruments with class instruction, individual instruction and ensemble participation. Grades will be determined by jury examination.

20 (x) SURVEY OF OPERA (3)

Three lecture hours per week.

Lecture with record and film demonstration. A survey of the history of opera combined with principles and appreciation.

22a-22b-22c-22d (x) ORCHESTRA (2)

Five hours per week.

Prerequisite: Consent of instructor. Open to all students of the College.

Standard chamber and symphonic literature.

23a-23b-23c-23d (x) SYMPHONIC BAND (2)

Five hours per week.

Prerequisite: Consent of instructor. Open to all students of the College.

Study and performance of music for concert band. Performance is required.

24a-24b-24c-24d STUDY OF BRASS INSTRUMENTS (1)

Three class hours per week.

Prerequisite: Concurrent enrollment in Music 22 or Music 23, or consent of instructor. Concurrent enrollment in Music 99 (Studio Hours) is required.

Techniques of playing the instrument of the student's choice, with individual instruction. The course may be repeated for credit. Grades will be determined by jury audition.

25a-25b-25c-25d STUDY OF WOODWIND INSTRUMENTS (1)

Three class hours per week.

Prerequisite: Concurrent enrollment in Music 22 or Music 23, or consent of instructor. Concurrent enrollment in Music 99 (Studio Hours) is required.

Techniques of playing the instrument of the student's choice, with individual instruction. Grades will be determined by jury audition.

26a-26b-26c-26d STUDY OF STRING INSTRUMENTS (1)

Three class hours per week.

Prerequisites: Concurrent enrollment in Music 22 or consent of instructor. Concurrent enrollment in Music 99 (Studio Hours) is required.

Techniques of playing the violin, viola, cello or string bass, with individual instruction and ensemble playing. Grades will be determined by jury audition.

27a-27b-27c-27d (B-S-W) INSTRUMENTAL ENSEMBLE

Three hours per week.

Prerequisite: Adequate performing ability to secure consent of the instructor.

The letters B, S and W indicate Brass, String and Woodwind. Performance is required.

33a-33b-33c-33d (x) A CAPPELLA CHOIR (2)

Five hours per week.

Prerequisite: Consent of the instructor.

Study and performance of choral literature for accompanied and unaccompanied choir. Performance is required.

34a-34b-34c-34d (x) COLLEGE CHORALE (1)

Three hours per week.

Prerequisites: Consent of instructor after audition, concurrent registration in Music 33.

An advanced ensemble which specializes in the performance of fine choral literature for small choir. Members are selected by audition from the enrollment of the A Cappella Choir. Performance is a part of the course.

35a-35b-35c-35d (x) CAÑADA COLLEGE ORATORIO CHORUS (1)

Three hours per week. Taught in the evening.

Prerequisite: Consent of the director. Open especially to adult singers with choral experience.

Rehearsal and performance of material from oratorio and other large choral literature for public performance. Performance is part of the course.

36a-36b-36c-36d SOLO VOICE (1)

Prerequisite: Concurrent enrollment in Music 33 or 34 and Music 99 (Studio Hours) or consent of instructor.

Vocal problems analyzed and corrected through exercises and songs. Class sessions with private help by appointment. Grades will be determined by jury audition. Lab hours required.

40 MUSICAL PRODUCTIONS (1-3)

One class hour per week per unit.

Prerequisite: Consent of instructor after audition.

Training in chorus and solo parts of staged musical shows. Units depend on the hours the part demands. May be repeated for credit.

42 CONDUCTING (CHORAL CONDUCTOR'S WORKSHOP) (1)

Three lecture hours per week for six weeks.

Prerequisite: Conducting experience or consent of the instructor.

Development or review of conducting techniques with special emphasis on the choral literature. Selected problems in score reading and interpretation. Survey of recent publications for school and church choirs.

43 (x) STUDY OF CLASSICAL GUITAR (1)

Three class hours per week plus lab.

Prerequisites: Concurrent enrollment in Music 99 and possession of a guitar.

Techniques of playing the guitar. Group and individual attention. Grades will be determined by jury audition. May be repeated for credit.

44 FINE ARTS FOR CHILDREN (3)

Three lecture hours per week.

Prerequisites: None.

For parents and teacher aides. A study of methods and materials useful in teaching the pre-school and primary grade child understanding and self-expression in art and music. Involves art and folk music, finger painting, clay modeling, and elementary painting and drawing.

49 INDIVIDUAL PROJECTS (1-2)

Hours by arrangement.

Prerequisites: Sophomore standing and permission of Chairman of the Fine Arts Division.

Special projects in such fields as experimental media or tours of world music centers.

51 (x) PIANO TUNING AND TECHNOLOGY (4)

Three lecture hours and three lab hours per week.

Prerequisites: Music 1, 4a and 6, and concurrent enrollment in Physics 9 or consent of instructor.

A career-related course in keyboard temperaments, mechanism and design with practical work in tuning, regulating and repair of pianos.

99 STUDIO HOURS (0)

Hours by arrangement.

Supervised studio hours in connection with Music 11, 24, 25, 26, 36.

Nursing

62 X-RAY (3)

Three hours of lecture and discussion per week.

Prerequisite: Anatomy 62a with a grade of "C" or better.

Nursing 62 is designed to provide the knowledge, skills, and terminology of nursing procedures for the X-ray technologist. Patient care, ethics, and radiological techniques are stressed.

Philosophy

6a GENERAL INTRODUCTION TO PHILOSOPHY (3)

Two lecture and one seminar hour per week.

An introductory consideration of some of the central problems of traditional philosophy: the existence of God; the nature and possibility of knowledge, certitude, evidence and proof; the nature of the good life and moral obligation; the problem of human freedom and deterministic causality; the relation of the individual to society and the State, their respective rights and obligations. (Emphasis is placed not merely on clearly understanding the positions taken by the various philosophers studied on these issues, but also on the student developing and defending, both in oral and written form, positions of his own.)

6b ADVANCED INTRODUCTION TO PHILOSOPHY (3)

Three hours of lecture per week.

Prerequisite: One other course in philosophy or consent of instructor.

A more advanced introduction to philosophy stressing the various kinds of argument and analysis employed by the great philosophers of the past. Several famous claims from the history of philosophy are analyzed for their logical structure, logical and methodological presuppositions, consistency and relevance within the total philosophy of the particular author: an attempt is made to arrive at developing insight into what constitutes an acceptable methodology in philosophy. (The student will be expected to do a good deal of independent work; some study of logic would be helpful, either before or at the same time as this course.)

12 INTRODUCTION TO SYMBOLIC LOGIC (3)

Three hours lecture/self-study per week.

Prerequisite: English 1a or consent of instructor.

The course divides into three parts: (1) survey of the traditional Aristotelian logic of the categorical statement and syllogism; (2) fairly complete treatment of modern symbolic propositional logic; (3) brief introduction to (first-order) symbolic predicate logic. (If time permits, some discussion of Russell's paradox, Gödel's incompleteness theorem, and the impact of each on the development of 20th century logic, will be introduced.)

20a HISTORY OF PHILOSOPHY: ANCIENT AND MEDIEVAL (3)

Three hours of lecture per week.

A study of Greek philosophy with emphasis on the Pre-Socratics, Socrates, Plato and Aristotle; philosophy of the Roman world, and the development of Christian philosophy in the Middle Ages.

20b HISTORY OF PHILOSOPHY: RENAISSANCE AND MODERN (3)

Three hours of lecture per week.

A study of the thought of the Renaissance and the rise of modern science, of continental rationalism in Descartes, Leibnitz, Spinoza, and of the opposing tradition of British empiricism and the critical philosophy of Kant.

20c HISTORY OF PHILOSOPHY: CONTEMPORARY (3)

Three hours of lecture per week.

This course may be employed by the student as a convenient method of introducing himself to the study of philosophy through the consideration of the thought of men closer to, and hence with more obvious influence on, the present time. A selection will be made from among the multitude of 19th and 20th Century philosophers, illustrating two or three themes or schools of philosophy, their relation to the past and to each other, and their impact on the present world. Various schools that might be chosen for presentation include: Idealism, Existentialism, Marxist Communism, Christian Philosophy, Logical Positivism, Pragmatism, Utilitarianism, Contemporary Analysis. Some of the following philosophers will be studied: Hegel, Fichte, Feuerbach, Engels, Marx, Lenin, Marcuse, Kierkegaard, Nietzsche, Husserl, Heidegger, Sartre, Camus, Bergson, Teilhard de Chardin, Tillich, Barth, Marcel, Mill, Carnap, Frege, Russell, Whitehead, Pierce, James, Austen, Quine, etc.

23 INTRODUCTION TO ETHICS (3)

Three lecture hours per week.

Prerequisite: Philosophy 6a, or English 1a, or consent of instructor.

A study of the traditional theories of the good life and moral obligation and their application to typical problems of individual and social behavior. Theories discussed include: Epicureanism, Stoicism, and Hedonism; the "Nicomachean Ethics" of Aristotle; Augustinianism; theistic approbativism, Kantianism; the consequentialism of John Stuart Mill and other Utilitarians; the intrinsicism of G. E. Moore; Plato's views on the ideal of a just society and Marx's views on the ideal of a classless society; the capitalistic and libertarian views of the ideal society.

24a INTRODUCTION TO RELIGION: RELIGIONS OF THE WORLD (3)

Three hours of lecture per week.

An introductory course in the history and development of the great religions of the world; their cultural background, their basic tenets, their religious practices, their literature and art, and their impact on the society and culture of which they are a part.

24b INTRODUCTION TO RELIGION:

PHILOSOPHY OF RELIGION (3)

Three hours of lecture per week.

An investigation of the questions, relating to the existence of God, including appeals to rational arguments, revelation, miracles, authority, faith, mystical experience; the nature of God and the problem of evil; the relationship between religion and moral convictions, and between religion and science; the problem of immortality.

28 INTRODUCTION TO THE PHILOSOPHY OF SCIENCE (3)

Three lecture hours per week.

Prerequisite: One course in philosophy and/or Science or mathematics, or permission of instructor.

An elementary treatment of the structure and orientation of the positive sciences; the role of observation and laws, inductive and deductive evidence, hypothesis and theory, in the logical structure and historical development of the sciences; the mathematicization of science. Typically the sciences considered would include mathematics, physics, either biology or psychology and one other (e.g. economics, anthropology, cosmology, etc.)

