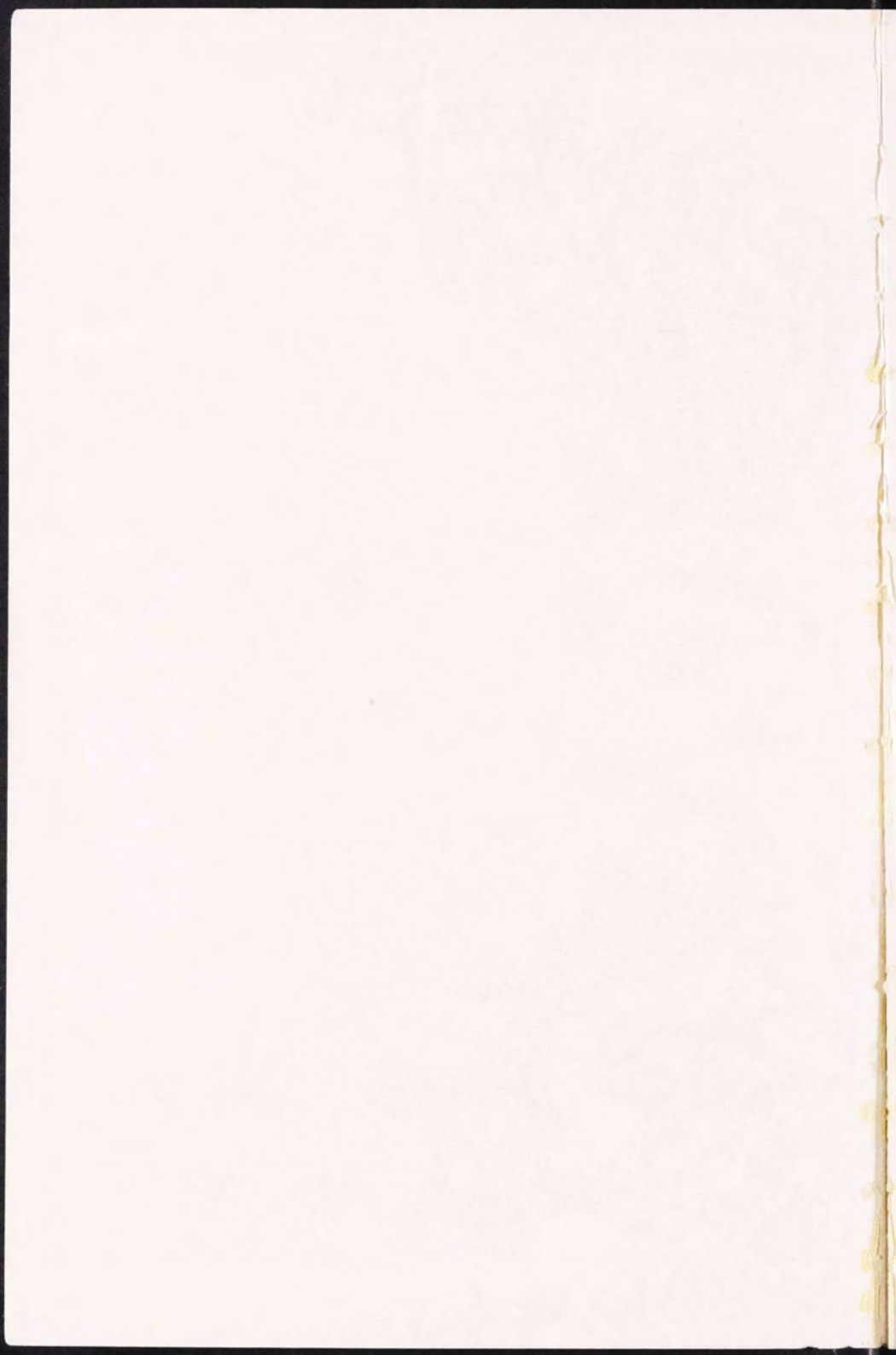




CAÑADA  
COLLEGE

CATALOG 69-70



A community college within the San Mateo Junior College District  
4200 Farm Hill Boulevard • Redwood City, California 94061



CAÑADA  
COLLEGE

# FOREWORD



William A. Goss

## TO THE STUDENTS OF CAÑADA COLLEGE:

The initial year of organization and experimenting has produced at Cañada College a new institution with vitality and innovative force.

It is our hope that the level of student and faculty involvement in both instructional and student activity areas will continue, and, indeed, increase.

With all Phase I buildings now complete, the College offers you the use of exceptional facilities on a superb site. Because of its relatively small size, it also offers you a maximum chance for personal involvement.

If the information in this catalog does not answer all of your questions, please call on any member of the staff for personal counsel. We are an "open door" college. It will be our pleasure to serve you in any of our programs.

*William A. Goss*

WILLIAM A. GOSS  
President

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# CALENDAR

1969-1970

- June 14 . . . . . Placement examination (8 a.m.)
- July 12 . . . . . Placement examination (8 a.m.)
- August 9 . . . . . Placement examination (8 a.m.)
- August 18-September 4 . Counseling and registration, fall semester, 1969
- August 23 . . . . . Placement examination (8 a.m.)
- August 29 . . . . . Registration for special students (9 a.m.)

## Fall Semester

- September 1 . . . . . Labor Day holiday
- September 2, 3, 4 . . . Counseling and registration
- September 5 . . . . . Faculty meetings
- September 9 . . . . . Admission Day holiday
- September 10 . . . . . Day and evening classes begin
- September 16 . . . . . Last day to add new classes
- September 23 . . . . . Last day to drop a class without penalty
- October 15 . . . . . Applications available for spring, 1970, semester
- October 31 . . . . . End of midterm grading period
- November 11 . . . . . Veterans' Day holiday
- November 21 . . . . . Last day to drop a class without dean's approval
- November 27, 28, 29 . . Thanksgiving recess
- December 12 . . . . . Last day to apply for fall graduation
- Dec. 13, 22; Jan. 2 . . . Placement examination (8 a.m.)
- December 23- January 3 . Winter recess

- January 5-January 13 . . . Spring, 1970, registration for continuing students
- January 10 . . . . . Placement examination (8 a.m.)
- January 14-January 23 . . . Counseling and registration, new and returning students
- January 14-January 23 . . . Final examinations
- January 16 . . . . . Evening College classes close
- January 20 . . . . . Registration for special students, one class only (9 a.m.)
- January 23 . . . . . Day College classes close

## Spring Semester

- January 26-January 30 . . . Between-semester recess
- February 2 . . . . . Day and evening classes begin
- February 6 . . . . . Last day to add new classes
- February 12 . . . . . Lincoln's Birthday holiday
- February 16 . . . . . Last day to drop a class without penalty
- February 16 . . . . . Applications available for fall, 1970, semester
- February 22, 23 . . . . . Washington's Birthday holiday
- March 23-March 27 . . . Spring recess
- April 3 . . . . . End of midterm grading period
- April 17 . . . . . Last day to apply for June graduation
- April 18 . . . . . Placement examination (8 a.m.)
- April 24 . . . . . Last day to drop a class without dean's approval
- April 25 . . . . . Placement examination (8 a.m.)
- May 2, 9 . . . . . Placement examination (8 a.m.)
- May 29, 30 . . . . . Memorial Day holiday
- June 2-June 10 . . . . . Final examinations
- June 5 . . . . . Evening College classes close
- June 10 . . . . . Day College classes close
- June 13 . . . . . Placement examination (8 a.m.)
- June 14 . . . . . Commencement

# BOARD OF TRUSTEES

**Eleanore D. Nettle**

*(Since 1956)*

Housewife

**Francis W. Pearson Jr.**

*(Since 1963)*

Certified Public Accountant

**U. S. Simonds Jr.**

*(Since 1942)*

Union Official

**Robert A. Tarver**

*(Since 1953)*

Attorney

**Carl E. Ward**

*(Since 1960)*

Bank Executive



# ADMINISTRATION

*District Chancellor-Superintendent*

**Clifford G. Erickson**

*Assistant Superintendent for Business Affairs*

**Matteo V. Fasanaro**

## CAÑADA COLLEGE STAFF

*President*

**William A. Goss**

*Dean of Instruction*

**George A. Mangis**

*Dean of Students*

**William A. Walsh**

*Chairman, Evening College Division*

**Leland H. Mahood**

*Dean of Men*

(To Be Named)

*Chairman, Library and Audio Visual*

**Amerigo T. Ciani**

*Dean of Women*

**Patricia Pallister**

*Assistant for Community Education*

**Ruth K. Nagler**

*Assistant for Registration*

**Lynn E. Carlyle**

*Manager of Services*

**John H. Rhoads**

## CHAIRMEN, DAY DIVISIONS

*Business Education*

**Louis E. Yaeger**

*Mathematics and Physical Sciences*

**Donald C. Raney**

*English and Foreign Languages*

**D. Robert Stiff**

*Physical Education (and athletics)*

**Gordon M. Gray**

*Fine Arts*

**John H. Krueger**

*Social Sciences*

**Melvyn E. Pratt Jr.**

*Life Sciences and Health Education*

**John C. Forsythe**

# FACULTY

1969-1970

(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

**Andrew, Alan** (1968)  
*Mathematics and Physics*  
B.S., University of Nebraska  
M.S., California Institute of  
Technology  
Ph.D., California Institute of  
Technology

**Alexander, Marvin** (1966)  
*Education*  
B.A., Pennsylvania State University  
M.A., Stanford University

**Ashley, Lyman C.** (1968)  
*Physical Education*  
B.S., California State Polytechnic  
College, San Luis Obispo  
M.A., San Francisco State College

**Blanton, Donald J.** (1964)  
*Biology, Botany*  
B.A., Aquinas College  
M.S., University of Michigan

**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

**Clemens, Roger W. C.** (1957)  
*Forestry*  
B.S., M.S., Univ. of California,  
Berkeley

**Cline, Alec O.** (1968)  
*Food Technology, Instructor-Chef*

**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,  
Counselor*  
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 Col.

**Daniel, Hazel** (1968)  
*Social Science*  
B.A., Sarah Lawrence College  
M.A., Stanford University

**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

**Ellett, Melvin K.** (1952)  
*Drama*  
A.B., A.M., Stanford University

**Fahey, Frank M.** (1956)  
*History*  
A.B., University of Washington  
A.M., Ph.D., Stanford 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

**Giuntoli, Mervin A.** (1966)  
*Biology, Zoology*  
B.A., M.A., San Jose State College

**Glessing, Robert J.** (1968)  
*Journalism and English*  
B.A., Marquette University  
M.A., University of California

**Goss, William A.** (1949)  
*President*  
A.B., Univ. of California, Los Angeles  
M.A., Univ. of California, Berkeley

**Gray, Gordon M.** (1958)  
*Chairman, Physical Education  
Division and Director of Athletics*  
B.A., Univ. of California,  
Santa Barbara  
M.A., San Francisco State College

- Hancock, John C.** (1968)  
*Fine Arts, Music*  
A.B., San Francisco State College
- Heidsiek, Richard C.** (1968)  
*Fine Arts, Art*  
B. of Art Ed., M.F.A., California  
College of Arts and Crafts
- 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
- Jacques, Lois S.** (1968)  
*Physical Education*  
B.A., University of Nevada  
M.A., San Jose State College
- 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 Col.
- Kenney, William C.** (1968)  
*English*  
A.A., College of San Mateo  
B.A., Stanford University  
M.A., San Jose State College
- Klein, Daniel J.** (1968)  
*School Psychologist, Psychology*  
A.B., Colby College  
Ph.D., University of Texas
- 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
- Lepisto, Martin M.** (1968)  
*Fine Arts, Drama*  
B.S., Midland College  
M.A., Northwestern University
- Loughrey, James R.** (1963)  
*Mathematics*  
B.S., St. Michael's College, Vermont  
M.S., Rensselaer Polytechnic Inst.
- Mahood, Leland H.** (1964)  
*Chairman, Evening Division*  
B.A., Whittier College  
B.D., University of Chicago
- Mangis, 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., University of Wisconsin
- Marchi, Joseph J.** (1968)  
*Counseling*  
B.A., San Francisco State College  
M.A., Columbia University Teachers  
College
- Margolis, Susan S.** (1968)  
*English*  
B.A., Ohio State University  
M.A., San Francisco State College
- Messner, Gerald** (1964)  
*English*  
A.B., Stanford University  
M.A., Los Angeles State College

- Murashige, Kate H.** (1968)  
*Chemistry*  
B.A., Washington University  
Ph.D., Univ. of Calif., Los Angeles
- Nicolopoulos, Samuel J.** (1968)  
*Physical Education*  
A.A., College of San Mateo  
B.A., San Jose State College  
M.A., Stanford University
- Norman, Timothy H.** (1968)  
*Mathematics*  
B.A., St. Procopius College  
M.S., University of Notre Dame
- 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., Michigan State University  
M.A., University of Maryland
- 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)  
*Chairman, Mathematics and  
Physical Sciences; 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 and History*  
A.B., M.A., Univ. of Calif. Berkeley
- Ross, Neil W.** (1968)  
*Sociology and Psychology*  
A.B., Univ. of California, Berkeley
- Simmons, Gordon T.** (1964)  
*Anatomy, Biology*  
B.S., D.V.M., Univ. of Calif., Davis
- Sitton, Carl V.** (1968)  
*Fine Arts, Music*  
B.Mus., Texas Wesleyan College  
M.A., Mills College
- Skinner, Byron R.** (1968)  
*Social Sciences, History, Counselor*  
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
- Spangenberg, Ruth B.** (1968)  
*Psychology, Counselor*  
B.A., Pomona College  
M.A., Stanford University
- Stiff, Robert** (1961)  
*Chairman, English and Foreign  
Languages Division*  
A.B., M.A., San Francisco State Col.
- Stoney, James M.** (1959)  
*Bacteriology, Biology*  
B.A., M.A., San Francisco State Col.

- 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
- Tovissi, Joseph A.** (1965)  
*Mathematics and Counselor*  
B.S., Kent State University  
A.M., Stanford University  
M.S., Purdue University
- Upton, James M.** (1968)  
*Mathematics and Philosophy*  
A.B., A.M., Gonzaga University  
M.S., Seattle University
- Vial, Silvano A.** (1964)  
*Physical Education*  
B.S., University of Idaho  
A.M., Stanford University
- Walker, Robert C.** (1968)  
*Food Technology, Supervising  
Teacher*  
B.S., Cornell 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)  
*Chemistry*  
B.S., Brigham Young University  
M.S., Syracuse University
- Whitmore, Amy D.** (1968)  
*English*  
A.B., Southern University  
M.A., North Carolina College
- 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
- Zingales, Thomas J.** (1964)  
*French, German*  
B.A., University of Notre Dame  
A.M., Stanford University

# GENERAL INFORMATION

## THE COLLEGE

Cañada College is a new community college within 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) 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 in its present stage represents an investment of thirteen million dollars, 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 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 AND PURPOSES OF THE COLLEGE

The purpose of Cañada College is to provide education beyond the high school level for the people in its area who can profit thereby. This education is designed to help the student realize his potentialities for cultivating his cultural and vocational abilities. It prepares the student to assume the responsibilities of citizenship in our free society. It attempts to develop in the student the ability to think critically.



To achieve its purpose, Cañada College offers the following kinds of education:

**General Education:** Instruction which will assist students to function effectively as individuals, as members of their families and as citizens with local, national and world responsibilities.

**Lower-Division College Education:** Courses which will enable students to complete the first two years of four-year college work. These courses satisfy the lower division requirements in the liberal arts and in the scientific, engineering and other professional and technical fields.

**Technical-Vocational Education:** Training in skills which will qualify students for employment in business and industry.

**Continuing Education:** Classes in which all persons living in the area may broaden their educational, vocational and aesthetic horizons.

**Community Education:** Short courses, public forums, lecture series, small group discussions, institutes, concerts and similar educational and cultural programs for the public at large.

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.

## ACCREDITATION

Cañada College is approved by the California State Department of Education and by the Veterans Administration. The College has established a candidacy relationship with the Western Association of Schools and Colleges, the recognized local agency which is affiliated with the Federation of Regional Accrediting Commissions of Higher Education. In the fall of 1969 Cañada College will have its initial accreditation visitation.