35 ASIAN PHILOSOPHY (3)

Three lecture hours per week.

Prerequisite: Philosophy 6a, 24a, or History 9a or 9b strongly recommended.

An introductory course in the philosophical development in the major Asian countries—India, China and Japan. A comparison of the philosophical developments among these countries will be the central theme of the course. An analysis will also be made of the religious element within these philosophical systems and their impact on surrounding countries.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in philosophy and the consent of the instructor and the Social Science Division Chairman.

Specified individual study of directed research in specific problem areas.

Physical Education (Men)

The Department of Physical Education for Men at Cañada College operates under the State Law of California, which requires each regularly registered student to participate in Physical Education activities. In accordance with the provisions of the School Code, all men students, except those excused by the Physical Education Division, are required to attend the regularly organized courses in Physical Education **for not less than two hours each week** that the college is in session.

Department Requirements: Students registered in a Physical Education activity class who claim exemption from physical education by reason of physical disability must present statements signed by a physician. The Physical Education class must be attended until the disability is verified and the student is given specific instructions by the Physical Education Division.

A student may elect more than one Physical Education general service class following approval by the Division Chairman. A student must be enrolled in and pass a course in Physical Education each semester until graduation unless appropriately excused.

Students will have the choice of selecting their classes from a variety in individual sports, team sports, aquatics, gymnastics, rhythmic, dance, combatives and conditioning.

It is possible to repeat a specific class providing permission of the Physical Education Division is obtained. Students must understand that some four-year institutions may not grant transfer credit in the case of physical education classes which are repeated.

Enrollment on a varsity athletic team will satisfy the physical education requirement.

VARSITY SPORTS

These courses are designed for those students who desire to compete in intercollegiate athletics and may be limited to those who present the necessary qualifications. The passing of medical and physical examinations and the consent of the coach are necessary before actual participation is started. Varsity awards are granted for all sports.

5 VARSITY BASKETBALL (2)

Prerequisite: Permission of the coach.

Intercollegiate varsity basketball competition in the Camino Norte Conference and participation in regional tournaments. Daily practices October 15 to March 15.

6 VARSITY WRESTLING (2)

Prerequisite: Permission of the coach.

Intercollegiate competition in dual matches in the Camino Norte Conference; competition in several regional wrestling tournaments each year including the Camino Norte Conference Meet, the Northern California Meet and the State J.C. Championships. Daily practices October 15 to March 15.

7 VARSITY SOCCER (2)

Prerequisite: Permission of the coach.

Intercollegiate competition with four-year institutions and junior colleges in Northern California. League competition in the Western Junior College Soccer Conference. Daily practices from September to December.

8 VARSITY BASEBALL (2)

Prerequisite: Permission of the coach.

Intercollegiate competition in the Camino Norte Conference and participation in regional tournaments, Northern California playoffs and the State J.C. Championships when qualified. Daily practices February to May.

9 VARSITY CROSS COUNTRY (2)

Prerequisite: Permission of the coach.

Intercollegiate competition in the Camino Norte Conference and participation in dual meets, triangulars, invitationals, league meet, and Northern California and State Championships as qualified. Daily practice, September to December.

10 VARSITY TENNIS (2)

Prerequisite: Permission of the instructor.

Intercollegiate competition in the Camino Norte Conference and participation in dual matches, invitationals, league meet, Northern California and State Championships as qualified. Daily practice, February to May.

INTRAMURALS

Supervised intramural sports are scheduled throughout the semester, beginning with the third week. Primary hours are from 11:00 A.M. to 12 Noon on Tuesdays and Thursdays. Additional intramural hours may be established as needed for play-offs and make-up contests. Students should consult the Intramural Bulletin Board in the Physical Education building for detailed information concerning activities, days and hours, sign-up instructions, rules and procedures.

As students interest determines the need, intramural programs will be conducted in three and five man basketball, table tennis, badminton, bicycling, soccer, weight lifting, softball, bowling, volleyball, tennis, and flag football.

Physical Education General Service Classes (Men)

COMBATIVES

1 ELEMENTARY WRESTLING (1)

Two hours per week.

Prerequisite: Enrollees must be beginners in wrestling activity.

Designed to introduce the student to intercollegiate wrestling through instruction in the rules, scoring system, and skills. Fundamental stances, take downs, escapes, reversals, breakdowns, rides and pinning combinations. After learning these skills, the student will be able to apply them in short periods of wrestling.

1 ELEMENTARY JUDO (1)

Two hours per week.

Prerequisite: Enrollees must be beginners in judo activity.

An elementary course in judo for the beginning student. Consideration is given to the rules, procedures, techniques of falling, unbalancing, throwing, and combinations of techniques as related to physical development. The emphasis of this class is on judo as a sport.

CONDITIONING

1 ROPE ACTIVITIES (1)

Two hours per week.

This class is designed to offer techniques related to vertical rope climbing, rope skipping, and peg board work. The major emphasis of this class is placed on the development of shoulder girdle structure and the improvement of cardio-respiratory endurance. Students skip rope for speed and techniques. Seventeen vertical rope climbing skills are taught in progressive order. Nine peg boards are utilized for the development of strength as related to hands, wrists, forearms, and legs. Detailed evaluations procedures are followed. Emphasis is placed on the explanation and development of safety procedures.

1 FITNESS ACTIVITIES (1)

Two hours per week.

For the student who desires a course in vigorous activity of a "conditioning" nature. Tests are given regularly relating to motor fitness, speed, balance, strength, endurance, flexibility, and power. Considerable running activity is included. Emphasis is placed on the development of cardio-respiratory improvement. Several college fitness batteries are utilized. Team games are utilized to develop stamina.

1 EXERCISE APPRECIATION (1)

Two hours per week.

A basic conditioning course, which presents a life-long program in exercise appreciation for the promotion and maintenance of one's health. Progressive exercise plans are offered for strength, endurance, flexibility, coordination, balance and agility. Students are expected to reach a level of fitness and to develop the necessary self-discipline to maintain this level. To perform more efficiently with less expenditure of energy and to "push-back" the aging processes are primary objectives of the course.

1 ISOMETRICS AND ISOTONICS (1)

Two hours per week.

Instruction in, and conditioning through, basic isometric exercises and running activities. The isometric concept is achieved through basic isometric exercise conducted on a partner basis as well as with the "Exer-genic." Running activities are conducted at each class meeting for the inclusion of cardio-respiratory values.

INDIVIDUAL SPORTS

1 ELEMENTARY WEIGHT CONDITIONING (1)

Two hours per week.

Prerequisite: Enrollees must be beginners in weight conditioning work

A basic course in the elementary lifts and procedures of weight training. Emphasis is placed upon proper form and techniques, safety procedures, and strength values of beginning work in weight lifting. Bar-bells, dumb-bells, and associated equipment are combined with regular running activity.

1 INTERMEDIATE/ADVANCED WEIGHT CONDITIONING (1)

Three hours per week.

Prerequisite: Successful completion of Elementary Weight Conditioning or permission of the instructor.

Progressive skills and weight development in various weight conditioning exercises. Opportunities will be granted to specialize in different areas of the body. The development of individual programs will be encouraged.

1 ELEMENTARY BADMINTON (1)

Two hours per week.

The rules and strategies of badminton as well as the fundamentals of grip strokes, footwork and court coverage through drills and competition; testing program in the various skills and techniques are taught; tournaments in singles and doubles are held.

1 GYMNASTICS (1)

Two hours per week.

For beginning students in gymnastic activity.

Elementary concepts of gymnastic activities for beginning students; includes trampolining, side horse, long horse, horizontal bar, parallel bars, pyramid building and tumbling.

1 INTERVAL-CIRCUIT TRAINING (1)

Two hours per week.

A combination of vigorous weight training activities combined with endurance, agility and cardio-vascular exercises which are conducted on a circuit course basis. One class hour each week will be devoted to weight training and the second class hour will cover improvement in flexibility, strength, and cardio-vascular aspects. Particular emphasis is placed on self-improvement. Evaluation programs include tests for sit-ups, push-ups, standing broad jump, step tests, and a 300 yard shuttle run.

TEAM SPORTS

1 ELEMENTARY BASKETBALL (1)

Two hours per week.

Prerequisites: Enrollees must be beginners in basketball activity. Students who have participated on high school interscholastic teams will not be admitted.

Instruction in the fundamental skills of basketball play, such as dribbling, passing, shooting, team offense and defense. Knowledge of the playing rules as well as game strategies, will be taught. Evaluation will be conducted through written and practical examinations on rules and on all skills taught. Round robin schedules are conducted during the last half of the semester.

1 ADVANCED BASKETBALL (1)

Two hours per week.

Prerequisites: Successful completion of Elementary Basketball with approval of the instructor; participation on high school basketball teams of J.V. or varsity level.

Advanced instruction in basketball play. Advanced aspects of team offense and defense will be taught. Emphasis will be placed on team play through the medium of round robin schedules and tournaments. Evaluation will be conducted through written and practical examinations on rules and skills taught.

1 ELEMENTARY SOFTBALL (1)

Two hours per week.

Prerequisite: Enrollees must be beginners in softball play.

Fundamentals and play situations of softball are offered. Students participate in game situations and round-robin play. A testing program is included on all rules and skills taught. Regulation "fast-pitch," "lob ball" and "16 inch" play is included.

1 ELEMENTARY SOCCER (1)

Three hours per week.

Prerequisite: For beginning students in soccer only.

Basic fundamentals of individual play such as dribbling, heading, shooting, trapping, passing and defensive tactics; participation in game situations and round-robin play; testing program in all soccer skills and rules.

1 ADVANCED SOCCER (1)

Two hours per week.

Prerequisite: Successful completion of Elementary Soccer or permission of the instructor.

Advanced aspects of team play in soccer; extension of elementary skills of play in dribbling, trapping, heading, offensive and defensive tactics; considerable team play is offered.

1 ELEMENTARY VOLLEYBALL (1)

Two hours per week.

Prerequisite: Enrollees must be beginners in volleyball play.

Instruction in the fundamentals of serving, passing, setting, and spiking; team competition under national and international rules of play; testing program in all skills taught and in knowledge of rules.

Physical Education Competencies

**20a-20b-20c-20d PHYSICAL EDUCATION
COMPETENCIES (Women) (2)**

**30a-30b-30c-30d PHYSICAL EDUCATION
COMPETENCIES (Men) (2)**

**50a-50b-50c-50d PHYSICAL EDUCATION
COMPETENCIES (Co-Ed) (2)**

Prerequisites: Enrollees should be major or minor students in either Physical Education or Recreation Education. This course replaces the need of a general service class in physical education and satisfies the graduation and transfer requirement in physical education.

A series of planned activities designed to assist students who are majoring or minoring in Physical Education or Recreation Education to attain the skill level necessary to pass the upper division competency requirements of the four year colleges and universities. Emphasis is placed on the development and improvement of the individual's own skills to perform selected activities. Activities include dance, gymnastics, individual sports, combatives, conditioning activities and team sports. One of this class series is offered each semester for four semesters. The class meets six hours each week.

41m THEORY OF SPORTS OFFICIATING (2)

(Not a general service activity class.)

One hour of lecture per week with two hours of laboratory experience in general service classes or intramural activities. Enrollees must be available for all hours listed for class meetings. For major and minor students in Physical Education and Recreation Education, and does not satisfy the general service class requirement.

Knowledge of rules, techniques and current practices associated with officiating in football, basketball, softball, baseball, wrestling, soccer, aquatics and track and field. Students participate in a laboratory experience officiating in these activities as conducted in the college instructional and intramural programs.

Courses: Physical Education - Men (cont.) to Co-Ed 173

40 THE NATURE AND SCOPE OF PHYSICAL EDUCATION (2)

Two lecture hours per week with assigned laboratory meetings. For major and minor students in Physical Education and Recreation Education.

(Not an activity class.)

A parallel course to Introduction to Physical Education which is offered in the four year institutions. This course represents a detailed treatment of academic and professional requirements for physical education preparation, development of aims, objectives and philosophies. Consideration is given to the history of Physical Education as it relates to current developments and programs. Students are required to prepare a term paper, participate in panel discussions, symposiums, laboratory and field experiences.

42 SPORT IN CONTEMPORARY SOCIETY (2)

Two lecture hours per week.

The incidence, form and regulation of sport and physical activity in contemporary society.

Physical Education (Co-Ed)

2 ADAPTIVE ACTIVITIES (1)

Two hours per week.

Prerequisite: Physician's recommendation or assignment by the College nurse, Division Chairman or by an instructor.

This course is geared to the individual needs of each student. Sections of instruction are related to recreational sports of limited activity, to isometric and isotonic programs, and to remedial and rehabilitative concepts. Corrective programs are available. Consultation with physicians precedes the development of each student's program of activity.

2 ELEMENTARY ARCHERY (1)

Two hours per week.

For beginning archers. Deals primarily with the fundamentals of target archery. Individual and team competition is used in the Junior Columbia Round, Columbia Round and clout shooting. Also included is the basic understanding of rules, scoring, terminology, and care and selection of arching equipment.

2 ELEMENTARY BADMINTON (1)

Two hours per week.

The rules and strategies of badminton as well as the fundamentals of grip, strokes, footwork and court coverage through drills and competition; testing program in the various skills and techniques taught; tournaments in singles and doubles are held within the class period.

2 ELEMENTARY FOLK DANCE (1)

Two hours per week.

Dance fundamentals and basic skills associated with beginning folk dance activity. Representative dances of many countries are offered. Emphasis is placed on the basic steps and appropriate rhythmical responses.

2 INTERMEDIATE FOLK DANCE (1)

Two hours per week.

Prerequisite: Elementary Folk Dance or permission of instructor.

Review of folk dance fundamentals and basic skills; introduction of approximately 30 intermediate dances. Representative dances of many countries, including Spain and Mexico, are presented.

2 MODERN JAZZ (1)

Two hours per week.

Prerequisite: Elementary Modern Dance or permission of instructor.

Elementary jazz techniques, foot and leg development, isolation of body parts and a rhythmic appreciation of jazz musicians and music. Solo and group improvisations to selected music will be included.

2 ELEMENTARY MODERN DANCE (1)

Two hours per week.

Basic dance techniques; ballet movement for proper body alignment, balance, flexibility and rhythmic coordination. Small group improvisations discovering new sources of movement will be included.

2 INTERMEDIATE AND ADVANCED MODERN DANCE (1)

Two lab hours per week.

Prerequisite: Successful completion of Elementary Co-ed Modern Dance, or permission of instructor.

A continuing study of dance experiences with emphasis on movement technique and the elements of composition.

2 ADVANCED MODERN DANCE (1)

Four lab hours per week.

Prerequisite: Successful completion of Co-ed Intermediate and Advanced Modern Dance, or permission of instructor.

A synthesis of previous dance experience. Advanced modern technique, group improvisations and repertory experience.

2 ELEMENTARY BALLET/MODERN DANCE (1)

Two hours per week.

Beginning techniques of both ballet and modern dance are studied and executed. Movement skills, rhythmic structure

of dance, qualities of movement, spatial design and an appreciation of dance are presented. The modern ballet and modern dance styles are emphasized in the creation of individual compositions.

2 ELEMENTARY FOLK DANCE (1)

Two hours per week.

Folk and square dance fundamentals, basic steps (two-step, polka, schottische, waltz and mazurka) and the development of a correct rhythmical response. Representative dances of many countries are presented.

2 ELEMENTARY JAZZ/MODERN DANCE (1)

Two hours per week.

Beginning techniques of modern dance are studied and executed. However, the expression and suggestion of slow and fast jazz and the inner expression of modern dance are emphasized. Movement skills, rhythmic structure of dance, qualities of movement, spatial design and an appreciation of jazz and modern dance are presented. Jazz and modern dance styles are emphasized in the creation of individual compositions.

2 ELEMENTARY SOCIAL DANCE (Ballroom) (1)

Two hours per week.

Social dance fundamentals and basic steps: waltz, tango, cha cha, samba, rhumba, fox-trot and fad (novelty) dances of today. The etiquette of social dance is emphasized and stress is placed on the individual's development of rhythmical response.

2 TRAMPOLINE (1)

Two hours per week.

Trampoline activity for elementary, intermediate and advanced students. Safety skills and fundamental processes of trampolining are taught in the following phases: Phase I—Fundamental bounces, checks, drops, simple combinations, turns, twists and somersaults. Phase II—Continuance of the activities of Phase I plus combinations of front and back somersaults and other intermediate movements. Phase III—The development of techniques in twisting somersaults, advanced routines, trick skills and team bouncing.

2 TUMBLING (1)

Two hours per week.

A course in tumbling skills ranging from the beginning level to advanced techniques. Activity is conducted in pyramid building, doubles and group tumbling. Flexibility stunts, agility stunts, balance activities, strength skills and the development of individual routines make up the course offerings.

2 INTERMEDIATE/ADVANCED JUDO (1)

Two hours per week.

Prerequisite: Successful completion of Elementary Judo at Cañada College or permission of the instructor.

An intermediate and advanced exposure to sport judo and self-defense; special emphasis on advanced conditioning, falling to both sides, refinement of throws, countering and selected new throws and drops.

2 ELEMENTARY BOWLING (1)

Two hours per week.

A course for beginning students in bowling. Learning opportunities will be provided in the stance, approach, release and roll. Participation in a league bowling situation will be required. A working knowledge of bowling rules, scoring and etiquette will be required. Interested students should investigate bowling costs before enrolling.

2 INTERMEDIATE-ADVANCED BOWLING (1)

Two hours per week.

Prerequisite: Women must have at least 110 average; men, at least 140 average.

Participation in advanced league bowling competition; individual scoring statistics are maintained. Approximate cost, \$15 per semester.

2 LIFE SAVING (1)

Two hours per week.

Prerequisites: The ability to swim 440 yards continuously, demonstrating the crawl, side stroke and breast stroke; standing front dive; surface dive to six-foot depth and swim two body lengths under water; floating.

Progressive skill development in take-offs, approaches, carries, defensive mechanisms, shallow water carries, water safety knowledge and artificial respiration.

2 WATER SAFETY INSTRUCTION (1)

Two hours per week.

Prerequisite: Current American Red Cross Senior Life Saving Certificate.

Phase I: Development of effective performance in the nine basic swimming strokes and the various life saving and water safety skills. Phase II: Teaching techniques, methods and knowledge necessary to teach American Red Cross swimming and life saving courses.

2 BASIC METHODS AND TECHNIQUES OF SKIN AND SCUBA DIVING (2)

Two activity hours per week plus out-of-class assignments.

Prerequisite: Student must pass instructor's water skills test the first activity class meeting, or hold a current Senior Red Cross Life Saving card or a Water Instructor's card.

Demonstration and practice of skills necessary to become proficient in skin and scuba diving activities and in the

proper utilization of scuba gear and its various periphery equipment. Thorough familiarization with those aspects of physics, physiology and mechanics directly related to a basic competency in skin and scuba diving. A basic study of the ocean environment and marine life from the safety, aesthetic and scientific viewpoints.

2 ELEMENTARY GOLF (1)

Prerequisite: Only beginning golfers will be enrolled.

Elementary instruction concerning the techniques, rules, etiquette and philosophy for the beginning golfer. Stance, grip, position, swing and follow-through as associated with selected irons and woods. Most sessions will be held on campus, although some activity is scheduled for local courses and driving ranges.

2 INTERMEDIATE/ADVANCED GOLF (1)

Two hours per week.

Prerequisite: Permission of the instructor.

An extension of the fundamentals learned in Elementary Golf; considerable emphasis is placed on the competitive aspects of golf; tournament play is a major part of the course; most sessions are conducted at the Emerald Hills golf course, putting greens, driving ranges, pitch-and-putt areas also utilized.

2 ELEMENTARY VOLLEYBALL (1)

Two hours per week.

Skills involving the serve, volley, dig, smash and hit will be taught and practiced. Proper rotation, rules and team play will be stressed. National volleyball rules of play will be strictly enforced. An evaluation program in all skills will be conducted. Tournament play will be conducted on a round-robin basis.

2 TABLE TENNIS (1)

Two lab hours per week.

Prerequisite: Enrollees must be beginners.