## 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 Session at colleges within the District. Further information may be obtained by calling the Cañada College, Evening College office.

## 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 references 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 14,000 carefully selected volumes, some 350 periodicals and over 500 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 60,000 volumes and large collections of microfilms, phonodiscs and tapes.

## Parking

Parking for students is provided on the campus in clearly designated areas. Certain parking places are reserved 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 College of San Mateo or 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 St. in San Francisco or 590 Hamilton St. 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 recommendation 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 Veteran Affairs at 350 McAllister St. 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 25 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 take the placement test or submit transcripts. Special students planning to enroll in a course in English are required to take the placement test.

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 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.

## 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 who legal residence is in a state other than California 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 \$390 for the academic year 1969-70. This fee is payable at the time of registration at the rate of \$195 per semester or \$13 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	\$50.00 per semester
Student activity card	\$7.50 per semester
Room and board	\$100.00-\$140.00 per month
Transportation	\$20.00 per month
Personal expenses (laundry, recreation, medical)	\$30.00 per month

## Choice of College

Residents of the District may elect to attend College of San Mateo, Cañada 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 1969-70 Calendar for application filing dates.)*

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.)
3. Take placement examination prior to the time of registration.

## **Placement Test Required At Entrance**

A placement test (see Calendar for dates) is required of all entering students and is used for the purpose of helping them determine the courses for which they may enroll.



# 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  $17\frac{1}{2}$  units without the special approval of his counselor.

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 Requirement

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 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 25 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 premitted 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 will receive a semester grade of "F." No student will 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 or Men or Dean of Women to prevent unjust application of this regulation.

# GRADES AND SCHOLARSHIPS

## 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

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
CR—Credit	0 grade points per unit
F—Failed	0 grade points per unit
NCR—No Credit	0 grade points per unit
W—Withdrawn	0 grade points per unit
Inc—Incomplete	0 grade points per unit

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 personal emergency. In this case, it is the student's obligation to give the instructor prior notification of the reason for his inability to complete the course requirements and to make arrangements for completion of the work. A grade of "Incomplete" is computed the same as a grade of

"F" until the deficiency is removed. The deficiency must be removed by the end of the next semester of attendance. Additional time may be provided upon approval of the instructor and the registrar. The grade from a repeated course will not erase the "Incomplete."

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, nor is there any penalty involved.

Ordinarily, units for a course which are completed and then repeated will not be counted as units earned toward an A.A. degree or for transfer to another college. However, units repeated will be counted as units attempted in computing grade-point averages. 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.

## Grade Reports

On the college level, 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 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

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  $12\frac{1}{2}$  units in one semester and  $15\frac{1}{2}$  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.

During an initial experimental period, the 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**

A transfer student who enters with a deficiency of 12 or more grade points will be dismissed if he incurs a grade-point deficiency in any subsequent semester. However, a transfer student who has not increased his total deficiency after admission to Cañada College may petition the Faculty-Student Appeals Committee for permission to continue in College.

# 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 the College code of rules and regulations.

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 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."

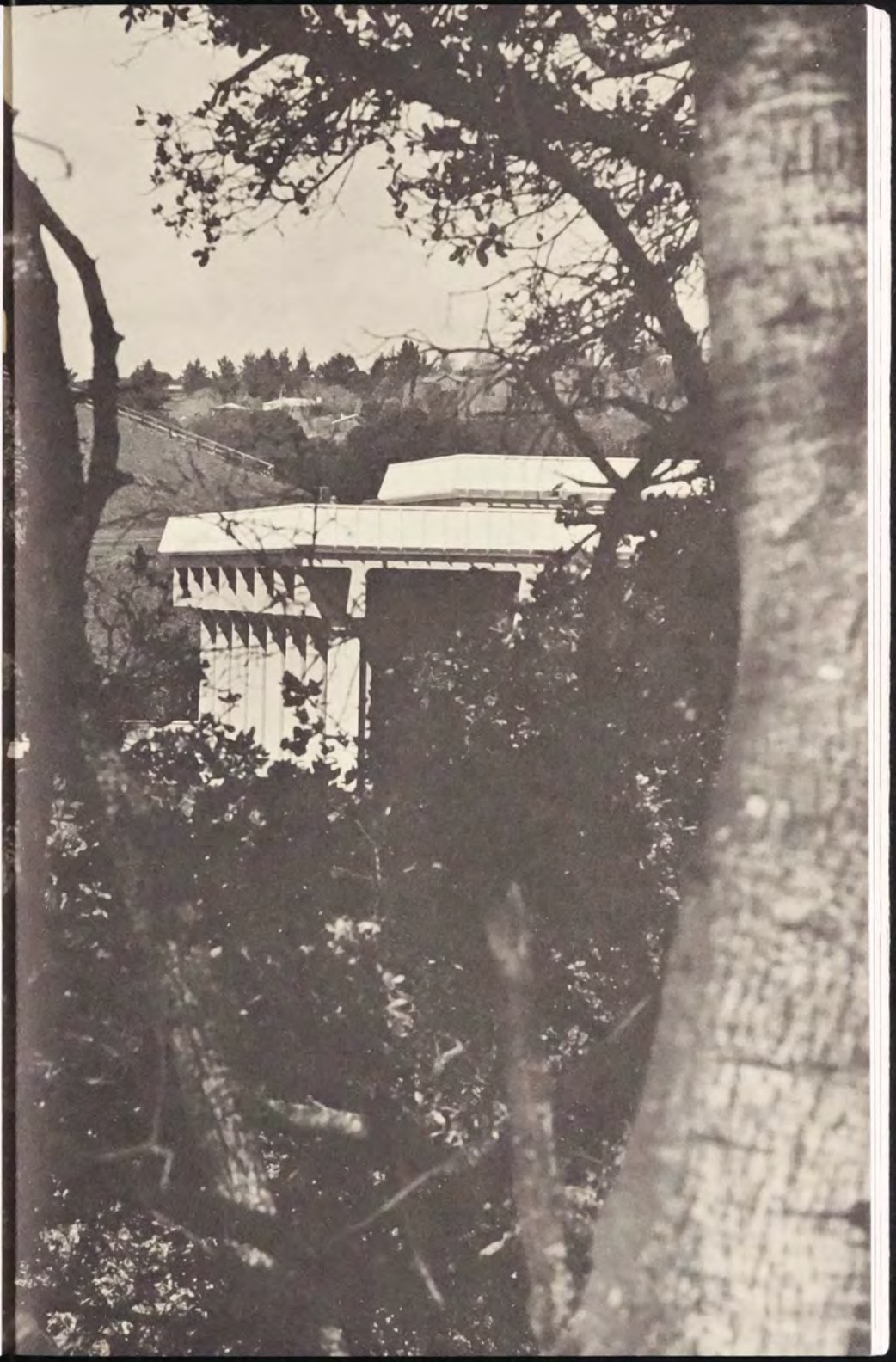
At any time through the 10th college calendar day (Sept. 23, 1969, and Feb. 16, 1970), a student may withdraw, whether passing or failing in courses, without incurring penalty grades of "F." A student who withdraws after the deadline will receive the penalty "F" for any course in which he is failing.

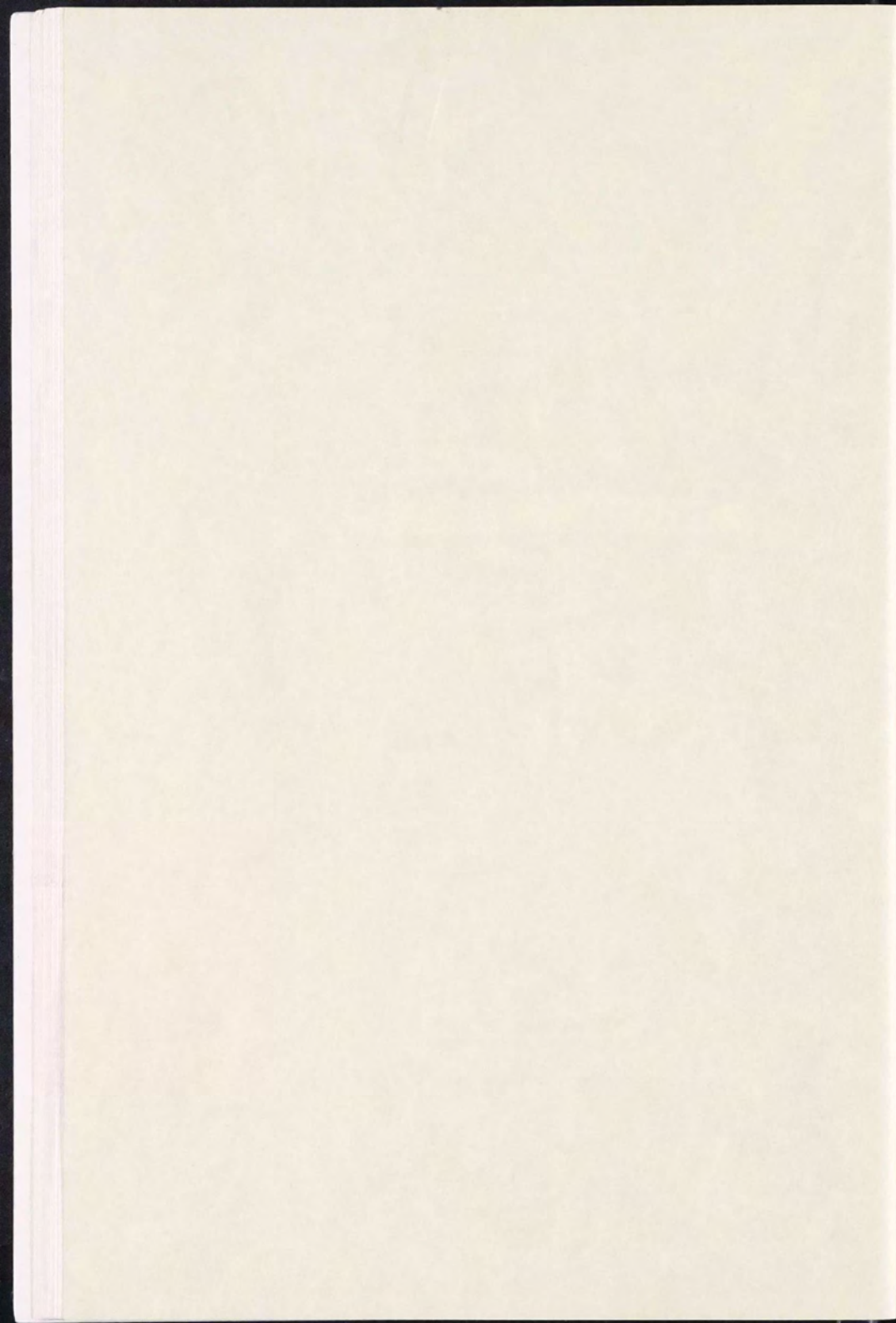
After the 10th college calendar day, a student who drops classes with his counselor's approval will be given a grade of "W" if passing the course and a grade of "F" if failing the course.

After the 11th week of the semester (Nov. 21, 1969, and April 24, 1970), no student may withdraw 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.

## 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, must approve the final program for each semester and must be consulted about program changes. However, the final responsibility for the selection of 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.

## 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.

The Introduction to College course carries transfer credit to state colleges and some universities and is optional for all students. It is strongly urged for students whose counselors recommend it. It offers the following personnel services:

1. **Further testing services:** A thorough explanation and interpretation of psychological tests taken at entrance are given each student. Additional psychological tests are given to the student to help him appraise his aptitudes, interests, personal adjustment and special abilities, and to assist him to verify or to make effective educational and vocational plans.
2. **Introduction to College:** The course is also designed to acquaint students with College facilities, activities, services and requirements; to improve study habits and skills, to develop leadership techniques, and to explore the world of work in areas which meet their individual interests and abilities.

## 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 in room 206a in the Campus Center 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 and the Dean of Men 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 those who have completed one semester at the College, have a "C" average or better and have an emergency need.

For detailed information and applications for scholarships, students should contact the Dean of Women. For all other financial aids, they should apply to the Dean of Men.

## 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 as permitted under the Education Code of the State of California and the policies of the Board of Trustees.

During the past year at Cañada, students have had the unique opportunity of creating a new student government and activity program. 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 activities and 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 following publications are issued by and for the Associated Students:

The student newspaper, which provides full coverage of activities on campus and offers invaluable experience to journalism students.

The **Student Guide**, an attractive booklet which contains information to incoming students about the rules, staff, student organizations and services of the College together with a complete calendar of events.

The **Daily Bulletin**, a mimeographed publication prepared and distributed by the Activities Office each school day, announcing activities, news events and items of interest to the faculty and students of the College. The deadline for submission of items for publication is 9:00 a.m. on the preceding day.

## Athletics

The Associated Students sponsor 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 shall 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).

### **Inter-Mural Activities**

The Recreation Association, chiefly through the P.E. classes, offers a wide variety of coeducational sports. Included in the program are sports days arranged with neighboring colleges and universities. The competition and the friendships brought about on these occasions are of lasting value. For further information concerning this program, please see the Physical Education section of this catalog.

# 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 History and Institutions; California Government	4-8
English	6-8
Health Education and First Aid	2-3
Physical Education	2
Major (in a specified field)	20
General Education	6
Electives	12-20
	<hr/>
TOTAL UNITS	60

## History and Government

This requirement may be satisfied in two different ways: (a) by completing 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

- History 17a-17b—American History (6 units), or
- Political Science 21—American Institutions (3 units), or
- History 4a-4c—Western Civilization (6 units)

### **Group 2—California State and Local Government**

- a. Political Science 24 — California Urban Government (2 units), or
- b. History 22 — California History (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 (4 units), or
- c. Social Science 1 & 2—Introduction to the Social Sciences (6 units)

## **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 the course to which the student is assigned by the Placement Test (50a, 57a, 57b, A, 1a). Other courses shall be selected from the following:

English: A, 1a, 1b, 23, 24, 25, 26, 27, 28, 29, 30, 42ab, 43, 46ab; 50b; 57b.

Speech: 1a, 1b, 2a, 2b, 57a, 57b, 62.

## **Health Education and First Aid**

All students are required to take Health Education 1. 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  $\frac{1}{2}$  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 Cañada and other community colleges to certify that the general education requirements have been met. Students may obtain from their counselor, or from the office of the Registrar, comprehensive lists of Cañada courses which satisfy these state college general education requirements.

### 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

(Some of the courses listed below will not be taught at Cañada College during the 1969-70 school year but are included for the benefit of students who transfer from the College of San Mateo and who may offer them in satisfaction of the General Education requirement.)

#### Aeronautics

- Aeronautics 1 (3)
- Aeronautics 10 (3)

#### Anthropology

- \*1 Physical Anthropology (3)

#### Astronomy

- \*10 Introduction (3)

#### Biology

- \*†10a General Biology (4)
- \*†10b General Biology (4)
- 25 Concepts (3)

#### Botany

- †1 General Botany (5)

#### 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)

#### Data Processing

- 60 Introduction (3)

#### Electronics Technology

- 10 Introduction (3)

#### Geology

- \*10 Elementary Physiography (3)
- †1a General Geology (4)

#### Geography

- 1a Physical Geography (3)

#### Horticulture

- 50a-b Intro. to Ornamental Horticulture (3-3)

#### Life Science

- \*10 Intro. to Life Sciences (3)

#### Mathematics

- 10 Intro. to Mathematical Concepts (3)
- 11 Elementary Algebra (5)
- 12 Plane Geometry (5)

**Meteorology**

- 1 Elementary (3)

**Paleontology**

- 1 General Paleontology (3)

\*Courses suitable for non-science majors.

†Has an accompanying laboratory.

**Physical Science**

- 10 Introduction to Physical Science (3)

**Physics**

- \*10 Descriptive Introduction to Physics (3)

### GENERAL EDUCATION COURSES IN THE HUMANITIES AND PERSONAL GROWTH

(Some of the courses listed below will not be taught at Cañada College during the 1969-70 school year but are included for the benefit of students who transfer from the College of San Mateo and who may offer them in satisfaction of the General Education requirement.)

**Architecture**

- 10 Survey of Contemporary Architecture (3)

**Anthropology**

- 2 Cultural (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)
- 72a Plant Form and Design (2)
- 80 Line, Design, Form, Color (2)

**Business**

- 35 Personal and Family Finance (3)
- 55 Introduction to Business (3)
- 58 Human Relations (3)
- 81 Security Investments (3)
- 82 Insurance (3)
- 84 Property Valuation and Management (3)
- 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 Under-developed Areas (3)

**English**

- 4 Word Study (2)
- 12 Mythology and Folklore (3)
- 13 The Bible as Literature (3)
- 21 The Short Story (2)
- 23 Introduction to Poetry (3)
- 24 Modern Drama (3)
- 25 Shakespeare (3)
- 26 Modern Novel (3)

**English (Continued)**

- 27 Contemporary Literature (3)
- 42a-b Masterpieces of Euro. Lit. (3-3)
- 61 The Short Story (2)
- 62a-b Masterpieces of Euro. Lit. (3-3)
- 64 Word Study (2)
- 67 Reading Laboratory (1)
- 68 Contemporary Literature (3)

**Foreign Language**

- 39 Russian Novel (3)

**Geography**

- 1b Cultural Geography (3)
- 5a World Regional Geography (3)

**Guidance**

- 1 Introduction to College (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)
- 22 California History (3)
- 33 Afro Amer. Hist. (3)

**Home Economics**

- 9 Nutrition (2)
- 20a Beg. Clothing (3)
- 22 Textiles (2)
- 24 Clothing Selection (2)
- 40 Housing & Int. Decor. (3)
- 41 Interior Design (3)

**Journalism**

- 1 Introduction (3)

**Music**

- 3 History and Appreciation (3)
- 6 Literature and Appreciation (3)

**Music (Continued)**

- 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-b General Introduction to Philosophy (3-3)
- 12 Int. to Symbolic Logic (3)
- 20a-b-c Hist. of Philosophy (3-3-3)
- 23 Ethics (3)
- 24a-b Introduction to Religion (3-3)

**Political Science**

- 1 Introduction to Political Science (3)
- 2 Comparative Government (3)
- 3 International Relations (3)

**Psychology**

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

**Social Science**

- 33 Afro American Culture (3)

**Sociology**

- 1 Principles of Sociology (3)

**Speech**

- 62 Elements of Speech (3)
- 2a-b Oral Expression and Interpretation (3-3)
- 27 Discussion and Parliamentary Procedures (3)

**Urban Planning**

- 50a Survey of Urban Planning (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 "College Courses" in this catalog; the current schedule of classes gives information regarding time and location of courses offered.

Anatomy . . . . .	48	Ecology . . . . .	58
Anthropology . . . . .	48	Economics . . . . .	58
Art . . . . .	48-51	Education . . . . .	58
Bacteriology . . . . .	51	Engineering . . . . .	59
Biochemistry . . . . .	51	English . . . . .	60
Biology . . . . .	51	Entomology . . . . .	60
Biophysics . . . . .	51	Food Technology . . . . .	60-61
Botany . . . . .	51	Foreign Language . . . . .	61
Business Administration . . . . .	52-53	Forestry . . . . .	61
Business . . . . .	54-57	Genetics . . . . .	61
Clerk-Typist . . . . .	54	Geography . . . . .	61
General Clerical . . . . .	54	Geology . . . . .	61
Merchandising . . . . .	56	History . . . . .	61
Secretarial . . . . .	55	Home Economics . . . . .	62
Transportation . . . . .	57	Humanities . . . . .	62
Chemistry . . . . .	57	International Relations . . . . .	62
Criminology . . . . .	57	Journalism . . . . .	62
Dental Hygiene . . . . .	58	Law (Pre-Legal) . . . . .	62
Dentistry . . . . .	58	Liberal Arts . . . . .	63
Dramatic Arts . . . . .	58	Librarianship . . . . .	63



Mathematics . . . . .	63	Physics . . . . .	67
Medical Illustration . . . . .	63	Physiology . . . . .	67
Medical Sciences . . . . .	64	Police Science . . . . .	68
Microbiology . . . . .	64	Probation . . . . .	68
Military Science (R.O.T.C.) . . . . .	64	Psychology . . . . .	68
Music . . . . .	65	Public Health . . . . .	68
Nursing . . . . .	66	Recreation Education . . . . .	68
Nutrition . . . . .	66	Social Science . . . . .	68
Occupational Therapy . . . . .	66	Social Service . . . . .	69
Pre-Optometry . . . . .	66	Social Work . . . . .	69
Paleontology . . . . .	66	Sociology . . . . .	69
Parasitology . . . . .	66	State Colleges . . . . .	46
Pharmacy . . . . .	66	Theatre Arts . . . . .	69
Philosophy . . . . .	66	Universities . . . . .	46
Physical Education . . . . .	66	Pre-Veterinary Medicine . . . . .	69
Physical Sciences . . . . .	67	Wildlife Conservation . . . . .	69
Physical Therapy . . . . .	67	Zoology . . . . .	69

# 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 and in the office of the Registrar. A comprehensive Occupational Library is available in room 206 of the Campus Center. 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 College of Letters and Science of the University of California at Berkeley.

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		Units
English 1a-1b—Reading & Composition	6	Chemistry 8—Elem. Organic	3
Chemistry 1a-1b—General	10	Social Science	9
Physics 2a-2b—General	6	Health Education	2
Physics 3a-3b—Gen. Lab.	2	Physical Ed. (One course each semester)	2
Botany 1—General	5	Electives	8
Zoology 1a—General	5		

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); Humboldt State College Wildlife Management requires Zoology 1b, Psychology 1a, etc.

Included in the possible fields of emphasis are the following:

Agricultural Economics	Entomology and Parasitology
Agricultural Education	Farm Management
Agricultural Production	Food Science:
Irrigation Science	Dairy Industry Program
Agronomy (Plant Science)	Food Technology Program
Genetics (Plant Science)	Home Economics
Landscape Management (Plant Science)	Preforestry
Plant Pathology (Plant Science)	Preveterinary Medicine
Pomology (Plant Science)	Range Management
Vegetable Crops (Plant Science)	Soil Science:
Viticulture (Plant Science)	General Soil Science Program
Animal Science:	Soil Management and Conservation Program
Animal Husbandry	
Animal Physiology and Genetics	
Poultry Husbandry	

## 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		Sophomore Year	Units	
	F	S		F	S
Art 1a—History of Art ..	3	3	Art 3a—Color .....	—	3
Art 2a—Form and Com- position .....	3	—	Art 6a—Painting I .....	3	—*
Art 4—Perspective .....	—	2	Art 7a—Watercolor .....	3	3*
Art 5a—Design .....	3	—	Art 19—Art of Our Times .....	3	—
Art 10—Introduction to Arts .....	—	3	Physics 9—Sound, Color, and Light .....	3	—
Art 12—Lettering .....	—	2	Polit. Sci. 21—American Institutions .....	—	3
English by Eligibility .....	3	—	Philosophy 6a or b (or Eng. Lit.) .....	3	—
Polit. Sci. 24—Calif. Urban Govt. ....	2	—	Electives, Gen. Ed. ....	—	2
Health Education 1 .....	2	—	Physical Education .....	1/2	1/2
Life Science 10 .....	—	3			
Speech 1a .....	—	3			
Physical Education .....	1/2	1/2			
	<hr/>			<hr/>	
	16 1/2	16 1/2		15 1/2	11 1/2

\*Art 6b and 7b are interchangeable.

### Suggested Electives

Art 5b—Design (3)                      Bus. 120—Advertising (2)  
Guid. 1—Introduction to College (1)    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		Sophomore Year	Units	
	F	S		F	S
Art 1b—History of Art ..	—	3	Art 3—Color .....	—	3
Art 2a-2b—Form and Composition .....	3	3	Art 6a-6b—Painting .....	3	3*
Art 13a-13b—Drawing ..	3	3	Art 7a-7b—Watercolor ..	3	—*
Art 10—Introduction to Arts .....	—	3	Art 15—Life Drawing ....	2	—
English by Eligibility .....	3	—	Art 19—Art of Our Times .....	—	3
Polit. Sci. 21— Amer. Inst. ....	3	—	Physics 9—Sound, Color and Light .....	3	—
Life Sci. 10 .....	3	—	Philosophy 6a or 6b (or Eng. Lit.) .....	3	—
Speech 1a .....	—	3	Polit. Sci. 24—Calif. Urban Govt. ....	2	—
Physical Education .....	1/2	1/2	Health Education 1 .....	—	2
			Electives, General Education .....	—	1
			Physical Education .....	1/2	1/2
	<hr/>			<hr/>	
	15 1/2	15 1/2		16 1/2	12 1/2

\*Art 6b and 7b are interchangeable.

#### Suggested Electives

Art 1a—History of Art (3)  
Art courses not listed above

Guid. 1—Introduction to College (1)

## Art (Fine Arts)

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

Freshman Year	Units		Sophomore Year	Units	
	F	S		F	S
Art 1a-1b—History of Art .....	3	3	Art 15—Life Drawing .....	2	-
Art 2a—Form and Composition .....	3	-	Art 19—Art of Our Times .....	3	-
Art 5b—Design .....	-	3	Art 20a—Ceramics .....	-	3
Art 13a-13b—Drawing ..	3	3	Art 22a-22b—Sculpture ..	3	3
English by Eligibility .....	3	-	Physics 9—Sound, Color and Light .....	3	-
Polit. Sci. 21—Amer. Inst. ....	3	-	Philosophy 6a or 6b (or Eng. Lit.) .....	3	-
Life Sci. 10 .....	-	3	Polit. Sci. 24—Calif. Urban Govt. ....	2	-
Speech 1a .....	-	3	Health Education 1 .....	-	2
Physical Education .....	1/2	1/2	Electives, General Education .....	-	4
			Physical Education .....	1/2	1/2
	<hr/>			<hr/>	
	15 1/2	15 1/2		16 1/2	12 1/2

#### Suggested Electives

Art 10—Introduction to Arts (3)	Art 3—Color (3)
Guid. 1—Introduction to College (1)	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

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, Intermediate Algebra, Plane Geometry, Trigonometry, Chemistry or Physics.*

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

For information concerning the transfer requirements of other colleges and universities, students should consult the catalogs of the colleges and universities concerned, or their Cañada College counselor.

The program outlined below is typical of requirements for transfer in junior standing to a state college.

	Units		Units
°English 1a-1b	6	Lit., Philosophy and Arts	3-6
Physical & Life Science	6	(At least one in Philos.	
Economics 1a and 1b	6	or Lit.)	
Bus. Adm. 1a and 1b	8	Psychology 1a or 10	3
Bus. Adm. 18a	3	Health Education	2
Physical Education	2	Social Science	7-9
G.E. Electives	6	(Including American History, U.S. Constitution and California Government)	

Students graduating with a major in the field of business must achieve a percentile rating of 35 or over on the quantitative part of the SCAT entrance examination, 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:

Mathematics—A percentile rating of 35 or over on the quantitative part of the SCAT entrance examination, or completion of 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 55—Introduction to Business, or Management 99—Introduction to Business Management offered in Evening College.

°Speech 1a is required at San Jose State College and may be substituted for English 1b. Logic or Ethics and Finite Math are required by San Jose State.



## Business Administration (Two-Year Program)

Associate in Arts Degree with a Major in Business Administration

(Recommended Program)

This curriculum is for the Business student who does not wish to specialize.

Freshman Year	Units		Sophomore Year	Units	
	F	S		F	S
Bus. 58—			Bus. 91—Bus. Eng. ....	3	—
Human Relations .....	—	3	Polit. Sci. 21—American		
Health Education .....	—	2	Institutions .....	—	3
Bus. 92—Typing .....	3	—	Bus. 93—Machine		
English—by Eligibility ....	3-5	—	Calculation .....	—	3
Bus. 66—Gen. Acc't or			General Education		
Bus. Adm. 1a .....	4	—	Electives .....	3	3
Bus. 50 or 51—			Econ. 1a-1b—		
Basic Math. ....	2-3	—	Prin. of Econ. ....	3	3
Polit. Sci. 24—Calif.			Business Electives .....	3	—
Urban Govt. ....	—	2	Bus. 56—Bus. Corres. ....	—	3
Bus. Adm. 18a—			Bus. 65—Small Business		
Commercial Law .....	—	3	Management .....	3	—
Bus. 55—Introduction			Physical Education .....	1/2	1/2
to Business .....	3	—			
Bus. 60—Introduction to					
Data Processing .....	—	3			
Physical Education .....	1/2	1/2			
	<hr/>			<hr/>	
	15 1/2	16 1/2		15 1/2	15 1/2

### Suggested Electives

Bus. 110—Fundamentals of Salesmanship (3)	Bus. 35—Personal and Family Finance (3)
Bus. 116—Retail Principles and Practices (3)	Bus. 70a—Principles of Transportation (3)
Bus. 81—Security Investments (3)	Guid. 1—Introduction to College (1)

## Business (General Clerical)

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

Freshman Year		Units		Sophomore Year		Units	
	F	S		F	S	F	S
Health Education .....	2	-		Bus. 60—Intro. to Data Processing .....	3	-	
Bus. 92a, b or c .....	-	3		Bus. 93—Calculating Machine .....	-	3	
Bus. 91—Bus. English .....	3	-		Soc. Sci. 1 & 2—Intro ..	3	3	
English .....	-	3		Bus. 100— Office Procedures .....	-	3	
General Education Elective .....	3	-		General Education Elective .....	3	3	
Bus. 50 or 51— Bus. Math. ....	2-3	-		English .....	-	3	
Bus. 56—Bus. Corres. ....	-	3		Business 92c—Typing ..	3	-	
Bus. 58— Human Relations .....	-	3		Bus. 66 or Bus. Adm. 1a	4	-	
Bus. 55—Intro. to Bus. ....	3	-		Physical Education .....	1/2	1/2	
Electives .....	2	3					
Physical Education .....	1/2	1/2					
	<hr/>				<hr/>		
	15 1/2	15 1/2			16 1/2	15 1/2	

### Suggested Electives

Bus. 35—Personal Finance (3)	Speech 62—Elements (3)
Bus. Adm. 18a—	Guid. 1—Introduction to College (1)
Commercial Law (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
Related Courses .....	6
English A or Business English .....	3
Electives .....	6
	<hr/>
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## Business (Secretarial)

### Associate in Arts Degree with a Secretarial Major

(Recommended Program)

*Recommended High School Preparation: Typing, Shorthand (Gregg System, D.J.), Business English, Business Arithmetic and Office Machines.*

Freshman Year	Units		Sophomore Year	Units	
	F	S		F	S
Health Education .....	-	2	Bus. 56—Bus. Corres. ...	3	-
Bus. 92a or 92b—Typing	3	-	Bus. 92b or 92c—Typing	3	-
Bus. English .....	3	-	Bus. 90b, c—		
English .....	-	3	Shorthand (Gregg) ....	7	5
Bus. 66—Gen. Acc't .....	4	-	Bus. 100—Office		
Bus. 50 or 51—Arith.....	2	-	Procedures .....	3	-
Bus. 93—Mach.			Polit. Sci. 21—American		
Calculation .....	3	-	Institutions .....	-	3
Bus. 55—Intro. to Bus...	-	3	Polit. Sci. 24—Calif.		
Bus. 90a-b or c—			Urban Govt. ....	-	2
Shorthand (Gregg) ....	-	5	General Education		
General Education			Electives .....	-	3
Electives .....	-	3	English .....	-	3
Physical Education .....	1/2	1/2	Physical Education .....	1/2	1/2
	15 1/2 16 1/2			16 1/2 16 1/2	

See Business section for division requirements for all Business majors.