Elementary to intermediate techniques in table tennis play. Students will receive instruction in the skills involving all aspects of play, such as strokes, serving, offensive and defensive aspects, and singles and doubles play. Considerable attention will be given to rules, formats and etiquette.

2 ELEMENTARY BICYCLING (1)

Four lab hours per week.

Prerequisite: Enrollees must be beginners.

Beginning concepts of bicycling. Students will receive instruction in the operation of bicycles, safety concepts, and will participate in cycling programs that involve controlled conditions. Activities conducted on various types of terrain will be geared to the individual potential.

2 ELEMENTARY ICE SKATING (1)

Two hours per week.

Prerequisite: Enrollees must be beginners.

Instruction will be provided for all basic movements in ability groups labeled "Alpha" (elementary), "Beta" (intermediate) and "Gamma" (advanced elementary). Attention will be given to skating in pairs, groups, and in figure concepts. Conditioning and basic techniques conducive to maximum safety will be offered. The course will be taught off campus. Students will be required to pay a small fee for use of skates.

Physical Education (Women)

The Department of Physical Education for Women at Cañada College operates under the State Law of California, which requires each regularly registered student to participate in Physical Education activities. In accordance with the provisions of the School Code, all women students, except those excused by the Physical Education Division, are required to attend the regularly organized courses in Physical Education for not less than two hours each week that the college is in session.

Department Requirements: Students registered in a Physical Education activity class who claim exemption from Physical Education by reason of physical disability must present statements signed by a physician. The Physical Education class must be attended until the disability is verified and the student is given specific instructions by the Physical Education Division.

A student may elect more than one Physical Education general service class, following approval by the Division Chairman. A student must be enrolled in and pass a course in Physical Education each semester until graduation unless appropriately excused.

INTRAMURALS

Supervised intramural sports are scheduled throughout the semester, beginning with the third week. Primary hours are from 11:00 A.M. to 12 Noon on Tuesdays and Thursdays. Additional intramural hours may be established as needed for play-offs, make-up games or to coordinate with off-campus facilities. Students should consult the Intramural Bulletin Board in the Physical Education building for detailed information concerning activities, days and hours, sign-up instructions, rules and procedures.

As student interest determines the need, intramural programs will be conducted in basketball, volleyball, badminton, table tennis, tennis, bicycling, softball, and bowling.

41aW-41bW THEORY OF SPORTS OFFICIATING (1-1)

(Not a general service activity class.)

One hour of lecture per week with two hours of lab experience in general service classes or intramural activities. Enrollees must be available for all hours listed for class meetings. For major and minor students in Physical Education and Recreation Education. This class does not satisfy the general service class requirement.

Knowledge of rules, techniques and current practices associated with officiating in field hockey, softball, volleyball, basketball, soccer, speed ball, speed-a-way and others. Students participate in a lab experience, officiating in these activities as conducted in the college instructional and intramural programs.

1 BODY MECHANICS (1)

Instruction designed to assist the individual in moving efficiently, aesthetically and with a feeling of well being. Through a better understanding of the body functions, the individual will be able to develop a personal fitness for his needs. Emphasis will be on body functions, knowledge, fitness, exercise and charm.

1 FITNESS ACTIVITIES (1)

Two hours per week.

This class is designed to allow the student to comprehend and put into practice the necessary ingredients of movement to develop or improve physical fitness. Exercises range from mild to vigorous. Programs for the evaluation of individual fitness are developed. Endurance activities are stressed. Emphasis is placed on the development of understandings related to the needs and benefits of regular and continuing exercise.

1 ELEMENTARY JUDO (1)

Two hours per week.

Consideration is given to the rules, procedures, techniques of falling, unbalancing, throwing techniques and combination techniques as related to physical development. The emphasis of this course is on the development of a proper level of physical conditioning and on Judo as a sport. Self-defense will not be a primary concern.

1 RHYTHMIC GYMNASTICS (1)

Two hours per week.

Use of hand apparatus: balls, hoops, ropes, ribbons and Indian clubs. General body conditioning exercises, elementary tumbling and dance movements.

1 GYMNASTICS (1)

Two hours per week.

Use of the following apparatus: balance beam, uneven parallel bars, vaulting, tumbling and floor exercises. The elements of judging and actual participation in the D.G.W.S. College meets will be included.

TEAM SPORTS

1 BASKETBALL/VOLLEYBALL (1)

Two hours per week.

Eighteen weeks of activity in the elementary concepts of both basketball and volleyball will be offered. Basic skills, strategy, theory and practice in basketball is included. Skills include dribbling, shooting, guarding and passing. Basketball theory offers use and practice of team play and strategy. Volleyball units include explanation and practice of the volley, set, serve, dig and smash. Proper rotation, execution of rules and team play will be stressed. A tournament will conclude the semester activity.

1 ELEMENTARY VOLLEYBALL (1)

Two hours per week.

An elementary course in volleyball play. Skills involving the serve, dig, smash and hit will be taught and practiced. Proper rotation, rules and team play will be stressed. National volleyball rules of play will be strictly enforced. An evaluation program in all skills will be conducted. Tournament play will be conducted on a round-robin basis.

1 FIELD SPORTS (1)

Class may elect to cover three or more of the following sports: softball, soccer, field hockey, speedball, speed-away and flagball. Instruction in basic skills, rules and strategies of each selected sport will be taught. Round-robin competition will be conducted.

Physical Education Competencies

20a-20b-20c-20d PHYSICAL EDUCATION COMPETENCIES (Women) (2)

Prerequisite: Enrollees should be major or minor students in either Physical Education or Recreation Education. This course replaces the need of a general service class in Physical Education and satisfies the graduation and transfer requirement in Physical Education.

A series of planned activities designed to assist students who are majoring or minoring in Physical Education or Recreation Education to attain the skill level necessary to pass the upper division competency requirements of the four-year colleges and universities. Emphasis is placed on the development and improvement of the individual's own skills to perform selected activities. Activities include dance, gymnastics, individual sports, conditioning activities and team sports. One of this class series is offered each semester for four semesters. The class meets five hours each week.

Physical Science

10 INTRODUCTION TO THE PHYSICAL SCIENCES (3)

The basic physical laws of nature as described by the sciences of physics, astronomy and chemistry. Many topics of interest to prospective school teachers are included. (This course meets the general education requirements for physical science at many colleges and universities.)

Physics

2a-2b GENERAL PHYSICS LECTURE AND LABORATORY (4-4)

Three lecture hours, one recitation hour and one two-hour lab per week.

Prerequisites: Elementary algebra and plane geometry. Trigonometry is strongly recommended. Physics 2a is a prerequisite for Physics 2b.

Lectures with experimental demonstrations and laboratory experiments covering mechanics, heat and sound in the first semester, and magnetism, electricity, light and modern developments in the second semester. (Designed for students majoring in some field of letters and science; required for those planning to enter medicine, dentistry, pharmacy, optometry, agriculture or forestry.)

4a-4b-4c GENERAL PHYSICS (4-4-4)

Three lecture hours, one recitation hour and one two-hour lab period per week.

Prerequisites: 4a—Mathematics 30 and concurrent registration in Mathematics 31; 4b or 4c—Physics 4a, Mathematics 31 and completion of or concurrent registration in Mathematics 32.

4a—Mechanics, wave motion and special relativity.

4b—Electricity and magnetism.

4c—Heat, light and modern physics. These courses constitute a three-semester program designed to give the student majoring in engineering, physics or chemistry a thorough foundation in the fundamentals of physics.

9 PHYSICS OF SOUND AND MUSIC (3)

Two lecture hours per week, three lab hours per week.

Prerequisite: None; high school algebra suggested.

Lectures with experimental demonstrations, emphasizing the nature of sound, music and related wave phenomena. A weekly laboratory period studying musical instruments, overtones, resonance, pitch and recording techniques. This course is planned for, but not restricted to, Music majors.

10 INTRODUCTION TO DESCRIPTIVE PHYSICS (3)

Three lecture hours per week.

Prerequisite: The equivalent of at least one semester of high school mathematics.

A description with experimental demonstrations of the more important phenomena of physics. This course is open to all students except those who have had, or are taking Physics 2a or 4a. (This course meets the general education requirements for physical science at most colleges and universities.)

62 PHYSICS FOR X-RAY TECHNOLOGISTS (4)

Four lecture hours per week.

Prerequisite: High school algebra and geometry; high school science.

This specialized course will consider ideas of energy, electricity and electromagnetic waves as related to X-Ray phenomena, including interaction with matter. X-Ray circuits and equipment also will be studied. (Intended for students pursuing careers as X-Ray technologists.)

Physiology

1 INTRODUCTORY PHYSIOLOGY (5)

Three lecture hours and two three-hour lab periods per week.

Prerequisites: One course selected from Biology I, Anatomy I, Zoology I. A knowledge of elementary chemistry and physics is recommended.

A course designed to familiarize the student with the functions of the organs and systems of the human body. This course is for students of Nursing, Physiotherapy, Physical Education, Psychology and other related fields.

Police Science

9 INTRODUCTION TO LAW ENFORCEMENT (3)

Three lecture hours per week.

An orientation to the Police Science program as well as law enforcement as a profession and means of livelihood. This includes history and philosophy of law enforcement on the local, state and national levels. The employment opportunities and general requirements of the various law enforcement agencies. The problems facing law enforcement and the over-all crime picture in the United States. The general crime trends and crime rate for various sections of the country with special emphasis on California crime.

47 INTERNSHIP COOPERATIVE EDUCATION (2)

Six hours per week—one hour classroom and five hours to be arranged.

Prerequisites: Sophomore standing; Police Science major and consent of instructor.

50 PATROL PROCEDURES AND REPORT WRITING (3)

Three lecture hours per week.

Prerequisite: Police Science 9 or concurrent registration in same.

Methods, techniques and responsibilities of the patrol unit. Beat patrol and observation, police hazards and how to handle them. Includes the methods of writing police reports, what material is important, what purpose the different reports will fill. Various types of files and their uses.

51a-51b CRIMINAL INVESTIGATION (3-3)

Three lecture hours per week.

Prerequisites: Sophomore standing; Police Science 9, 52 or 55, or consent of instructor.

Rudiments of criminal investigation; crime scene search; collection, preservation and identification of physical evidence; scientific aids; sources of information; interrogation of victims, witnesses and suspects; cooperation with related agencies; case preparation and follow-up work.