### Suggested Electives

Guid. 1—Introduction to College (1)	Bus. 58—Human Relations (3)
Geog. 1b—Cultural Geography (3)	Bus. 81—Security Investments (3)
Bus. 35—Personal and Family Finance (3)	Bus. Adm. 18a—Commercial Law (3)

### SECRETARIAL CERTIFICATE PROGRAM REQUIREMENTS

Remedial Courses (if required by testing)	
Core Courses	Units
Bus. 92a-b-c—Typing (through 92c) .....	6-9
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
Related Courses .....	6
English (Business English included) .....	5-6
Speech .....	3

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## Business (Merchandising-Management)

### Associate in Arts Degree with a Major in Merchandising

(Recommended Program)

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		Sophomore Year	Units	
	F	S		F	S
Bus. 50 or 51—			*Business Elective .....	3	3
Bus. Arith. ....	2-3	—	Bus. 124 Marketing ....	—	3
Bus. 55—Intro. to Bus. ...	3	—	Bus. 66—Gen. Acctg. ....	4	—
Bus. 116—			Bus. 65—Small Bus. ....	—	3
Merchandising .....	—	3	Speech 62 .....	3	—
Bus. 120—Advertising....	—	3	Soc. Sci. 1 & 2—Intro		
Bus. 58—			To Social Science ....	3	3
Human Relations .....	—	3	General Education		
Bus. 110—Salesmanship	3	—	Elective .....	3	3
English—by Eligibility ..	5	3	Physical Education .....	1/2	1/2
Health Education .....	2	—			
General Education					
Elective .....	—	3			
Physical Education .....	1/2	1/2			
	<hr/>				
	15 1/2	15 1/2		16 1/2	16 1/2

#### \*Business Electives

Bus. 58—Human Relations in Business	Bus. 35—Personal and Family Finance
Bus. 60—Introduction to Data Processing	Bus. 91—Business English
Bus. Ad. 1a—Accounting	Bus. 93—Cal. Machine
Bus. 56—Business Correspondence	Bus. 92a—Beginning Typing

## Business (Transportation)

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

Freshman Year	Units		Sophomore Year	Units	
	F	S		F	S
English—by Eligibility	5	3	Bus. 70a— Transportation	3	—
Bus. 50 or 51—Arith.	2-3	—	Bus. 70b—Traffic Mgt.	—	3
Bus. 55—Intro. to Bus.	—	3	Bus. 124—Marketing	3	—
Bus. Adm. 18a— Com. Law	—	3	Geog. 1a—Physical	—	3
Econ. 1a-1b—Principles	3	3	Soc. Sci. 1 & 2—Intro	3	3
Geog. 5a— World Regional	3	—	Bus. Adm. 1a or Bus. 66—Accounting	4	—
Geog. 4—Economic	—	3	Bus. 65—Small Business Management	—	3
Health Education	2	—	General Education Electives	3	3
Physical Education	1/2	1/2	Physical Education	1/2	1/2
	<hr/>			<hr/>	
	15 1/2	15 1/2		16 1/2	15 1/2

See Business section for division requirements for all Business majors.

### Suggested Electives

Stat. 2—Statistics (4)

Econ. 11—Econ. Hist. U.S. (3)

Bus. Adm. 18b—

Adv. Comm. Law (3)

Psych. 1a—General (3)

### CAREER OPPORTUNITIES

A relatively new field in business, Transportation offers an unlimited future in rail, motor, marine and air transportation, plus the field of traffic management. Numerous positions are offered in personnel, public relations, trade development, promotional services and management.

## Chemistry

See "Physical Sciences."

## 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 departmental requirements, 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."

## Dramatic Arts

See "Liberal Arts."

## Ecology

See "Biology."

## 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 program outlined on the following page 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 supplement "Paraprofessional Careers in the Social Services" from the Registrar's Office.

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

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. Music 8 and Art 8 are strongly recommended for the Elementary teacher.

## Engineering (Basic Program)

The basic Engineering program detailed below prepares for transfer to a four-year college or university at the end of the sophomore year. 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		Sophomore Year	Units	
	F	S		F	S
Math. 30—Anal. Geom. and Calculus .....	5	—	Math. 32-33—Calculus ..	3	3
Math. 31—Calculus .....	—	3	Engin. 35—Statics .....	3	—
Chem. 1a-1b—General ..	5	5	Engin. 36—Dynamics .....	—	3
Physics 4a—General .....	—	4	Engin. 38—Circuits and Devices .....	—	3
Engin. 20— Desc. Geom. ....	2	—	Physics 4b-4c—Gen. ....	4	4
Engin. 22—Graphics .....	—	2	Polit. Sci. 21—American Institutions .....	3	—
Engin. 48—En. Prof. ....	2	—	General Educ. Electives .....	4	3
Health Education .....	2	—	Physical Education .....	1/2	1/2
Eng. 1a—Read. and Comp. ....	—	3			
Physical Education .....	1/2	1/2			
	<hr/>			<hr/>	
	16 1/2	17 1/2		17 1/2	16 1/2

In addition to electives offered at Cañada, certain students should consider one or two of the following subjects offered only at CSM:

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 students 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.

## Food Technology

Associate in Arts Degree with a Major in Food Technology

First Semester	Units	Second Semester	Units
°English 50a, A, or 1a	3-5	Food Tech. 49— Special Problems	1-2
Food Tech. 49— Special Problems	1-2	°Food Tech. 50b— Food Prep	5
°Food Tech. 50a— Food Prep	5	or	
or		Food Tech. 51b— Food Prep.	4
Food Tech. 51a— Food Prep.		°Food Tech. 60b— Food Purch.	2
°Food Tech. 60a— Food Purch.	2	°Food Tech. 65b— Menu Planning	1
°Food Tech. 65a— Menu Planning	1	°Health Education	2
°Guid. 1—Intro. To College	1	°Food Tech. 90— Food Tech. & Adm.	1
°Food Tech. 90— Food Tech. & Adm.	1	°Physical Education Electives	$\frac{1}{2}$ 3-5
°Physical Education	$\frac{1}{2}$		
	<hr/>		<hr/>
°Required	13½ - 16½	°Required	14½ - 16½

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



### Food Facilities Engineering

FT 80—Equipment Layout & Design	4
DF 50—Drafting Fundamentals	2

### Allied Supply Field

Bus. 116—Merchandising	3
Bus. 110—Fundamentals of Salesmanship	3
FT 80—Equipment Layout & Design	4

### Electronic Data Processing

DP60 —Intro. to Data Processing	3
DP63a—Basic Computer Programming	4
DP63b—Computer Programming Systems	4
FT85—Food Service Computer Systems	4

### Foods

FT 54—Advanced Food Preparation	3
FT 53—Catering & Special Functions	2
FT 52—Food Preparation Supervision	3
FT 70—Food Management Problems	3

### Accounting

Bus. Adm. 1a—General Accounting	4
FT 75—Hotel & Restaurant Accounting	3

### Suggested Electives

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

Students should check under graduation requirements for courses required for the Associate in Arts degree.

## Foreign Languages

## Forestry

## Genetics

## Geography

Also see "Social Science."

## 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 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.

### Associate in Arts Degree with a Major in Home Economics

Freshman Year	Units		Sophomore Year	Units	
	F	S		F	S
Home Econ. 52—Foods	2	2	Home Econ. 20a-20b or 20b-20c—Clothing	3	3
Bus. 35—Pers. and Fam. Fin.	—	3	Home Econ. 9—Nutrition	2	—
Psych. 1a—General	3	—	Home Econ. 40 or 41— Home Furnishings	—	3
Home Econ. 35—Child in the Home	—	3	Anthropology 2— Cultural	3	—
English and/or Speech	3	3	Psych. 4—Marriage	—	3
Polit. Sci. 24—Calif. Urban Govt.	2	—	Hist. 17a-17b—Amer.	3	3
Health Education	2	—	Home Econ. 22—Textiles	2	—
Physical Education	1/2	1/2	General Education Elective	—	3
Electives	4	4	Physical Education	1/2	1/2
			Electives	2	—
	16 1/2			15 1/2	
				15 1/2	

One Life Science and one Physical Science course are recommended.

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

## 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.

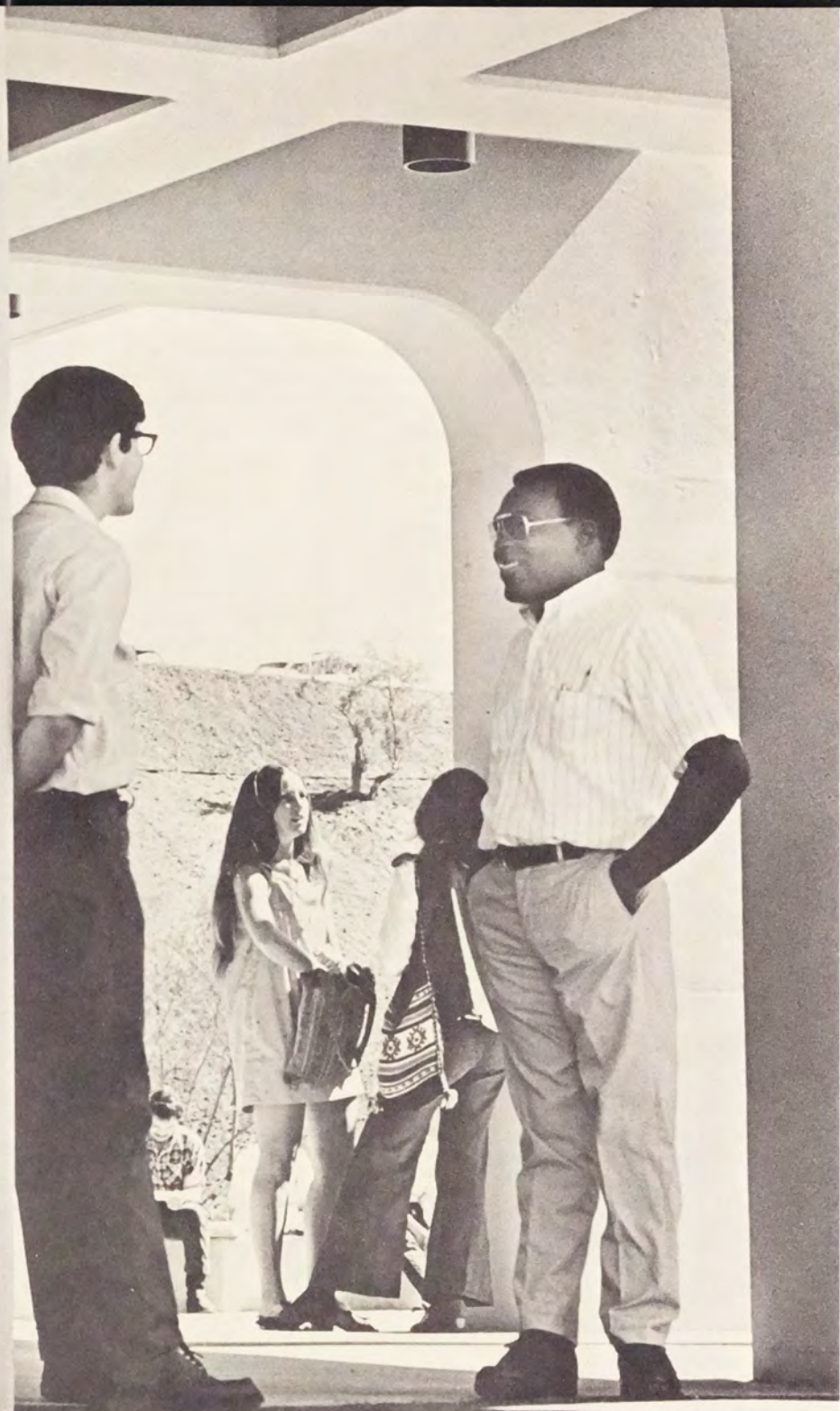
	Units		Units
English 1a, English 1b or Speech 1a	6	Major Requirements	20-30
Social Science		May include:	
American Institutions	4-8	Chemistry 1a-1b, 5, 8, 9,	
Psych. 1a or Electives	3-5	Physics 2a-2b, 3a-3b, or	
Humanities		Physics 4a-4b-4c,	
Literature, Philosophy	3	Zoology 1a-1b,	
Art, Music, Drama, Literature,		Psychology 33, Anthropology,	
Philosophy	3	Anatomy, Bacteriology,	
Foreign Language (Continuing from high school)	4-8	Physiology, Sociology,	
Health Education	2	Analytical Geometry and	
Physical Education	2	Calculus.	

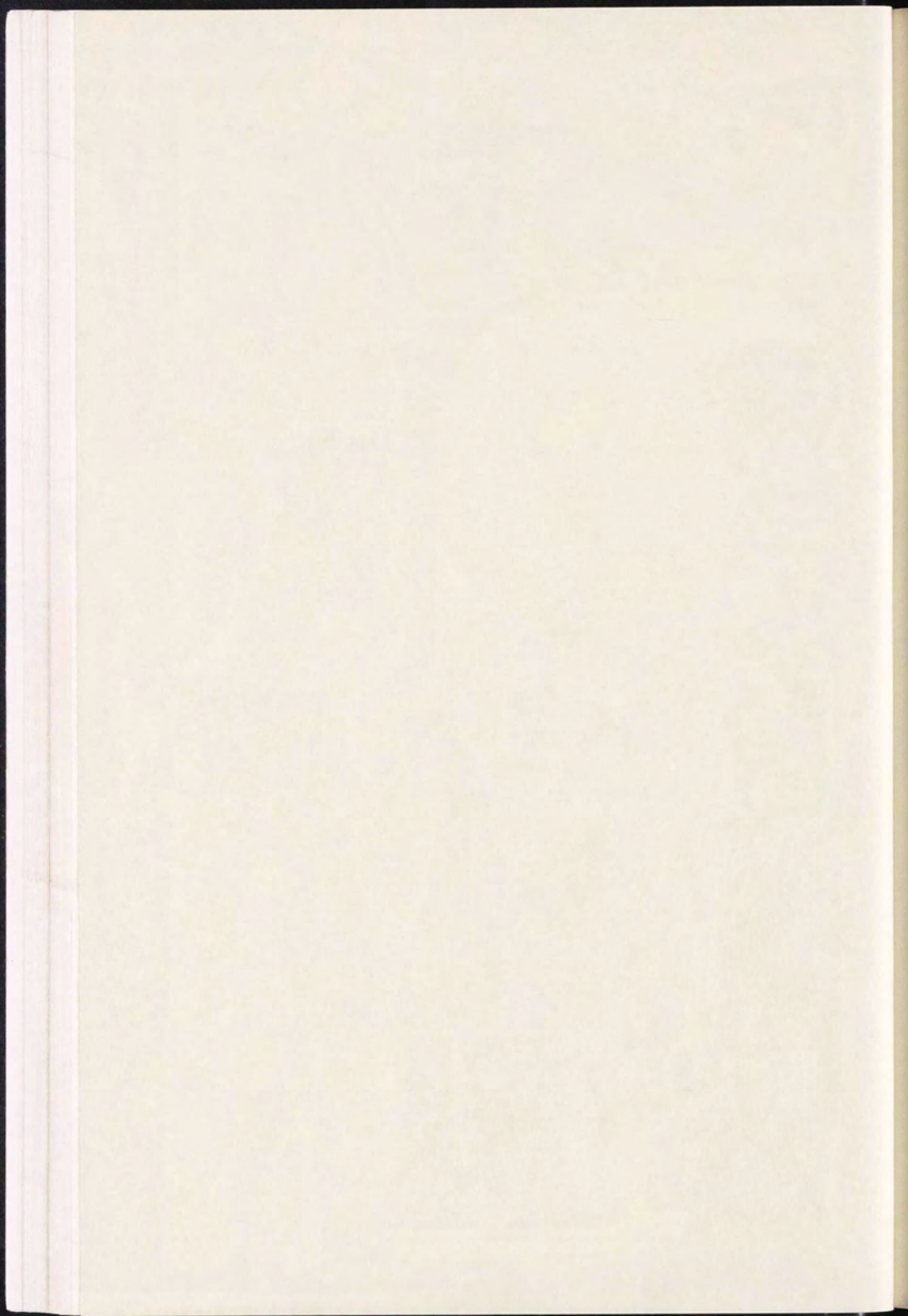
## Microbiology

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 (R.O.T.C.)

Military Science is offered to qualified students enrolled at Cañada College on a full-time basis. Classes and drill are conducted at Stanford University under the supervision of the Professor of Military Science, Stanford University. Students may complete the first two years of Army ROTC while enrolled at Cañada College and qualify for enrollment in the advanced courses (third and fourth years) at degree granting universities. Completion of ROTC and a baccalaureate degree qualify students for a commission in the United States Army Reserve.





## 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.*

Freshman Year	Units		Sophomore Year	Units	
	F	S		F	S
Music 1a— Musicianship .....	2	—	Music 2b—Advanced Musicianship .....	2	—
Music 2a— Adv. Musicianship .....	—	2	Music 5a-5b—Advanced Harmony .....	3	3
Music 4a-4b—Harmony .....	3	3	Applied Music .....	1	1
Music 6—Appreciation and Survey .....	3	—	11—Piano		
Applied Music .....	1	1	24—Brasses		
11—Piano*			25—Woodwinds		
24—Brasses			26—Strings		
25—Woodwinds			36—Voice		
26—Strings			Performance Groups .....	2	2
36—Voice			Music 22—Orch (2)		
Performance Groups .....	2	2	Music 23—Band (2)		
Music 22—Orch (2)			Music 33—Chorus (2)		
Music 23—Band (2)			Physics 9—Sound, Color and Light .....	3	—
Music 33—Chorus (2)			Polit. Sci. 21— American Institute .....	3	—
English 1a .....	3	—	Music 10—Introduction to Arts .....	—	3
Speech 1a .....	—	3	Philosophy 6a or 6b (or Lit. course) .....	—	3
Health Education 1 .....	2	—	Physical Education .....	1/2	1/2
Life Science 10 .....	—	3			
Polit. Sci. 24—Calif. Urban Govt. ....	—	2			
Physical Education .....	1/2	1/2			
	16 1/2	16 1/2		14 1/2	12 1/2

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

### Suggested Electives

Guid. 1—Introduction to College (1)      Music courses not listed above

## 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. 20A, B, C, D (women) and P.E. 30A, B, C, D (men) each semester rather than a general service section.

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



## Physical Sciences (Chemistry, Physics)

### Transfer Program

*Recommended High School Preparation: Elementary Algebra, Plane Geometry, Intermediate Algebra, Trigonometry, Chemistry, Physics, German.*

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

## 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		Sophomore Year	Units	
	F	S		F	S
English—by Eligibility ..	3	3	Police Sci. 51a-b—		
Police Sci. 9—Intro. ....	3	—	Crim. Investigation ....	3	3
Police Sci. 10—Admin.			Police Sci. 56—Records..	2	—
of Justice .....	3	—	Police Sci. 59—		
Police Sci. 50—Patrol ..	3	—	Juv. Proc. ....	3	—
Police Sci. 52—			Police Sci. 70—Organiz.	2	—
Crim. Law .....	—	3	Police Sci. 71—Police &		
Police Sci. 55—			Community Relations	—	2
Crim. Evid. ....	—	3	Police Sci. 80—		
Police Sci. 60—Traffic ..	—	3	Internship .....	—	2
Health Education .....	2	—	Electives .....	3	7
Elective .....	2	—	Polit. Sci. 24—California		
Polit. Sci. 21—			Urban Government ....	2	—
American Institutions..	—	3	Physical Education .....	1/2	1/2
Physical Education .....	1/2	1/2			
	<hr/>			<hr/>	
	16 1/2	15 1/2		15 1/2	14 1/2

### Recommended General Education Electives

Psych. 1a—General (3)  
 Soc. 1—Introduction (3)  
 Chem. 10—Survey (3)

Physics 10—Survey (3)  
 Life Sci. 10—Introduction (3)  
 Phy. Sci. 10—Introduction (3)

### Probation

Also see "Social Service."

### Psychology

Also see "Social Service."

### Public Health

### 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 probation technician, social work technician or psychological technician should obtain the special supplement, "Paraprofessional Careers in the Social Services," from the Registrar's Office.

## **Social Work**

Also 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.

Courses numbered 10 are specifically designed for General Education; the number 49 indicates Special Projects and the number 249 indicates a Community Education course.

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 10a or 10b 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 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.

### **2 ANATOMY AND PHYSIOLOGY (5)**

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

*Prerequisite: Concurrent registration in the A.A.R.N. Program.*

A detailed survey of basic human anatomy and of the principles of physiology. Emphasis is placed upon those areas which have a direct correlation with the practice of nursing.

### **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.

## **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 requirement 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.

## **Anthropology (continued)**

### **3 ARCHEOLOGY (3)**

*Three lecture hours per week.*

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.

## **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.*

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.*

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

### **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.

### **3a-3b COLOR (3-3)**

*Three lecture hours per week.*

*Prerequisite: Art 3a—none; 3b—3a.*

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

## Art (continued)

### 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.

### 5a-5b DESIGN (3-3)

*Three lecture hours per week.*

*Prerequisites: 5a—Concurrent enrollment in Art 99 (Studio Hours); 5b-5a or 2a and concurrent enrollment in Art 99 (Studio Hours).*

Study of special 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.

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

*Three lecture hours per week. Three additional studio hours required.*

*Prerequisite: None; recommend Art 2a-b. Concurrent enrollment in Art 99 (Studio Hours) is required.*

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.)

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

*Three lecture hours per week. Three additional studio hours required.*

*Prerequisite: 7a—2a; 7b—7a.*

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

### 9 PHYSICS OF SOUND, COLOR, AND LIGHT (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, light and related wave forms. A weekly laboratory period studying musical instruments, overtones, resonance, pitch and recording techniques, and light, color and optical phenomena. (See Physics 9.)

## **Art (continued)**

### **10 (x) INTRODUCTION TO THE ARTS (3)**

*Three lecture hours per week.*

The basic elements of painting, music and theatre. Problems of organization and contemporary experiments with media and forms.

### **12 LETTERING (2)**

*Two lecture hours per week.*

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

### **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.

### **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.

### **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.)

### **17a-b (x) PRINTMAKING AND ETCHING (2-2)**

*One lecture hour per week. Three hours per week of laboratory.*

*Prerequisite: 17a—2a, 13a; 17b—17a.*

A study of printmaking as a fine art. Includes intaglio etching, woodcuts, lithograph and silk screen.



## Art (continued)

### 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.

### 20a-b (x) CERAMICS (3-3)

*Three lecture hours per week. Three additional studio hours per week.*

*Prerequisite: 20a—none; 20b—20a.*

Elementary clay construction including pinch, coil and slab; methods of ornamentation, glazing, firing, introduction to potter's wheel.

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

*Three lecture hours per week. Three additional laboratory hours per week.*

*Prerequisite: 22a—none; 22b—22a.*

A basic course in figurative and non-objective structural forms using plastic, fiberglass, metal and other media.

### 27a-27b (x) STAGE DESIGN (3-3)

*Three lecture hours per week.*

*Prerequisite: 27a—none; 27b—Art 27a.*

27a—Experience in executing designs for theatrical settings. Analysis of plays and scenic problems. Emphasis upon solving the problems involved in preparing a design for presentation. No experience in drawing required.

27b—Special problems in scene design.

(This course is also taught as Drama 27a-b.)

### 52 (x) FIGURE DRAWING (2)

*One lecture and three lab hours per week with group and individual instruction.*

Graduated problems using the clothed figure, and dealing with the drawing of the structure and proportions of the figure at rest and in motion. Through contour line, gesture and volume studies, and using different media as wash, crayons, pencil, the student acquires an ability to render a sketch of complete spontaneity and expression. (May be repeated for credit.)

### 99 STUDIO HOURS (0)

*Hours by arrangement.*

Supervised studio hours in connection with Art 2, 5, 6, 22.

## **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 satisfying the science requirements in state colleges and universities. The course includes the motions of the earth, planets, comets, meteors, the sun, double stars, motions of the stars, variable stars, the Milky Way system and galaxies, together with an introduction to the methods employed by astronomers in gathering information.

## **Bacteriology**

### **1 GENERAL BACTERIOLOGY (5)**

*Three lecture hours and six lab hours per week.*

*Prerequisite: One semester of Chemistry in college; not open to first semester freshmen. Recommended: One semester of a college course in the Biological Sciences.*

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.)

### **2 MICROBIOLOGY (4)**

*Two lecture hours and six lab hours per week.*

*Prerequisite: Concurrent registration in A.A. Degree Nursing program.*

The disease process and plant and animal microbes that cause disease in man. The history, morphology, physiology and destruction of bacteria. An introduction to parasitic protozoa and worms.

### **10 MICROBES AND MAN (3)**

*Three lecture hours per week.*

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

## Biology

### 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.

### 10a-10b GENERAL BIOLOGY (4-4)

*Three lecture hours and one three-hour lab period per week, with field trips during the regular period.*

*Prerequisite: 10a—none; 10b—10a.*

10a—Broad principles of structure, function, evolution and inter-dependence between plants and animals, with emphasis on lower animal groups. Special attention to the study of structure and life histories of local forms.

10b—Particular emphasis on vertebrates, their structure and function, ecology and evolution, higher plants.

### 20 MARINE BIOLOGY (3)

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

*Prerequisite: Biology 10a or 10b, Zoology 1a or Botany 1 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 SPECIAL PROBLEMS (1 or 2)

*Hours by arrangement.*

*Prerequisites: Open only to students who have completed, or are currently enrolled in one of the following: Zoology 1a-1b, Biology 10a-10b, or Botany 1. 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 10a or 10b 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 1, 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:

**Mathematics**—A percentile rating of 35 or over on the quantitative part of the SCAT entrance examination 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.

**Business 55**—Introduction to Business.

## **Business (continued)**

### **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.

### **50 BUSINESS ARITHMETIC (2)**

*Two hours per week.*

*Prerequisite: For students with a percentile rating 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 rating of 35 or over on the quantitative part of the SCAT entrance examination 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)**

*(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. A basic orientation course in business designed to develop a realization of the role of business in the economy and as an aid in selecting a field of vocational specialization.

### **56 BUSINESS CORRESPONDENCE (3)**

*Three hours per week — Spring Semester.*

*Prerequisite: 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.

## **Business (continued)**

### **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.

### **60 INTRODUCTION TO DATA PROCESSING (3) (Evening College)**

*Three lecture hours per week.*

History of data processing; basic methods of data processing; functions of the punched card as reading, testing and selecting; the tabulating methods of data processing such as the sorter, interpreter, collator, reproducer and accounting machine; basic parts of a computer; and the concept of stored programs.

### **65 SMALL BUSINESS MANAGEMENT (3) (Evening College)**

*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 (4)**

*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.

### **70a-70b PRINCIPLES OF TRANSPORTATION AND TRAFFIC MANAGEMENT (3-3) (Evening College)**

*Three hours per week.*

*Prerequisite: 70a—none; 70b—70a.*

70a—Transportation in our economy, the transportation system and railroad development, development and regulation of transportation, theory of rate-making and government controls, selected carrier problems and transportation policies.

70b—Routing, classification and special services; claims for loss, damage and delay; determination of lawful freight charges by use of rail, truck and air tariffs.

## **Business (continued)**

NOTE: English requirement for Shorthand students: Completion of or enrollment in Business English, English 50b or English A or 1A.

### **90a BEGINNING SHORTHAND (5)**

*Five class hours and one lab hour by arrangement per week.*

*Prerequisites: Enrollment in or completion of Business 92a or equivalent and completion of or enrollment in Business English or English 50b, A 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 one lab hour 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 or English 50b,a 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 one lab hour per week.*

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

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

### **90r REFRESHER SHORTHAND (3)**

*Three hours per week.*

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

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

### **91 BUSINESS ENGLISH (3)**

*Three hours per week — Fall Semester.*

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

## **Business (continued)**

### **92a TYPING (3)**

*Five hours per week.*

*Prerequisite: No previous typing instruction.*

An elementary course designed to develop correct typing techniques, basic skill, and proper care and operation of the typewriter.

### **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 and legal letters and forms, including 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.*

Review of keyboard and correct techniques with emphasis on skill development. Introduction to business letters, problems and business forms.

### **93 MACHINE CALCULATION (3)**

*Five hours per week — Spring Semester.*

*Prerequisite: Business 50, or permission of instructor.*

Performance of arithmetic calculations in machines with special emphasis on actual business situations and problems. Three-fourths of the semester will be devoted to the operation of rotary-type calculators and touch system of operating printing calculators and one-fourth of the semester to familiarization with key-driven calculators. Recommended for all Secretarial, Merchandising and two-year Business Administration majors.



## **Business (continued)**

### **100a OFFICE PROCEDURES AND OFFICE ADMINISTRATION (3)**

*Five class hours plus two lab hours per week — Spring Semester.*

*Prerequisites: Business 92b or an equivalent proficiency in typing; and completion of Business English or completion of or enrollment in English 50b, A, 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.

### **109a, b MERCHANDISING INTERNSHIP (3-4)**

*Class meets one day per week; sessions vary from two to four hours in length.*

*Prerequisites: Business 55; concurrent enrollment in one of the following: Business 110, Business 116, Business 120 or Business 124 or by approval of the instructor; and part-time employment in the distributive field.*

Designed for the terminal student majoring in Merchandising. Activities include: (1) Job-Problems Seminar — group discussion based on individual and group job problems, and (2) Lab Field Study — selected field trips.

### **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 sales demonstrations by guests from the direct selling field and practical sales presentations by students.

### **116 MERCHANDISING (3)**

*Three hours per week.*

*Prerequisite: Business 55 and Business 50 (if required by test).*

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

### **120 ADVERTISING (3)**

*Three hours per week.*

*Not open to first semester freshmen.*

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

## **Business (continued)**

### **124 MARKETING (3)**

*Three hours per week—Fall Semester.*

*Prerequisite: Business 55.*

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 and wholesaling consumers' goods and marketing industrial goods.

## **Business Administration**

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

**Mathematics**—A percentile rating of 35 or over on the quantitative part of the SCAT entrance examination or its equivalent test score 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 or 51 is recommended. 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.

### **18a COMMERCIAL LAW (3)**

*Three hours per week.*

A brief history of law, our courts, court procedure, contracts, sales and agency.

## Chemistry

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

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

*Prerequisites: 1a—Chemistry 51 with grade of C or better, or high school Chemistry with 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 grade of C or better.*

1a—Principles of Inorganic Chemistry and an introduction to Organic Chemistry, for students majoring in Engineering, Physical Science, Medical Arts and other Science fields.

1b—Includes descriptive chemistry of the elements, 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.

## **Chemistry (continued)**

### **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; possible future developments in Chemistry. While concurrent enrollment in Chemistry 10L is not required, it is strongly recommended. (This course meets the General Education requirements for Physical Science at most colleges and universities; it meets the requirements for an introductory, non-mathematical Chemistry course in several curricula.)

### **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 lab science.)

### **12a ORGANIC CHEMISTRY (6)**

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

*Prerequisite: Chemistry 1b with grade 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.

### **51 ELEMENTARY CHEMISTRY (4)**

*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, as 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

### 1 COOPERATIVE EDUCATION (1-4)

The Cooperative Education program provides off-campus, career-related work experience in combination with traditional 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 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 at the Cooperative Education office located in the Counseling Center at Cañada College.

## Drama

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

### 1a (x) HISTORY OF DRAMATIC ARTS (CLASSICAL AND RENAISSANCE) (3)

*Three class hours per week.*

The evolution from classical Greece to the 17th Century of physical theatres, playwriting, acting, directing and staging. In each period the principles underlying these arts will be related to dominant social, intellectual and artistic forces. Use of motion pictures, filmstrips, recordings, models and play attendance, as well as lectures and discussion.

## **Drama (continued)**

### **1b (x) HISTORY OF DRAMATIC ARTS (3)**

*Three class hours per week.*

Evolution of the dramatic arts from the 17th Century to the present.

### **10 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 view point. 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 managership, 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, enacting of scenes and oral reading, tape recordings, pantomimes, and improvisations, vocal and physical exercises.

### **14b-14c-14d ADVANCED ACTING AND FUNDAMENTALS OF DIRECTING (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.

## **Drama (continued)**

### **15 PLAY PRODUCTION (1½ to 2)**

*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 (1½ to 2)**

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

### **17 (x) COSTUME-FASHION WORKSHOP (1½ 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 DIRECTING (3)**

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.

### **24 MODERN DRAMA (3)**

*Three hours per week.*

*Prerequisite: Eligibility for English 1a.*

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.

### **25 INTRODUCTION TO SHAKESPEARE (3)**

*Three hours per week.*

*Prerequisite: Eligibility for English 1a or permission of instructor.*

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

## **Drama (continued)**

### **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.

### **27a-27b (x) STAGE DESIGN (3-3)**

*Three hours per week.*

*Prerequisite: 27a—none; 27b—Art 27a.*

27a—Experience in executing designs for theatrical settings. Analysis of plays and scenic problems. Emphasis upon solving the problems involved in preparing a design for presentation. No experience in drawing required.