52 CRIMINAL LAW (3)

(May also be taken as Social Sciences 52)

Three lecture hours per week.

Prerequisite: Police Science 9, or consent of instructor.

Reason for criminal laws, their source and function in our society. The structure, definitions and most frequently used sections of the California Penal Code. Classification of crimes, nature of crimes, intent involved in the commission of an offense, attempts, conspiracy and criminal responsibility.

55 CRIMINAL EVIDENCE (3)

Three lecture hours per week.

Prerequisites: Police Science 9 and 52, or concurrent registration in Police Science 52.

Definition of evidence from the California point of view; a brief overview of the federal point of view concerning evidence. Admissibility of evidence in criminal court cases; materiality and competency of evidence. Distinction between admissions and confessions; the exceptions to the hearsay rule; types of evidence.

60 TRAFFIC CONTROL (3)

Three lecture hours per week.

Prerequisite: Police Science 9 or concurrent registration in same.

Laws relating to the registration of a vehicle; drivers' license laws; Vehicle Code sections most often encountered and violated; regulation and traffic control; traffic accident investigation; traffic accident report forms, types and uses.

71 POLICE ORGANIZATION AND ADMINISTRATION (2)

Two lecture hours per week.

Prerequisites: Sophomore standing; Police Science major.

The various functions of the police organization. The chain of command, span of control, functional supervision, unity of command and the purpose of the police organization.

100 POLICE MANAGEMENT (3)

Three lecture hours per week.

Prerequisite: Employment in law enforcement.

A course in management for police officers. Concepts and practices of management as well as methods for evaluating effective management. The course will cover (1) fundamentals of administration, (2) directing and coordinating human resources, and (3) communication problems and skill development among people.

Political Science

1 INTRODUCTION TO POLITICAL SCIENCE (3)

Three lecture-discussion hours per week.

Examination of the nature of politics, basic forms of government and the theories of democracy, communism, fascism and other political ideologies. Analysis of contemporary political problems, domestic and international. Varieties of citizen participation, voting behavior, pressure group and political party activity will be considered.

2 CONTEMPORARY FOREIGN GOVERNMENTS (3)

Three lecture-discussion hours per week.

The historical development and contemporary politics of significant foreign governments. Analysis and comparison of major forces and trends in Great Britain, France, Germany, the Soviet Union, Japan, and several new non-Western states.

3 INTERNATIONAL RELATIONS (3)

Three lecture-discussion hours per week.

This course examines the nature of relations among states and provides an analysis of the basic forces affecting the formulation of foreign policy and the dynamics of international politics. The evolution and operation of the United Nations Organization is a major topic of study.

5 INTRODUCTION TO POLITICAL THEORY (3)

Three lecture hours per week.

Prerequisite: Successful completion of at least 12 semester units of college work.

A study of classical and modern political thought designed to develop student understanding of various theoretical approaches to politics, basic political problems and proposed solutions to these problems.

7 SURVEY OF CONSTITUTIONAL PRINCIPLES (3)

Three lecture hours per week.

Prerequisite: History 5 is strongly recommended.

A survey of American Constitutional development and analysis of the issues and problems considered by the U.S. Supreme Court particularly in the area of civil liberties and civil rights; the rights of racial, political and religious minorities and of criminal defendants; the concepts of due process and equal protection of the laws; the interaction of the Supreme Court with the President, Congress, political parties and interest group.

21 AMERICAN GOVERNMENT (3)

Three lecture-discussion hours per week.

The course includes a thorough study of the Constitution, a survey of the organization and functions of the branches of the federal government and an examination of the dynamics of the American political process.

23 CALIFORNIA STATE AND LOCAL GOVERNMENT (2)

Two lecture-discussion hours per week.

Designed to acquaint the student with the institutions and problems of state and local government in California. Major emphasis is placed upon the study of state institutions.

24 CALIFORNIA URBAN GOVERNMENT (2)

Two lecture hours per week.

A survey of the principal problems of urban and metropolitan communities with emphasis on the major issues of decision-making and administrative organization in California. This course fulfills the California institutions requirements.

25 NATIONAL, STATE AND LOCAL GOVERNMENT (5)

Five lecture-discussion hours per week.

An introduction to the principles and problems of American government at the national, state and local levels. Intergovernmental relationships are examined from a functional point of view. Major areas of emphasis are American federalism, judicial review, the political process in nation and state, civil liberties, foreign policy and the role of the citizen at all levels of government. (This one-semester course satisfies both the American institutions and the California institutions requirements.) Not open to students who have had Political Science 21, 23, or 24.

27 AMERICAN SOCIETY (5)

Five lecture-discussion hours per week.

Prerequisite: Strictly limited to foreign students or recent immigrants.

An orientation course in American society and culture. It encompasses social, political and economic institutions as well as history. There will be particular attention given to aspects of American life and historical development that are unique—ethnic history, patterns of voluntary association, political and non-political, educational trends, in addition to some of our cultural characteristics. (This course meets the American institutions and California institutions requirements.)

28 SCHOOL GOVERNANCE (2)

Two lecture hours per week.

Surveys the operation of the higher education system of governance in California with special emphasis on the Community College as a social institution, its current problems, role of school personnel, relations to other social and political agencies, legal and fiscal aspects of higher education, styles and functions of administration, the political process affecting education, basic types of democratic governance structures and student characteristics especially as related to curriculum. This course is especially designed for student body officers, students serving on committees, and others interested in student government, and is designed to fulfill the California Institutions requirement.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in Political Science and consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Psychology

1a GENERAL PSYCHOLOGY (3)

Three hours of lecture per week.

An introduction to psychology, including such topics as motivation of behavior, emotion, learning and thinking, the basis of observation and the methods of measuring individual differences. Emphasis is placed upon experimental evidence.

1b EXPERIMENTAL PSYCHOLOGY (3)

Three lecture hours per week.

Prerequisite: Psychology 1a or consent of instructor.

Emphasizes the philosophy and aims of scientific inquiry and how it can be applied to answer questions in psychology. Students will carry out demonstration experiments to familiarize themselves with the methods discussed. (Recommended for Psychology majors.)

4 COURTSHIP, MARRIAGE AND THE FAMILY (3)

Three hours of lecture per week.

The history and development of marriage; dating; courtship; personality adjustment in marriage; parenthood; the problem of divorce; mate-selection; love; the family; anatomic, physiologic, psychologic and sociologic aspects of sex; children; religious factors; marriage as a social institution.

5 CHILD DEVELOPMENT (3)

Three hours of lecture per week.

Prerequisite: Psychology 1a.

Consideration of social, emotional and intellectual development from the prenatal period through adolescence. Emphasis will be upon factors influencing the developing personality.

6 SOCIAL PSYCHOLOGY (3)

Three hours of lecture per week.

Prerequisite: Psychology 1a or Sociology 1.

A study of human interaction, the effects of social influences on human behavior. Special attention will be given to social pressure and opinion change.

10 PSYCHOLOGY IN PRACTICE (3)

Three hours of lecture per week.

Intended for those who wish a general picture of human psychology who do not want to take further courses in psychology. Emphasis will be on an application of psychological principles to problems of everyday life rather than the technical-scientific approach of Psychology 1a.

**11a EARLY CHILDHOOD EDUCATION:
NURSERY SCHOOL PRINCIPLES AND
PRACTICES (3)**

Three lecture hours per week.

Nature and goals of early childhood education. Evolution and exploration of the various patterns of pre-schools in the United States. Exploration of the philosophic position, personalities and forces guiding the development of these early childhood programs.

**11b EARLY CHILDHOOD EDUCATIONAL
CURRICULUM (3)**

Three lecture hours per week.

Selecting, developing and managing activities for young children. Developing skills in providing adequate and effective education. Exploration of creative activities and growth experiences through art, music, language development, dance and science.

12 CHILD, FAMILY AND COMMUNITY (3)

Three lecture hours per week.

Designed for those who are working with or are concerned with the education and welfare of preschool children. Patterns of family living in a democratic society, and the role and interaction of members; varying factors affecting family life—racial, cultural, economic, social, urban and suburban; home-nursery relationships; community resources—health, welfare, education, counseling, guidance, recreation and religion.

33 PSYCHOLOGY OF ADJUSTMENT (3)

Three hours of lecture per week.

Prerequisite: Psychology 1A or permission of instructor.

The study of the ways people adjust to their environment. Emphasis upon the ways personality develops and changes. Case illustrations and different theories of personality will be presented.

For Psychological Statistics—see Statistics.

47 COOPERATIVE EDUCATION (1-3)

Supervised field experience by arrangement.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in Psychology and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Radiologic Technology

1 INTRODUCTION TO X-RAY TECHNOLOGY

(2) (Credit/No Credit)

Two lecture hours per week.

Prerequisites: Anatomy 62a, Physics 62 with grades of C or better.

Introduction to X-Ray technology. X-Ray technology as part of paramedical services. General orientation to the X-Ray field.

2 RADIOGRAPHIC POSITIONING (6)

(Credit/No Credit)

Five lecture hours and 15 lab hours per week.

Prerequisite: Radiologic Technology 1.

Introduction to radiographic positioning of structures and organs. Osseous and soft tissue radiography.

3 RADIOGRAPHIC EXPOSURE (6)

(Credit/No Credit)

Two lecture hours and 24 lab hours per week.

Prerequisite: Radiologic Technology 2.

Introduction to radiographic exposure, fluoroscopy, techniques, radiographic arithmetic.

4 ADVANCED RADIOGRAPHIC EXPOSURE (6)

(Credit/No Credit)

Three lecture hours and 24 lab hours per week.

Prerequisite: Radiologic Technology 3.

Continuation of Radiologic Technology 3 including pediatric radiography, topographic anatomy, radiologic pathology, film critique.

5a-5b INTERNSHIP (6-6) (Credit/No Credit)

Forty lab hours per week.

Prerequisite: Radiologic Technology 4.

Clinical internship on full-time basis and preparation for registry examination. Course lasts eight months.

Recreation Education

40 INTRODUCTION TO RECREATION (2)

Two lecture hours per week with assigned laboratory meetings. For major and minor students in Physical Education and Recreation Education.