27b—Special problems in scene design.

### **49 SPECIAL PROJECTS (1/2 to 2)**

Special projects in such fields as directing, technical directing, dramatic literature and the integration of the theatre arts.

## **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 costs, 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 will not receive credit for this course.

For Economic Statistics see Statistics.

### **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.

## Education

### 1 INTRODUCTION (2)

*Two 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 (3)

*Three lecture hours per week.*

The role of the teacher assistant in the secondary and elementary school structure. Specific instruction and practice will be given in the instructional, supervisory and clerical aspects of the assistant's position.

## Engineering

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

### 4 THE ENGINEERING PROFESSION (2)

*Two lecture hours per week.*

An historical overview of the branches and functions of Engineering, the engineering approach to problem analysis and solution, a preview of basic Engineering Sciences. Occasional lectures by practicing engineers to supplement classroom work.

### 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.

## Engineering (continued)

### 22 ENGINEERING GRAPHICS (2)

Six lab hours per week.

*Prerequisites: Engineering 20 and Mathematics 30.*

Dimensioning, sections, fasteners, welding details, working drawings, cams, gears, nomography and graphical calculus.

### 35 STATICS (3)

Three lecture hours per week.

*Prerequisites: Physics 4a and Mathematics 31. 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 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, gyroynamics of rigid bodies. D'Alembert's principle, generalized coordinates, Hamilton's principle, Lagranges' equations, introduction to celestial mechanics. Elementary fluid mechanics.

### 38 CIRCUITS AND DEVICES (3)

*Prerequisites: Physics 4b, concurrent registration in Mathematics 32 or above.*

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

Placement Test — required of all entering freshmen. Students transferring to Cañada College with credit in college English (a course equivalent to English 1a, Reading and Composition) will not be required to take the test. It is designed to determine the entrant's ability in reading and the mechanics of writing and to help determine placement of students in English courses.

## English (continued)

### 1a-1b READING AND COMPOSITION (3)

Three hours per week.

*Prerequisites:* 1a—Eligibility as determined by Placement Test or transcript; 1b—English 1a.

1a—Practice in writing based on a study of the form and content of the essay.

1b—Study of literary types: short story, drama, poetry and the novel. Themes based on reading and class analysis.

### 2 SOPHOMORE COMPOSITION (3)

Three hours per week.

*Prerequisites:* English 1a and English 1b.

Practice in writing research and critical papers based upon extensive and intensive reading of literature and related critical works.

### 9a-9b CREATIVE WRITING (2-2)

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

### 24 MODERN DRAMA (3)

Three hours per week.

*Prerequisite:* Eligibility for 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:* Eligibility for 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.)

## English (continued)

### 26 MODERN NOVEL (3)

*Three hours per week.*

*Prerequisite: English 1a or permission of the instructor.*

Study of novels of the late 19th and 20th Century and of various aspects of literary criticism. Reading, discussion and critical papers.

### 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.

### 28 FILM STUDY AND APPRECIATION (3)

*Two lecture hours and two lab hours per week.*

*One semester course (may be repeated).*

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.

### 29 THE CONTEMPORARY WRITER (1)

*One and one-half hours per week.*

An opportunity for students to meet with writers and to hear, read and study their work. A study of current literature as a product of contemporary life.

### 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.

### 31a AMERICAN LITERATURE (3)

*Three hours per week.*

*Prerequisite: English 1a or permission of the instructor.*

Study of American literature from the beginning through Mark Twain. Lectures; reading, analysis and discussion of selected works; papers.

## **English (continued)**

### **31b AMERICAN LITERATURE (3)**

*Three hours per week.*

*Prerequisite: English 1A or permission of the instructor.*

Study of American literature since Mark Twain. Lectures; reading, analysis and discussion of selected works; papers.

### **42a MASTERPIECES OF EUROPEAN LITERATURE (3)**

*Three hours per week.*

*Prerequisite: Eligibility for English 1a or permission of the instructor.*

Study of various works of European literature from the classical period to the 17th Century. Reading, analysis and discussion of selected works; written reports; lectures.

### **42b MASTERPIECES OF EUROPEAN LITERATURE (3)**

*Three hours per week.*

*Prerequisite: Eligibility for English 1a or permission of the instructor.*

Study of various works of European literature from the 17th Century to the present day, with emphasis on European prose writings. Reading, analysis and discussion of selected works; written reports, oral readings and lectures.

### **43 AFRO-AMERICAN LITERATURE (3)**

*Three lecture hours per week.*

*Prerequisite: Eligibility for English 1a or permission of the instructor.*

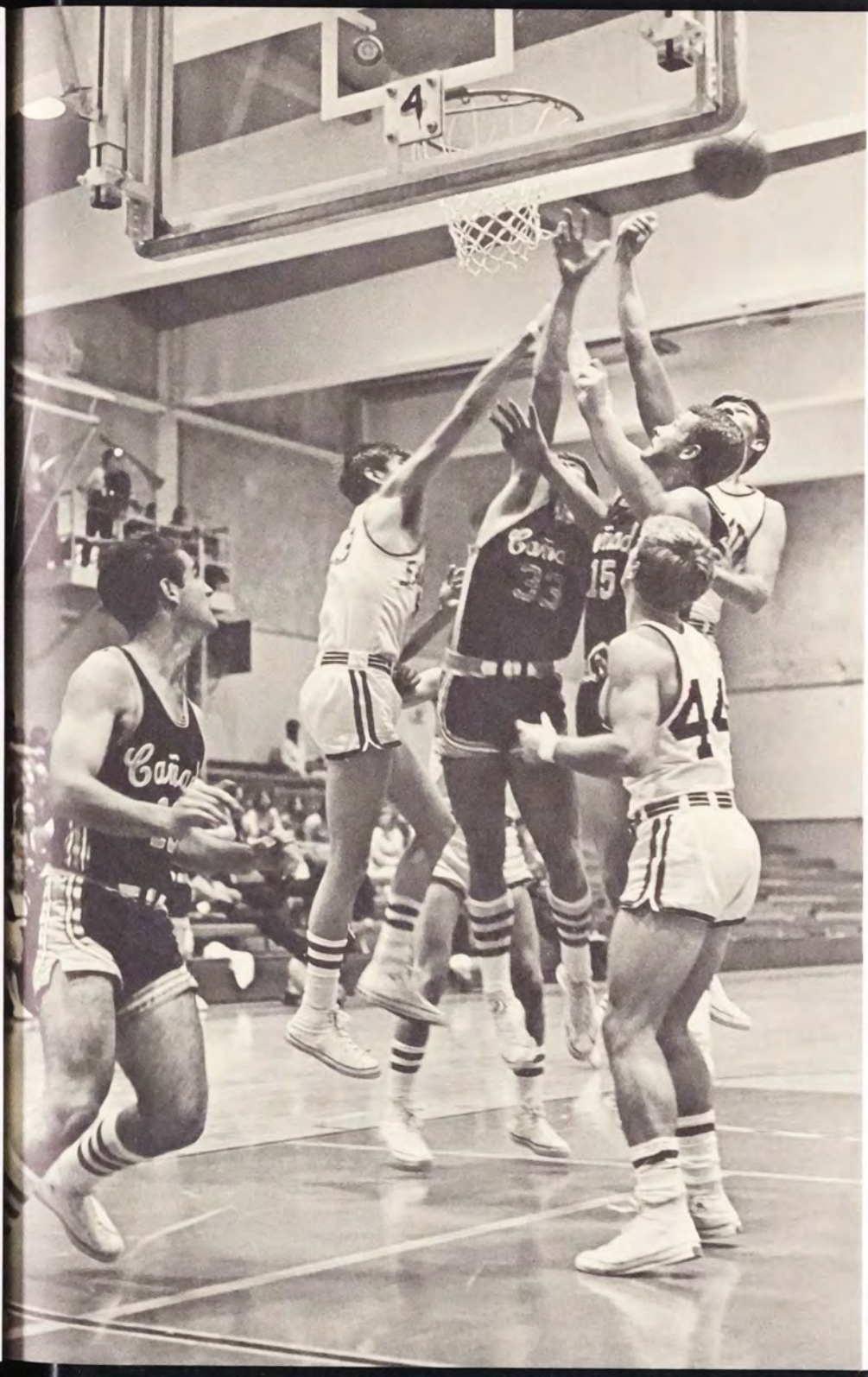
Historical and literary survey of Afro-American literature emphasizing principal authors and their works from the 19th Century to the present. Lectures and discussions based on readings of poetry, short stories, novels and drama; written reports.

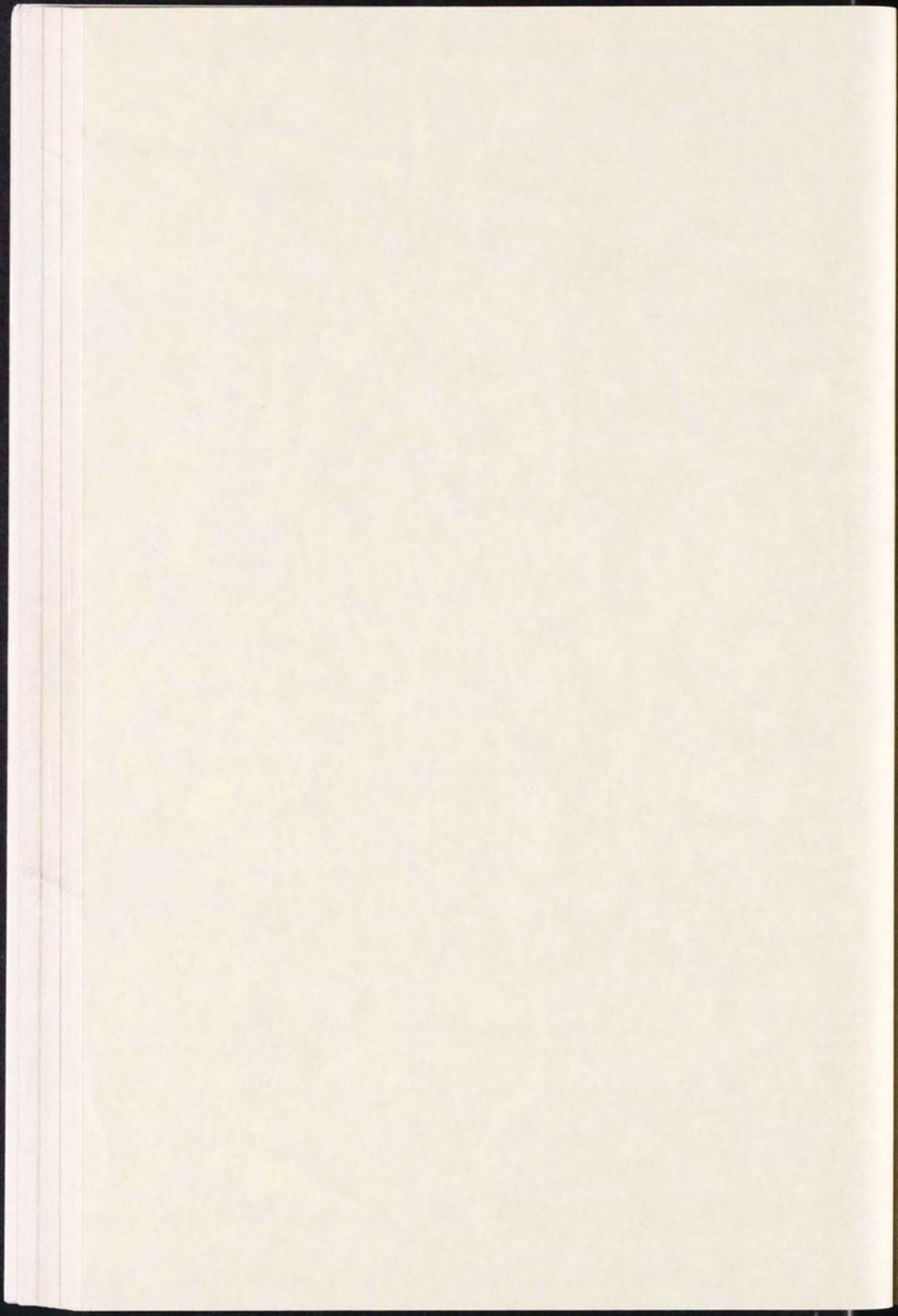
### **46a SURVEY OF ENGLISH LITERATURE (3)**

*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. (Recommended for English majors.)







## English (continued)

### 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 of a more general nature. Discussions, lectures, recordings. (Recommended for all interested students and particularly for those students majoring in English.)

### 49 SPECIAL PROJECTS (1)

Hours by arrangement.

Prerequisites: Sophomore standing and permission of 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.

### A PREPARATORY COMPOSITION (3) (Credit/No Credit)

Three hours per week.

Prerequisite: Eligibility as determined by the English Placement Test.

Training in the principles of composition to help the student achieve the required college freshman ability in writing coherent, intelligent and technically correct essays. Designed for students seeking eligibility for English 1a. Students successfully completing the course will receive three units of credit but no letter grade.

### 50a FUNDAMENTALS OF READING AND WRITING (4)

Four hours per week.

Prerequisite: Eligibility as determined by the English Placement Test or by permission of instructor.

Reading of short stories, informal essays and books of non-fiction; study of vocabulary and spelling; written exercises, quizzes and compositions; class discussions. (Students completing this course normally take English 50b.)

### 50b READING AND INTERPRETATION (4)

Four hours per week.

Prerequisite: English 50a or English A.

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

## English (continued)

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

*Five hours per week.*

*Prerequisites: 57a—Assignment on basis of a placement test. 57b—57a or assignment on basis of a placement test.*

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

### 61 THE SHORT STORY (2)

*Two hours per week.*

Study of short stories. Class discussion; lectures.

### 63 AFRO-AMERICAN LITERATURE (3)\*

*Three lecture hours per week.*

*Prerequisite: None. Completion of English 50a is recommended.*

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.

### 64 VOCABULARY BUILDING (2)

*Two hours per week.*

*Students who have had English 1a may not enroll in this course.*

Study of words, their synonyms and antonyms.

### 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.

### 68 CONTEMPORARY LITERATURE (3)

*Three lecture hours per week.*

*Prerequisite: None. Completion of English 50a is recommended.*

Study of the main currents of contemporary American, English and Continental literature. Works read will include poetry, novels and plays.

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\* Meets with English 43. Course requirements are somewhat different for English 63 students.

## **Food Technology and Management**

### **49 FOOD SERVICE RESEARCH (1 or 2)**

*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.

### **50-51 QUANTITY FOOD PREPARATION (5-4)**

*50—Two lecture hours per week, nine lab hours per week by arrangement.*

*51—Two lecture hours per week, six lab hours per week by arrangement.*

*Note: Beginning students enroll in either 50 or 51 their first semester depending on their schedule of other courses. They enroll in the alternate course their second semester.*

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)**

*Nine lab hours per week.*

*Prerequisites: Food Technology 50 and 51.*

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

### **53 CATERING AND SPECIAL FUNCTIONS (2)**

*Six lab hours per week.*

*Prerequisites: Food Technology 50 and 51.*

Preparation and service for on- and off-premise feeding at special hour.

### **54a-54b ADVANCED FOOD PREPARATION (3-3)**

*Nine lab hours per week.*

*Prerequisites: Food Technology 50 and 51.*

Emphasis on special functions, gourmet item preparation and service.

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

*Two lecture hours per week.*

*Prerequisites: 60a—Concurrent enrollment in Food Technology 50 or 51; 60b—60a and concurrent enrollment in Food Technology 50 or 51.*

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.

## Food Technology and Management (continued)

### 65a-65b MENU PLANNING (1-1)

*One lecture hour per week.*

*Prerequisites: 65a—Concurrent enrollment in Food Technology 50 or 51; 65b—65a and concurrent enrollment in Food Technology 50 or 51.*

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

### 70 FOOD MANAGEMENT PROBLEMS (3)

*Three lecture hours per week.*

*Prerequisite: Sophomore standing in Food Technology Program.*

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

### 75 HOTEL AND RESTAURANT ACCOUNTING (3)

*Three lecture hours per week.*

*Prerequisites: Food Technology 50 and 51, Accounting 66.*

Applying basic accounting to the hospitality industry variations.

### 80 EQUIPMENT LAYOUT AND DESIGN (4)

*Two lecture hours and six lab hours per week.*

*Prerequisites: Sophomore standing in Food Technology Program, Essentials of Drafting 14 or equivalent. Recommended: Fundamentals of Salesmanship 110.*

Equipment specifications and performance; layout principles of material and traffic flow.

### 85 FOOD SERVICE COMPUTER SYSTEMS (4)

*Two lecture hours and six lab hours per week.*

*Prerequisites: Sophomore standing in Food Technology Program, Introduction to Data Processing 60. Recommended: Concurrent enrollment in Basic Computer Programming 63a.*

Application of electronic data processing to food service problems of menu planning, purchasing and inventory control, and hotel front office controls.

### 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.

## Forestry

### 1 INTRODUCTION TO FORESTRY (3)

*Three lecture hours per week.*

The history and importance of Forestry; present Forestry policies and management; forest products and their utilization; Forestry in relation to public health and recreation; private, city, county, state and federal agencies engaged in forestry; Forestry education; Forestry as a career.

### 6 FOREST SURVEYING INSTRUMENT (3)

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

Use of basic forest engineering equipment—hand compass, staff compass, Abney level, tapes, aneroid barometer, transit and level. Measurement of distance, direction and elevation. Field and office assignments involving forest surveys.

## French

**Language Laboratory and Listening Requirement**—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.

## French (continued)

### 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, play 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.*

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.*

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 products of the various agricultural areas of the world, the mineral resources, industry, transportation, communication and power production.

### 5a WORLD REGIONAL GEOGRAPHY (3)

*Three hours per week for lecture, discussion and demonstration.*

A series of regional studies covering North and South America.

### 5b WORLD REGIONAL GEOGRAPHY (3)

*Three hours per week for lecture, discussion and demonstration.*

A series of regional studies covering Europe, Asia and Africa.

## 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.

## Geology (continued)

### 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.*

*Recommended: Elementary Chemistry.*

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.*

Introduction to the scientific method and history of Geology. 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 most colleges and universities.)

### 49 SPECIAL PROBLEMS (1-2)

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

*Prerequisite: Geology 1a or 1b or Paleontology I or Mineralogy 6.*

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.



## German (continued)

### 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)

*One hour a week.*

*Open to all students but strongly urged for students whose counselors recommend it.*

Acquaintance with campus facilities and activities, improvements of study habits and basic skills needed in college subjects, educational planning for ultimate vocational goal. Self-appraisal by means of tests measuring potential abilities, interests, aptitudes and past achievement as well as personal, emotional and social adjustment.

## 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 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.

## History (continued)

### 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 (3)

*Three hours per week.*

*Prerequisite: History 4a, or consent of instructor.*

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 4a-4c (6 units) may be substituted in lieu of History 17a-17b or Political Science 21 in fulfilling graduation requirements.*

### 6a AFRICAN CIVILIZATIONS (3)

*Three lecture hours per week.*

The period prior to 1800. The sources of African history, Africa in ancient times, the spread of Islam, the era of empires and city-states, Africa and the first period of European expansion, kingdoms of the savannah and forest, coastal tropical Africa and the Atlantic world.

### 6b AFRICAN CIVILIZATION (3)

*Three lecture hours per week.*

The period after 1800. African civilizations and cultures, political reorganizations, developments in Northern Africa, 19th Century Jihads, interaction of Africa and Europe, the European scramble for Africa and its partitioning, consolidation of colonial control and the rise of African nationalism.

### 8a HISTORY OF AMERICAS (3)

*Two hours of lecture and one hour of class discussion 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.

## History (continued)

### 8b HISTORY OF AMERICAS (3)

*Two hours of lecture and one hour of class discussion per week.*

*Prerequisite: None. History 8a is recommended.*

A general survey of the history of North and South America, from about 1830 until the present. Emphasis is placed upon the larger countries 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.

### 17a AMERICAN 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 AMERICAN 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 (6 units) may be substituted in lieu of Political Science 21, in fulfilling graduation requirements.*

### 22 CALIFORNIA HISTORY (3)

*Three hours per week.*

The story of Spanish, Mexican and American pioneers who in less than 200 years made California what it is today. This course emphasizes the political, social, and economic background of modern California. (History 22 satisfies the requirement in California state and local government.)

### 24 AMERICAN FOREIGN POLICY (3)

*Three hours per week.*

An historical inquiry into the background of major problems in foreign policy of our own day. Special attention is given to the period since World War II.

## History (continued)

### 33 THE AFRO-AMERICAN IN U.S. HISTORY (3)

*Three hours per week.*

*Prerequisite: None, but History 17a 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.

## Home Economics

### 5 CAREERS IN HOME ECONOMICS (1)

*One lecture hour per week.*

Exploration of areas of employment, opportunities and responsibilities of the Home Economist.

### 9 NUTRITION (2)

*Two 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.

### 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.

### 20b CLOTHING AND TAILORING (3)

*Prerequisite: 20a or consent of instructor.*

*Three two-hour lab periods per week.*

Advanced and custom techniques of tailoring and dressmaking with emphasis on clothing selection, principles of color, design and individuality.

## Home Economics (continued)

### 20c CREATIVE FASHIONS, CONSTRUCTION AND DESIGNING (3)

*Six lecture-lab hours per week.*

*Prerequisite: 20b.*

Custom techniques of tailoring will use fine finishes. Detailed study of pattern and fabric compatability. Elementary designing problems will emphasize originality of design for individual.

### 22 TEXTILES (2)

*Two lecture hours per week.*

Study of natural and chemical fibers; yarns and fabric construction and finishes. Care, cost and labelling as related to consumer use.

### 24 CLOTHING SELECTION (2)

*Two lecture hours per week.*

Individual coordination of costume and accessories for all occasions using principles of design and color. Wise purchasing and comparative shopping. Recommended as preparation for professional work.

### 35 CHILD IN THE HOME (3)

*Three lecture hours per week.*

*Prerequisite: Completion of or concurrent enrollment in Psychology 1a.*

Emotional, social, intellectual and physical development of children to age 6; intra-family relationships with emphasis on parent-child relations; mother-child relations; play-learning materials and activities. Observations of pre-school children; participation in play-school and evaluative conferences with the instructor.

### 40 HOUSING AND INTERIOR DECORATION (3)

**(Fall Only)**

*Three lecture hours per week.*

Analysis of today's house. Experiences in decorating, selecting furnishings and creating furnishings.

### 41 INTERIOR DESIGN AND HOME PLANNING (3)

**(Spring Only)**

*Three lecture hours per week.*

Study of environment of today's house, with experiences in use of color and design. Selection of furniture, surfaces, fabrics and accessories from artistic and practical standpoint. Construction of slipcovers, draperies, bedspreads and simple furniture upholstery.

## Home Economics (continued)

### 52 FOODS (2)

*One two-hour lecture-demonstration per week.*

Planning, selection and preparation of foods for meals for optimum health. An introductory course not open to Home Economics majors; 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. Pattern and fabric selection, alterations and fitting, and basic techniques will be given to develop individual skills.

### 65b CLOTHING CONSTRUCTION (1)

*Three hours per week.*

*Prerequisite: 65a or consent of instructor.*

Professional tailoring and advanced dressmaking for the more skilled individual. 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.*

*Prerequisite: Eligibility for English A.*

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 eligibility for 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.

## Journalism (continued)

### 3 ADVANCED NEWSWRITING (3)

*Two lecture hours and two lab hours per week.*

*Prerequisite: Journalism 2.*

A continuation of Journalism 2 with emphasis on detailed methods of and techniques for gathering and writing news. Practice in writing more complex and special story types. Individual writing conferences.

### 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.)

### 16 MAGAZINE PRODUCTION (2)

*Four hours per week.*

*Prerequisites: Eligibility for English 1a and permission of instructor.*

Production of a student magazine. Discussion of techniques of publishing and production especially applied to school publications.

### 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)

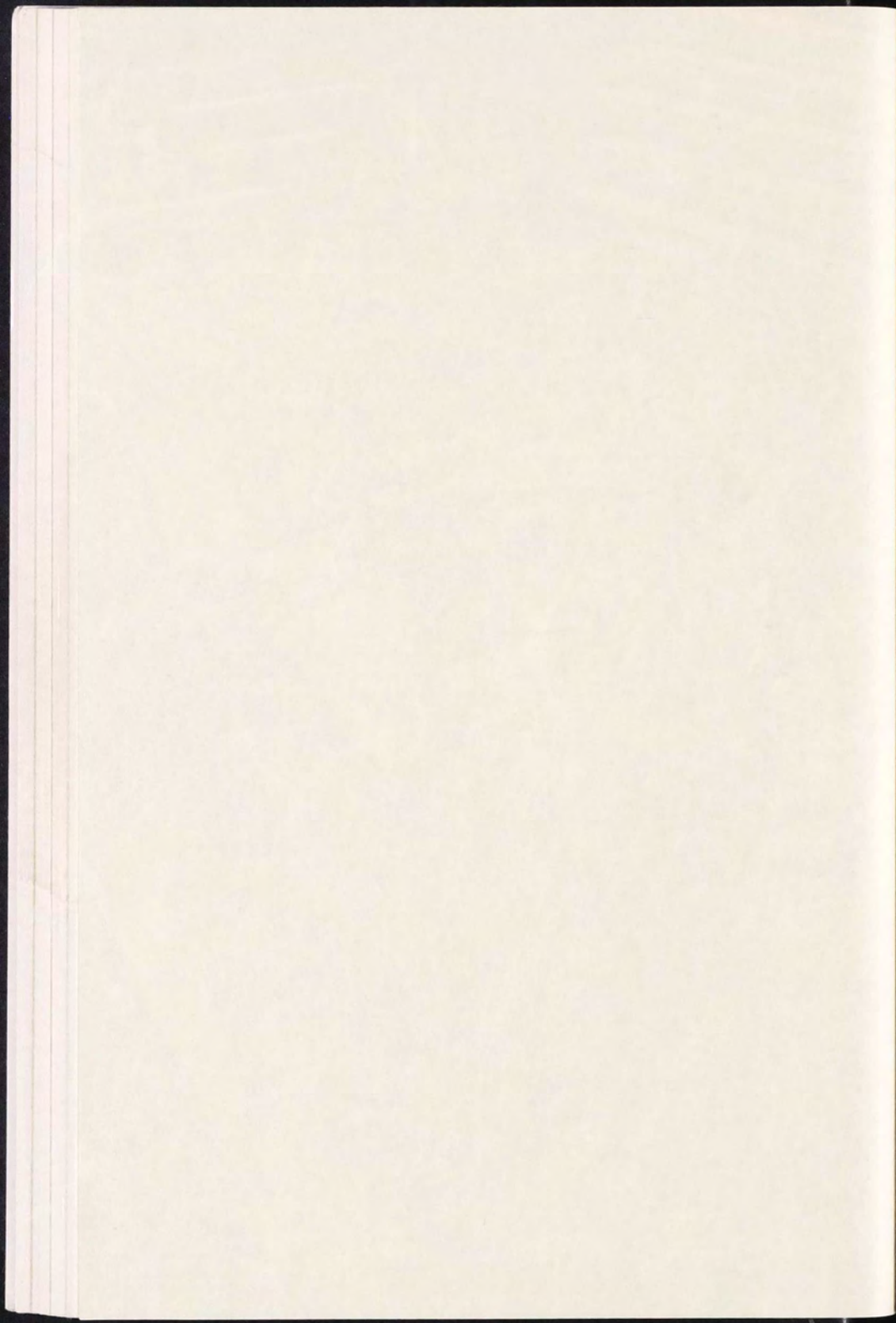
*Two hours per week.*

*Prerequisite: None.*

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.







## 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 or Anthropology 1. 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, 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.)

## Mathematics (continued)

### 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.

### 12 GEOMETRY (5)

*Five class hours per week.*

*Prerequisite: Mathematics 11 with 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, projective 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 CONTENT OF ELEMENTARY SCHOOL MATHEMATICS (3)

*Three class hours per week.*

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, Title 5, Education, Section 6130(g).)

## Mathematics (continued)

### 20 INTERMEDIATE ALGEBRA (3)

*Three 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 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 grade of C or better; or five 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.

### 29 MATHEMATICAL ANALYSIS (5)

*Five class hours per week.*

*Prerequisite: Mathematics 21 (or equivalent) with 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 grade of C or better or Mathematics 21 with 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 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. If he earns a grade below C, enrollment in the next course is subject to approval of the instructor.*

## Mathematics (continued)

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 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 SPECIAL 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.

## Military Science (ROTC)

### 11 WORLD MILITARY HISTORY (2)

*Two lecture hours and one drill hour per week.*

*Prerequisite: See Military Science section.*

Study of the forces which historically have produced armed conflict; historical development of basic concepts of war and their application to current national security problems; perspective of the history of warfare.

### 12 WORLD MILITARY HISTORY (Continued) (2)

*Two lecture hours and one drill hour per week.*

*Prerequisite: Military Science 11.*

## **Military Science (ROTC) (continued)**

### **21 FOUNDATIONS OF NATIONAL POWER (2)**

*Two lecture hours and one drill hour per week.*

*Prerequisite: Military Science 12.*

Study of the capacity of a nation to produce the elements of power; effectiveness of national power in solving international problems, with emphasis on the role of military power and national security.

### **22 FOUNDATIONS OF NATIONAL POWER (Continued) (2)**

*Two lecture hours and one drill hour per week.*

*Prerequisite: Military Science 21.*

## **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.

## **Music (continued)**

### **1 (x) MUSICIANSHIP (2)**

*Two hours per week; one lab hour 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 hours 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 in the library indicate the procedure of the course. 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 ELEMENTARY MUSIC EDUCATION (3)**

*Three hours per week.*

A study in the basic musical skills needed by the elementary classroom teacher. Voice, piano, theory, conducting, orchestral instruments, listening to and creating music, are subjects dealt with in this course.



## Music (continued)

### 9 PHYSICS OF SOUND, COLOR AND LIGHT (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, light and related wave forms. A weekly laboratory period studying musical instruments, overtones, resonance, pitch and recording techniques, and light, color and optical phenomena. (See Physics 9.)

### 10 (x) INTRODUCTION TO THE ARTS (3)

*Three lecture hours per week.*

An introduction to painting, music and theatre. The basic elements, problems of organization and contemporary experiments with media and forms.

### 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.

### 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.

## **Music (continued)**

### **24a-24b-24c-24d STUDY OF BRASS INSTRUMENTS (1)**

*Three class hours per week plus lab.*

*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 plus lab.*

*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 STRINGED INSTRUMENTS (1)**

*Three class hours per week plus lab.*

*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 (1)**

*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.

## **Music (continued)**

### **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) CANADA 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, 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.

## **99 STUDIO HOURS (0)**

*Hours by arrangement.*

Supervised studio hours in connection with Music 11, 24, 25, 26, 36.

## Philosophy

### 6a INTRODUCTION TO SOCIAL AND POLITICAL PHILOSOPHY (3)

*Three hours of lecture per week.*

A study of philosophical methods and attitudes; a critical evaluation of political and social ideologies, and of views concerning the nature of man, the physical world and God.

### 6b GENERAL INTRODUCTION (3)

*Three hours of lecture per week.*

*Prerequisite: Philosophy 6a or permission of instructor.*

A study of positions concerning the nature and extent of human knowledge; a critical evaluation of assumptions underlying moral codes and religious beliefs.

### 12 INTRODUCTION TO SYMBOLIC LOGIC (3)

*Three hours of lecture per week.*

*Prerequisite: English 1a or consent of instructor.*

A study of the logical structure of language, the validity of arguments expressed symbolically. Introduction to the logic of classes and relations. Introduction to the logic of mathematics.

### 20a HISTORY OF PHILOSOPHY (3)

*Three hours of lecture per week.*

*Prerequisite: Philosophy 6a or consent of instructor.*

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 (3)

*Three hours of lecture per week.*

*Prerequisite: Philosophy 6a or consent of instructor.*

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 (3)

*Three hours of lecture per week.*

*Prerequisite: Philosophy 6a or consent of instructor.*

A study of 19th and 20th Century philosophical positions including those of Kant, Nietzsche, Schopenhauer, the Utilitarians, Pragmatists, Logical Positivists, Existentialists and contemporary Analytic Philosophers.