A study of recreation as a profession. The history and principles of recreation are considered and various public and private recreation organizations are examined and observed. The basic philosophies, skills and knowledges necessary for effective leadership and programming are analyzed. Current trends in the field of recreation are studied. Students are required to prepare a term paper, or an approved project, participate in panel discussions, symposiums, laboratory and field experiences.

41 RECREATIONAL LEADERSHIP (3)

One hour of lecture per week with a minimum of three additional hours per week in a field assignment. For major and minor students in Recreation Education.

Prerequisites: Recreation 40 and Physical Education 40, one of which may be taken concurrently with Recreation 41. Recreational Leadership may be taken concurrently with Recreation 42.

Practical supervised experience in San Mateo County area recreation programs for students preparing for recreational leadership positions.

42 CAMPING AND OUTDOOR EDUCATION (2)

Two lecture hours per week.

Prerequisite: Recreation 40 or permission of the instructor.

A combination course in the theory and practice of camping. Attention is given to the leadership qualities for camp counseling, camper's development, and the growth and significance of organized camping. The principles of camping programs are considered and the practical skills in camping practiced. A week-end camping trip is planned as part of the course.

47 COOPERATIVE EDUCATION (1-3)

Supervised field experience by arrangement.

Social Science

1 INTRODUCTION TO THE SOCIAL SCIENCES (3)

Two lecture hours and one discussion hour per week.

An introductory course in the methodology of the social sciences. Using local problems as a basis of study, this course is designed to demonstrate how the resources of political science, anthropology and sociology can be utilized in working out solutions. This course carries California State and Local Government credit.

2 INTRODUCTION TO THE SOCIAL SCIENCES (3)

Three lecture hours per week.

Prerequisite: None; (Social Science 1 preferred).

An introductory course in the methodology of the social sciences. Using international problems as a basis of study, this course is designed to demonstrate how the resources of history, economics and political science can be utilized in working out solutions. (This course carries American History and Institutions credit.)

6 CONSUMER IN THE MARKET PLACE (2)

(also Home Ec. 6)

Two lecture hours per week.

A course designed to help the consumer operate in today's complicated market place. Guidelines for intelligent purchasing. Review of consumer protection services, rights, and responsibilities of the consumer.

10 INTERACTION AND COMMUNICATION FOR THE PARAPROFESSIONAL (3)

Three lecture hours per week.

Prerequisites: None.

This course is designed to develop skills in human interaction, listening and speaking, technical writing, inter-office communications, and preparation of public information data.

11 INTRODUCTION TO SYSTEMS ANALYSIS & DESIGN (3)

Three lecture hours per week.

Prerequisites: None.

This course introduces the student to the general concepts of planning and design. Emphasis is placed on problem solving, research techniques and adaptation to resource limitations on the designer. Experiences are provided in meeting performance specifications in an industrial, business, and/or professional environment.

29 JUVENILE PROCEDURES (3)

Three lecture hours per week.

Prerequisites: Police Science 9, Social Science 40, or Sociology 2, or concurrent registration in same.

The position the public agencies play in juvenile and delinquency control; organization and functions of related juvenile agencies; the laws governing the handling of juvenile offenders and their application; a brief resume of the juvenile court and its jurisdiction.

33 AFRO-AMERICAN CULTURE (3)

Three lecture hours per week.

A contemporary view of Black America. Concerned with the current political and social movements in Black communities with an emphasis on the urban area. The contemporary Black family will be examined, and culture of the contemporary Black community will also be studied in present and historical perspective.

34 MEXICAN-AMERICAN CULTURE (3)

Three lecture hours per week.

A contemporary view of the Mexican-American community covering its cultural heritage, social structure, problems and creative contributions.

35 CHILD IN THE HOME (3)

(also Home Ec. 35)

Three lecture hours per week.

Prerequisite: Completion of or concurrent enrollment in Psychology 1a.

Emotional, social, intellectual, and physical development of children to six. Understanding the young child, the point of view of a child, individual differences, implications for later behavior and personality growth; emerging resources for coping with the world. Observation of a child in depth; participation in a variety of pre-school experiences and evaluative conference with instructor.

36 THE LIFE CYCLE: INDIVIDUALS AND FAMILIES (3) (also Home Ec. 36)

Three lecture hours per week.

Prerequisites: None.

Crisis situations and their affect on family relationships. Research in family community services. Developmental problems and changes in the family structure. Study of family throughout the life cycle. Study of contemporary women and men in society.

38 COMMUNITY RELATIONS OF PUBLIC AGENCIES (3)

Three lecture hours per week.

The role of public agencies in contemporary society with particular emphasis on minority group relations. An examination of the society and the agencies that perform the police and service functions.

40 INTRODUCTION TO SOCIAL SERVICE (3)

Three lecture hours per week.

A course designed to assist students in their decision-making about careers in one of the Social Services and to give students an opportunity to interact with representatives from any social service agencies. A survey of the Social Services, their scope, purposes, problems, and issues. Designed to provide an overview of the many local, state, and federal services.

41 THE COMMUNITY WORKER (2)

Two lecture hours per week.

Prerequisites: Concurrent enrollment in Sociology 47—Cooperative Education (1-3); Social Science 40 or consent of the instructor (acceptable field experience).

Instruction in writing observations, log entries, reports, evaluation, case studies, and other related writing skills; field trips to various local agencies and institutions. Emphasis on the meaning of "professionalism," the importance and function of professional ethics and the difficulty personnel encounter in living these roles.

44 COMMUNITY DEVELOPMENT (3)

Three lecture hours per week.

The dynamics of community decision-making process in relation to meeting social welfare needs and problems; the variables in the functions and roles of the community organization and community development worker; the process of effecting change in communities.

48 SPECIAL TOPICS (2-3)

Two or three lecture hours per week.

A class dealing with topics of special interest. Specific subject matter will vary from semester to semester and will be announced in advance.

49 SPECIAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in Social Science and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

52 CRIMINAL LAW (3)

Three lecture hours per week.

Prerequisites: Police Science 9, Social Science 40, or consent of instructor.

Reason for criminal laws, their source and function in our society. The structure, definitions and most frequently used sections of the California Penal Code. Classification of crimes, nature of crimes, intent involved in the commission of an offense, attempts, conspiracy and criminal responsibility. (May also be taken as Police Science 52.)

Sociology

1 INTRODUCTION TO SOCIOLOGY (3)

Three lecture hours per week.

Analysis of processes of group behavior and interaction between the individual and society; personality development in different cultures as shaped by learned customs, attitudes and values. Study of family, politico-economic and religious behavior; social movements; institutions, "mass society" and communication; community structure: social class and status, ethnic minorities, with close study of ethnic relationships.

2 SOCIAL PROBLEMS (3)

Three lecture-discussion hours each week.

Socialization and development of the self: processes by which individuals learn approved behavior patterns and disturbances of those associated with non-conformity. Theoretical and descriptive study of patterns of poverty, crime/delinquency and treatment of offenders, racism, and associated problems. Prevention, control and rehabilitation. Costs and casualties in an acquisitive society.

3 MINORITIES IN AMERICAN SOCIETY (3)

Three lecture hours per week.

Prerequisite: Sociology 1 or 2, or History 33 is recommended.

Sociology of inter-ethnic contact with emphasis on the experience of minorities in the United States. An examination of the dual themes of racism and equality in American society.

47 COOPERATIVE EDUCATION (1-3)

Supervised field experience by arrangement.

49 INDIVIDUAL PROJECTS (1-2)

Prerequisites: Previous or concurrent work in Sociology and the consent of the instructor and the Social Science Division Chairman.

Specified individual study or directed research in specific problem areas.

Spanish

Students enrolled in certain courses in foreign language are asked to make use of the language laboratory. Imitation, response and independent practice are an integral feature of the study of a foreign language at the College.

1 ELEMENTARY SPANISH (5)

Five class hours and one lab hour per week.

Spanish structures and active vocabulary based on oral and written pattern drills. Conversation based on short readings containing only structures already practiced. Students are urged to make extensive use of the facilities in the language laboratory.

2 ADVANCED ELEMENTARY SPANISH (5)

Five class hours and one lab hour per week.

Prerequisite: Spanish 1 with a passing grade or assignment by the English-Foreign Language Division on the basis of the Foreign Language Placement Test in Spanish.

Continuation of Spanish 1. Additional reading of Spanish short stories to serve as a basis for classroom conversation. Students are urged to make extensive use of the listening facilities in the language laboratory.

3 INTERMEDIATE SPANISH (5)

Five class hours per week.

Prerequisite: Spanish 2 with a passing grade or assignment by the English-Foreign Language Division on the basis of the Foreign Language Placement Test in Spanish.

Practice of conversation and composition; review of grammar; class and collateral reading of Spanish and Spanish-American literature. Students are urged to make extensive use of the facilities in the language laboratory.

4 ADVANCED INTERMEDIATE SPANISH (3)

Three class hours per week.

Prerequisite: Spanish 3 with a passing grade or assignment by the English-Foreign Language Division on the basis of the Foreign Language Placement Test in Spanish.

Further practice of conversation and composition based on class reading of works of modern Spanish and Latin-American authors; review of grammar; collateral reading of Spanish and Spanish-American literature.

8a-8b SPANISH CONVERSATION (2-2)

Two class hours per week.

Prerequisite: Spanish 4 or Spanish 3 and permission of the instructor.

Practice in conversation based on Spanish customs and culture. Students are urged to make use of the facilities in the language laboratory.

25a-25b ADVANCED SPANISH (3-3)

Three class hours per week.

Prerequisite: 25a—Spanish 4; 25b—25a.

Oral and written composition, class reading of works of Spanish and Spanish-American literature, extensive collateral reading of varied types of Spanish and Spanish-American literature, and study of a review of grammar.

30 INDIVIDUAL READING (1-2)

Conferences for oral reports. Time to be arranged. A minimum of three hours of reading per unit per week is required.

Prerequisite: Spanish 25b or permission of the instructor.

Reading of Spanish and Latin-American classics and contemporary literature.

Speech

1a BASIC PUBLIC SPEAKING (3)

Three class hours per week.

Prerequisite: Enrollment in English 1a or permission of instructor.

Study and practice of basic principles of effective oral communication. Research, preparation, and delivery of extemporaneous speeches to inform and persuade. Emphasis on examination of relevant social issues. Analysis and evaluation of oral communication.

1b ADVANCED PUBLIC SPEAKING (3)

Three class hours per week.

Prerequisite: Speech 1a.

Advanced study of the process of oral communication. Preparation and delivery of persuasive and informative speeches. Analysis and evaluation of communication events.

4 ARGUMENTATION AND DEBATE (3)

Three class hours per week.

Prerequisite: Speech 1a or permission of the instructor.

A lecture-lab course in the principles and techniques of argumentation and debate. Research in significant social problems. Analysis of propositions, issues, evidence and reasoning. Training and experience in the forms of debate.

10 CONTEMPORARY DIALOGUE (3)

Three class hours per week.

Experiences in interpersonal communication, rational dialogue and cooperative analysis of communicative events. Study of communicative interaction, the symbolic process, reasoning and advocacy, and the effects of communication on man and society.

30a-30b ORAL INTERPRETATION OF LITERATURE (3)

Three class hours per week.

Prerequisite: 30a—Enrollment in English 1a; 30b—Successful completion of Speech 30a.

Oral reading of literature (poems, short stories, plays); analysis of meaning; analysis of voice quality, enunciation, pronunciation and expressiveness.

Statistics

1 RESEARCH METHODS AND STATISTICAL ANALYSIS (3)

Three lecture hours per week—Fall Semester.

Prerequisites: High School Algebra and sophomore standing, or consent of instructor.

An introduction to the descriptive techniques and methods of inference appropriate to psychology and related fields. Includes classification of data, graphical representation, measures of central tendency and dispersion, normal curve, etc; elementary statistical inference, hypothesis testing and correlation.

2 INTRODUCTORY STATISTICS FOR BUSINESS AND ECONOMICS (4)

Four hours per week—Spring Semester.

Prerequisite: Mathematics 13 or consent of instructor.

An introduction to the descriptive and inferential techniques used in Business and Economics with emphasis on the mathematical skills required. Includes organization of data, measures of central tendency and dispersion; methods of statistical inference; probability theory; T-statistics; chi-square statistics; regression; correlation.

Student Government

1-2 STUDENT GOVERNMENT (1-1)

One class hour and attendance at weekly Student Council meeting.

Designed to assist Student Council members, commissioners, club officers, and other interested students in acquiring background and skills for effective participation in activities. Includes parliamentary procedure, group dynamics, and analysis of the nature and techniques of effective leadership.

X-Ray Technology

(See "Radiologic Technology.")

Zoology

1 GENERAL ZOOLOGY (5)

Three lecture hours and two three-hour lab periods per week.

Prerequisite: High school Biology with grade of B or better, or Biology 1 with a grade of C or better.

A study of invertebrate and vertebrate animals, their organs and functions, adaptations, evolution, and natural history.

Evening College

General Information

The Evening College program is designed to serve the total community. Although a large majority of those attending Evening College are adults, many day students avail themselves of the opportunity of taking classes in the evening to round out their programs or to better fit their time schedules.

Approximately 140 classes are offered in 12 instructional areas each semester. Additional courses will be planned for future years as college enrollment increases.

A schedule of classes giving the times, days, and classroom locations is printed each semester and will be available at the college and public libraries prior to registration. The schedule will be mailed upon request.

A registration fee is charged adults for enrollment in each class for each semester. In those classes using special supplies all students are assessed an additional fee. Students purchase their own textbooks, notebooks, and supplies.

Registration procedures will be described in the Evening College Schedule and should be carefully noted.

Classes in the Evening College program are open to persons who are over 18 years of age or who are high school graduates.

Requirements for the Associate in Arts degree are listed in the college catalog obtainable in the college bookstore. Requirements for the A.A. degree and the certificate programs may be fulfilled through attending Evening College classes.

The Evening College offers certificate programs in Business Management, Industrial Management and Nursery School Assistant. Additional certificate programs are planned for the future. A cooperative education program is also offered in which students receive units leading to certificates in supermarket management, public administration management, small business management and toward the A.A. degree.

Many persons complete requirements for lower-division programs in Business Administration, Education, Liberal Arts, and other areas while obtaining the Associate in Arts degree. A complete offering in any one of these transfer programs may not be available each semester.

Counseling

Day students who plan to attend Evening College classes should first discuss those classes with their day counselor and receive his approval. Counseling services are also provided by the Evening College for persons who wish assistance in planning programs of evening study. For information concerning work in a specific subject, students may consult the instructor of the class in which they may be interested. Any one not registered in the day college who wishes individual counseling should bring transcripts of previous work to his interview. Requests for such assistance should be made at the Registrar's office.

Group counseling sessions, giving general information about college degrees and the organization of college programs, are scheduled each semester prior to registration. The schedule of classes lists times and location of these sessions.

Eligibility

Certain classes have prerequisites which are described in the College Catalog available in the Associated Students Store. An Evening College Catalog supplement with descriptions of courses not in the regular College Catalog, may be obtained in the Evening College Office.

Faculty

The Evening College faculty includes teachers from the regular college staff, teachers from nearby colleges and schools, and persons from business, industry, the professions, and other areas of specialization.

Index

- A**
- A.A. Degree 21
 - A Cappella Choir 68
 - Absence Without Leave 18
 - Academic Standards 16
 - Accounting 46, 48
 - Accreditation 11
 - Activities 20
 - Administration 5
 - Admission Information 12-14
 - Adult Students 13
 - Advertising 48
 - Afro-American Studies 29
 - Agriculture 28
 - American Institutions 21
 - American Studies 29
 - Anatomy 29, 41
 - Anthropology 29, 41-42
 - Application for Admission 14
 - Army ROTC 66
 - Art 29-30, 42-43
 - Asian Studies 30
 - Associate in Arts Degree 21
 - Astronomy 44
 - Athletics 20
 - Attendance Regulations 17
- B**
- Bacteriology 30, 44
 - Biochemistry 30
 - Biology 30, 44
 - Biophysics 30
 - Board of Trustees 4
 - Botany 30, 44-45
 - Business 30-33, 46-48
 - Business Administration 30, 48
- C**
- Calendar 3
 - California State Colleges 28
 - Career Planning 26-40
 - Change of Program 14
 - Chemistry 33, 48-49
 - Choice of College 14
 - Clothing Courses 62
 - College Orientation 19
 - Conduct 17
 - Conservation 49
 - Continuing Education 11, 86
 - Cooperative Education 33, 49
 - Costs to Students 13
 - Counseling 18
 - Counseling Appointments 14
 - Courses, General
 - College 41, 86
 - Credits 15
 - Credit and Finance
 - Management 32
 - Criminology 33
 - Curricula Suggested 28-40
- D**
- Data Processing 50
 - Decorative Art (See Art) 42-43
 - Degree (A.A.) 21
 - Dental Hygiene 33
 - Dentistry 33
 - Disqualification 16
 - Dismissal 16
 - District 10
 - Dramatic Arts 33-34, 50-51
- E**
- Ecology 34, 51
 - Economics 34, 51-52
 - Education 34
 - Emergency Leave of
 - Absence 17-18
 - Employment Opportunities 19
 - Engineering Courses 52-53
 - Engineering Curricula 35
 - English 21, 35, 53-55
 - Entomology 35
 - Entrance Test 19
 - Entrance Requirements 12-14
 - Environmental
 - Technology 35, 55
 - Ethnic Studies 35
 - Evening College 11, 86
 - Examinations 19
- F**
- Faculty 6-9
 - Financial Aids 19
 - Fines 17
 - Food & Lodging
 - Technology 36, 56-57
 - Foreign Language 36
 - Foreign Students 13
 - Forestry 36, 57
 - French Courses 57-58
- G**
- General College Information 10
 - General Education 22-26
 - Genetics 36
 - Geography 36, 58
 - Geology 36, 58-59
 - German Courses 59
 - Grade Point Deficiency 16
 - Grades 15
 - Grade Points 15
 - Grade Reports 16
 - Grades and Scholarship 15
 - Graduation Requirements 21
 - Guidance Course 59
 - Guide to Careers 26-27

| | |
|-------------------------|--------------|
| H | |
| Health Education | 22, 60 |
| Health Insurance | 19 |
| Health Service | 19 |
| High School Graduates | 12 |
| History | 36, 60-61 |
| Holidays (See Calendar) | 3 |
| Home Economics | 36-37, 61-63 |
| Honors at Graduation | 14 |
| Honorable Dismissal | 16-17 |
| Housing | 19 |
| Humanities | 37 |

| | |
|-------------------------|-------|
| I | |
| Incompletes | 15 |
| Information, General | 10-12 |
| Instructors | 6-9 |
| International Relations | 37 |
| Intramural Activities | 20 |

| | |
|-----------------|--------|
| J | |
| Job Placement | 19 |
| Journalism | 37, 63 |
| Junior Standing | 28 |

| | |
|---------------------|-----------|
| L | |
| Pre-Legal | 37 |
| Leave of Absence | 18 |
| Liberal Arts | 37 |
| Librarianship | 37 |
| Library | 11, 63-64 |
| Library Course | 63-64 |
| Life Science Course | 64 |
| Loans | 19 |

| | |
|----------------------|-----------|
| M | |
| Major | 22 |
| Marks Used | 15 |
| Mathematics | 37, 64-65 |
| Medical Illustration | 37 |
| Medical Sciences | 37 |
| Medicine | 37 |

| | |
|---------------------------------|-----------|
| Merchandising- Management | 32, 48 |
| Meteorology | 66 |
| Mexican-American Studies | 38 |
| Microbiology | 38 |
| Military Science (Army ROTC) | 38, 66 |
| Modern Drama | 51 |
| Music | 38, 66-68 |

| | |
|--------------------|--------|
| N | |
| Newspaper, College | 20 |
| Nursery School | 38 |
| Nursing | 38, 68 |
| Nutrition | 38 |

| | |
|------------------------|----|
| O | |
| Occupational Therapy | 38 |
| Pre-Optometry | 38 |
| Organizations, Student | 20 |

| | |
|--------------------------------------|-----------|
| P | |
| Paleontology | 38 |
| Parasitology | 38 |
| Parking | 12 |
| Personal Recommendations | 16 |
| Personnel Services | 18-20 |
| Pharmacy | 39 |
| Philosophy and Purposes (College) | 10 |
| Philosophy | 39, 69-70 |
| Physical Education | 39, 70-77 |
| Physical Education Requirement | 14, 22 |
| Physical Therapy | 39 |
| Physical Science Course | 77 |
| Physical Sciences | 39 |
| Physics | 39, 77-78 |
| Physiology | 39, 78 |
| Placement Services | 19 |
| Placement Credit | 13 |
| Police Science | 39, 78-79 |
| Political Science | 79-80 |

| | |
|--|-----------|
| Preparation to Enter Four-Year Colleges | 28 |
| Program Changes | 14 |
| Program Planning | 18 |
| Psychological Services | 18 |
| Psychology | 40, 80-81 |
| Publications | 20 |
| Public Health | 40 |

| | |
|--------------------------------------|--------|
| R | |
| Radiologic Technology | 40, 81 |
| Reading | 55 |
| Recreation Education | 40, 81 |
| Residence Requirements | 13 |
| Registration | 14 |
| Right of Petition for Readmission | 16 |

| | |
|-------------------------------------|-----------|
| S | |
| Scholarship Honors | 16 |
| Scholarships | 19 |
| Secretarial Curricula | 31 |
| Secret Organizations | 17 |
| Social Science | 40, 82-83 |
| Social Service | 40 |
| Social Work | 40 |
| Sociology | 40, 83-84 |
| Spanish Courses | 84 |
| Special Students | 13 |
| Speech | 84-85 |
| SPEED | 19 |
| Sports | 20 |
| State Colleges | 28 |
| Statistics | 85 |
| Student Activities | 20 |
| Student Development Program | 18-19 |
| Student Government Course | 85 |
| Student Organizations | 20 |
| Student Guide | 20 |
| Student Health Insurance Program | 19 |
| Student Obligations | 17 |
| Student Personnel Services | 18 |
| Student Publications | 20 |
| Suggested Curricula | 28-40 |
| Summer Session | 11 |

T

Testing19
Theatre Arts40
Transcripts16
Transfer of Credits13
Transfer Students12, 17
Trustees4
Tuition (Non-Residents)13

U

Unit Load Limitations14

Units of Work and Credit15
Universities28

V

Varsity Sports20, 70-71
Veterans and Dependents12
Pre-Veterinary Medicine40

W

Wildlife Conservation40

Withdrawal from College18
Work, Part-time21

X

X-Ray Technology81, 85

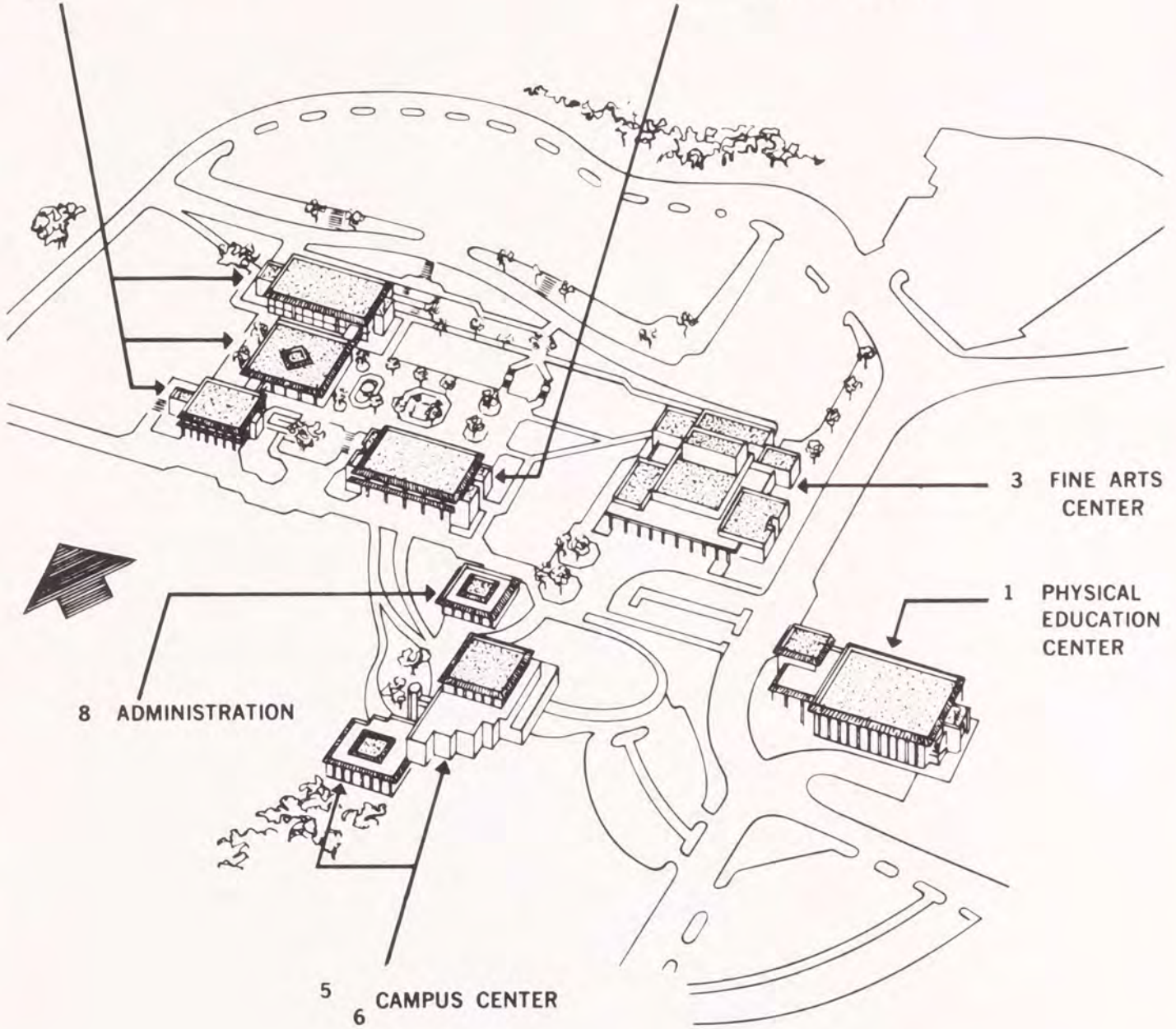
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Zoology40, 85

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18
17 SCIENCE CENTER
16

13 ACADEMIC CENTER



3 FINE ARTS CENTER

1 PHYSICAL EDUCATION CENTER

8 ADMINISTRATION

5
6 CAMPUS CENTER



14. ACADEMIC CENTER

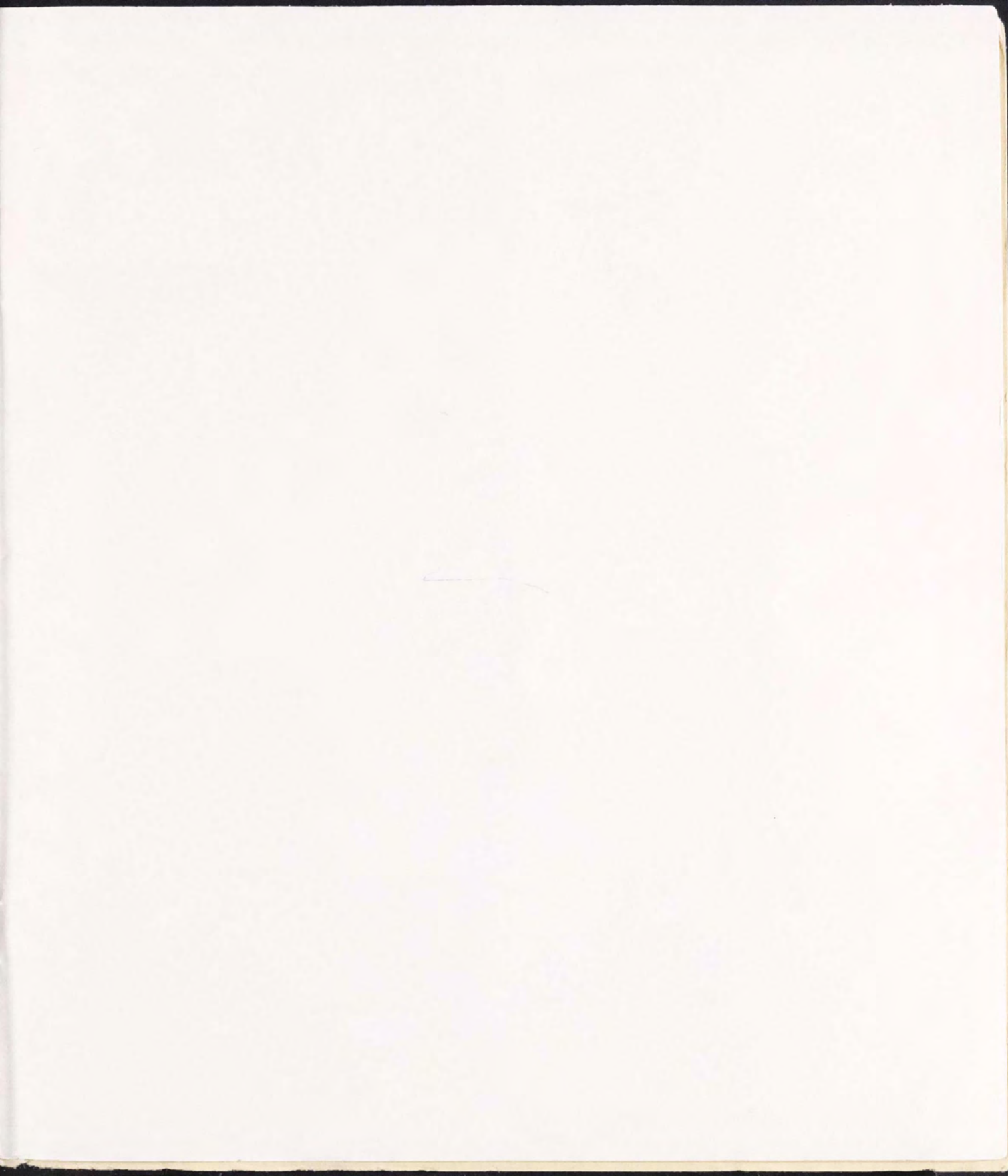
15. BOARD CENTER

3. FINE ARTS CENTER

1. PHYSICAL EDUCATION CENTER

8. ADMINISTRATION

2. CAMPUS CENTER



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