## Philosophy (continued)

### 23 ETHICS (3)

*Three hours per week.*

*Prerequisite: Philosophy 6a or consent of instructor.*

A study of the leading theories of moral principles and ideals, and their application to typical problems of institutional behavior, life, property and the family. Among the topics discussed will be the concept of the good, duty, egoism, altruism, freedom, personal social responsibility.

### 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.

## 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.

## Physical Education (Men) (continued)

A student may elect more than one Physical Education general service class of one-half unit following approval by the Division Chairman. A student must be enrolled in and pass a one-half unit course in Physical Education each semester until graduation unless appropriately excused.

It is the philosophy of the Physical Education Division that all students involved in activity courses have a diversified experience in physical education. Therefore, students will be programmed in such a manner as to give them a broad variety of activities. Physical Education counselors will require students to participate in several areas, drawing from rhythmic, individual sports, team sports, gymnastics or combatives. Students may not repeat a class activity without the permission of the physical education faculty. Enrollment on a varsity athletic team will satisfy the physical education requirement.

### VARSIY 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 (1)

*Prerequisite: Permission of the instructor.*

Intercollegiate varsity basketball competition in the Camino Norte Conference and participation in regional tournaments. Daily practices October 15 to March 15.

#### 6 VARSITY WRESTLING (1)

*Prerequisite: Permission of the instructor.*

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 (1)

*Prerequisite: Permission of the instructor.*

Intercollegiate competition with four-year institutions and junior colleges in Northern California. Possible participation in Northern California leagues. Daily practices September to December.

#### 8 VARSITY BASEBALL (1)

*Prerequisite: Permission of the instructor.*

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.

## Physical Education (Men) (continued)

### 9 VARSITY CROSS COUNTRY (1)

*Prerequisite: Permission of the instructor.*

Intercollegiate competition in the Camino Norte Conference and participation in dual meets, invitationals, Northern California and State J.C. meets. Daily practices September to December.

#### INTRAMURALS

Supervised intramural sports are scheduled throughout the semester. Primary hours are from 11 a.m. to 12 noon on Tuesdays and Thursdays. Additional intramural activities will be scheduled on Friday afternoons and some evenings. Students should consult the Intramural Bulletin Board in the Physical Education Building for detailed information concerning activities, days, hours, sign-up procedures and prerequisites.

As student interest determines the need, intramural programs will be established in 3- and 5-man basketball leagues, table tennis, badminton, weight lifting, wrestling, softball, bowling, volleyball.

## Physical Education General Service Classes (Men)

#### COMBATIVES

### 1 ELEMENTARY WRESTLING (1/2)

*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 (1/2)

*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 (1/2)

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

## Physical Education General Service Classes (Men) (contd.)

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 (1/2)

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 VIGOR ACTIVITIES (1/2)

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 (1/2)

Instruction in, and conditioning through, basic isometric exercises and running activities. The isometric concept is achieved through basic isometric exercises conducted on a partner basis as well as with the "Exer-genie." Running activities are conducted at each class meeting for the inclusion of cardio-respiratory values.

#### INDIVIDUAL SPORTS

### 1 ELEMENTARY WEIGHT CONDITIONING (1/2)

*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 (1/2)

*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.



## Physical Education General Service Classes (Men) (contd.)

### 1 INTERVAL-CIRCUIT TRAINING (1/2)

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, pull-ups, standing broad jump, step tests, and a 300 yard shuttle run.

### TEAM SPORTS

#### 1 ELEMENTARY BASKETBALL (1/2)

*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 ELEMENTARY SOFTBALL (1/2)

*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 ADVANCED SOFTBALL (1/2)

*Prerequisite: Successful completion of Elementary Softball or permission of the instructor.*

Advanced aspects of team play in softball; review of fundamentals as needed; team play in round-robin league; testing program related to the ability to perform advanced softball skills; leadership in the intramural softball program may be requested.

#### 1 ELEMENTARY SOCCER (1/2)

*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.

## **Physical Education General Service Classes (Men) (contd.)**

### **1 ELEMENTARY VOLLEYBALL (½)**

*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**

### **30a-b-c-d PHYSICAL EDUCATION COMPETENCIES (Men) (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 four 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.

## Physical Education Competencies (continued)

### 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.

## Physical Education (Co-Ed)

### 2 ADAPTIVE ACTIVITIES (1/2)

*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 (1/2)

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 (1/2)

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 INTERMEDIATE FOLK DANCE (1/2)

*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.

## Physical Education (Co-Ed) (continued)

### 2 MODERN JAZZ (1/2)

*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 (1/2)

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 ADVANCED MODERN DANCE AND COMPOSITION (CHOREOGRAPHY) (1)

*Four-hour classes twice a week.*

*Prerequisite: Permission of instructor.*

Further study of technique and choreography. Planning, conducting and experiencing of a dance concert. Repertory compositions will be presented to students by the instructor.

### 2 ELEMENTARY BALLET/MODERN DANCE (1/2)

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 GOLF (1/2)

*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 ELEMENTARY FOLK DANCE (1/2)

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.

## Physical Education (Co-Ed) (continued)

### 2 ELEMENTARY JAZZ/MODERN DANCE (1/2)

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) (1/2)

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 (1/2)

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 (1/2)

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 ELEMENTARY BOWLING (1/2)

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 (1/2)

*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.

## Physical Education (Co-Ed) (continued)

### 2 LIFE SAVING (1/2)

*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 (1/2)

*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 knowledges necessary to teach American Red Cross swimming and life saving courses.

### 2 ELEMENTARY VOLLEYBALL - CO-ED (1/2)

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 (CO-ED) (1/2)

*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 (CO-ED) (1/2)

*Two 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.

## Physical Education (Co-Ed) (continued)

### 2 ADVANCED BICYCLING (CO-ED) (1/2)

*Two lab hours per week.*

*Prerequisites: Demonstration of sufficient skill and conditioning to complete the advanced course, or permission of the instructor.*

Designed to provide students with a regular program of cycling to develop physiological benefits. Students will be exposed to interval training workouts involving short sprints and gliding, together with over-distance and hill training.

### 2 ELEMENTARY ICE SKATING (CO-ED) (1/2)

*Two lab 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 of 1/2 unit, following approval by the Division Chairman. A student must be enrolled in and pass a one-half unit course in Physical Education each semester until graduation unless appropriately excused.

## Physical Education (Women) (continued)

It is the philosophy of the Physical Education Division that all students involved in activity courses have a diversified experience in Physical Education. Therefore, students will be programmed in such a manner as to give them a broad variety of activities. Physical Education counselors will require students to participate in several areas, drawing from rhythmic, individual sports, team sports, gymnastics or combatives. Students may not repeat a class activity without the permission of the Physical Education faculty.

### INTRAMURALS

Supervised intramural sports will be scheduled throughout each semester. Primary hours are from 11:00 A.M. to 12 noon on Tuesdays and Thursdays. Additional intramural activities will be scheduled on Friday afternoons and some evenings. Students should consult the Intramural Bulletin Board in the Physical Education Building for detailed information concerning activities, days, hours, sign-up procedures and prerequisites. No unit credit will be given for participation in intramural activities.

#### 41W THEORY OF SPORTS OFFICIATING (2)

*(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.

## Physical Education General Service Classes (Women)

### 1 BODY MECHANICS (1/2)

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.



## Physical Education General Service Classes

### (Women) (continued)

#### 1 FITNESS ACTIVITIES (1/2)

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 (1/2)

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 (1/2)

Use of hand apparatus: balls, hoops, ropes, ribbons and Indian clubs. General body conditioning exercises, elementary tumbling and dance movements.

#### 1 GYMNASTICS (1/2)

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 (1/2)

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 (1/2)

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.

## Physical Education General Service Classes

(Women) (continued)

### 1 FIELD SPORTS (1/2)

Class may elect to cover three or more of the following sports: softball, soccer, field hockey, speedball, speed-a-way 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-b-c-d 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)

*Three lectures per week.*

*Open to all students except those who are currently enrolled in or have completed a college course in Physics, Astronomy or Chemistry.*

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 most colleges and universities.)

## Physics

### 2a-2b GENERAL PHYSICS LECTURE (3-3)

Three lecture hours per week.

*Prerequisites: Elementary algebra and plane geometry. Trigonometry is strongly recommended. Concurrent registration in Physics 3a-3b is required. Physics 2a is a prerequisite for Physics 2b.*

Lectures with experimental demonstrations 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.)

### 3a-3b GENERAL PHYSICS LABORATORY (1-1)

One three-hour lab period per week.

*Prerequisite: Concurrent registration in, or successful completion of, Physics 2a for 3a, 2b for 3b.*

Physical measurements designed to accompany Physics 2a-2b.

### 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. (This course, together with Physics 4b and Physics 4c, constitutes a three-semester program designed to give the student majoring in Engineering, Physics or Chemistry a thorough foundation in the fundamentals of Physics.) 4b—Electricity and magnetism. 4c—Heat, light and modern physics.

## 9 PHYSICS OF SOUND, COLOR AND LIGHT (3)

Two lecture hours per week, three laboratory hours per week.

*Prerequisite: None, high school Algebra suggested.*

Lectures with experimental demonstrations, emphasizing the nature of sound, light, and related wave forms. A weekly laboratory period studying musical instruments, overtones, resonance, pitch and recording techniques, and light, color and optical phenomena.

## Physics (continued)

### 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.)

## Physiology

### 1 INTRODUCTORY PHYSIOLOGY (5)

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

*Prerequisites: One course selected from Biology 10a or 10b, Anatomy 1, Zoology 1a. 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.

### 10 ADMINISTRATION OF JUSTICE (3)

*Three lecture hours per week.*

*Prerequisite: Concurrent registration in, or successful completion of, Police Science 9.*

Review of court systems in the United States with special emphasis on the California court system. Procedures from time of offense until disposition of the case by the court or Adult Authority. Basic principles of federal, state and local laws as they pertain to law enforcement and the court system.

## **Police Science (continued)**

### **50 PATROL PROCEDURES (3)**

*Three lecture hours per week.*

*Prerequisite: Police Science 9 or concurrent registration in same.*

Methods, techniques and responsibilities of the patrol unit. The value of one-man car as opposed to the two-man car; marked vs. unmarked patrol cars. Beat patrol and observation, police hazards and how to handle them.

### **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)**

*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.

### **56 RECORDS AND REPORT WRITING (2)**

*Two lecture hours per week.*

*Prerequisites: Sophomore standing; Police Science 9 and 52.*

History of records and reports pertaining to police. Various types of files and their uses; the value of the file system as used in the Police Department of the state; the method of writing police reports, what material is important, what purpose the different reports will fill.

## **Police Science (continued)**

### **59 JUVENILE PROCEDURES (3)**

*Three lecture hours per week.*

*Prerequisite: Police Science 9 or concurrent registration in same.*

The position the law enforcement 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.

### **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.

### **62 GUNNERY (1)**

*Three hours a week.*

*Prerequisites: Sophomore standing; Police Science major.*

The use and safe handling of the firearm; gun laws; the concern of the police officer in the use of the firearm; both legal and moral; demonstration of shotguns, gas guns and machine guns.

### **70 POLICE AND COMMUNITY RELATIONS (2)**

*Two lecture hours per week.*

*Prerequisites: Sophomore standing; Police Science major.*

The role of the Police Department in the community government and the value of good public relations. The role of the police in civil disturbances and other emergencies will be covered.

### **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.

### **80a-80b INTERNSHIP (2)**

*Five hours per week—one hour classroom and four hours to be arranged.*

*Prerequisites: Sophomore standing; Police Science major and consent of instructor.*

## **Political Science**

### **1 INTRODUCTION TO POLITICAL SCIENCE (3)**

*Three lecture-recitation hours per week.*

Examination of the nature of the state, basic forms of government and the theories of democracy, communism, fascism and other political ideologies. Analysis of the roles of political parties and pressure groups as well as the nature of public opinion and voting behavior. Consideration of the character of modern public administration and a brief survey of the pattern of contemporary international relations.

### **2 CONTEMPORARY FOREIGN GOVERNMENTS (3)**

*Three lecture-recitation hours per week.*

*Prerequisites: Political Science 1, 21 or 25, or consent of instructor.*

The historical development and contemporary forms of government in the major foreign political systems. An analysis will be made of significant political forces and trends with reference to England, France, Germany, the Soviet Union and Japan.

### **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.

### **21 AMERICAN GOVERNMENT (3)**

*Three lecture-discussion hours per week.*

*Prerequisite: Sophomore standing is recommended.*

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.

## Political Science (continued)

### 24 CALIFORNIA URBAN GOVERNMENT (2)

*Two lecture hours per week.*

*Prerequisite: None, but Political Science 21 or U. S. History is recommended.*

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 or 24.

### 27 AMERICAN SOCIETY (4)

*Four 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.)

## 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.



## Psychology (continued)

### 1b EXPERIMENTAL PSYCHOLOGY (3)

*Three lecture hours per week.*

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 extending 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 but who do not want to take further courses in psychology. Emphasis will be on the application of psychological principles to problems of everyday living rather than the technical-scientific approach of Psychology 1a.

### 33 PSYCHOLOGY OF ADJUSTMENT (3)

*Three hours of lecture per week.*

The study of the ways people adjust to their environment. Emphasis will be upon the ways personality develops and changes. Case illustrations and different theories of personality will be presented.

For Psychological Statistics—see Statistics.

## 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.

## 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.)

## Social Science (continued)

### 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 the culture of the contemporary black community will also be studied in present and historical perspective.

## 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; "mass society" and communication; community structure; social class and status, ethnic minorities, with close study of Negro-white 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 delinquency, alcoholism, drug addiction, prostitution, prejudice and discrimination, and suicide. 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.

## Spanish

**Language Laboratory and Listening Requirement** — 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.

## Spanish (continued)

### 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: Eligibility for English A or English 1a.*

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.

## **Speech (continued)**

### **2a-2b ORAL INTERPRETATION OF LITERATURE (3)**

*Three class hours per week.*

*Prerequisite: 2a—Eligibility for English 1a; 2b—Successful completion of Speech 2a.*

Oral reading of literature (poems, short stories, plays); analysis of meaning; analysis of voice quality, enunciation, pronunciation and expressiveness.

### **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.

### **5 FORENSICS PARTICIPATION (½-1)**

Participation in approved intercollegiate forensic contests. (May be repeated for credit.)

### **27 DISCUSSION AND PARLIAMENTARY PROCEDURE (3)**

*Three class hours per week.*

*Prerequisite: Eligibility for English A.*

A study of the methods, philosophy and responsibilities involved when individuals function as members of policy-making groups.

### **57a-57b SPEECH FOR FOREIGN STUDENTS (3)**

*Three class hours per week.*

*Prerequisite: Placement in English 57a, 57b, or permission of the instructor.*

Designed to help the non-native speaker develop greater fluency in spoken English. Practice in pronunciation, diction and usage. Preparation and delivery of extemporaneous speeches.

### **62 ELEMENTS OF SPEECH (3)**

*Three class hours per week.*

Frequent practice in extemporaneous and impromptu speaking. Experiences in research, language usage, and diction. Emphasis is on individual abilities and needs in achievement of effective oral communication in daily life.

## Statistics

### 1 INTRODUCTORY STATISTICS FOR THE BEHAVIORAL SCIENCES (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.

## Student Government

### 1-2 STUDENT GOVERNMENT (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.

## Zoology

### 1a 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 10a or 10b with a grade of C or better.*

An introduction to the facts and principles of animal biology, with special reference to the lower forms of animals. (This course is accepted as a laboratory science at both the University of California and Stanford University.)

### 1b GENERAL ZOOLOGY (5)

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

*Prerequisite: Zoology 1a with a grade of C or better.*

A continuation of Zoology 1a devoted largely to the comparative anatomy of the chordates. (This course is accepted as a laboratory science at both the University of California and Stanford University.)

# 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 100 classes are offered in 12 instructional areas each semester. Additional courses will be planned for future years as college enrollment increases.

A combined catalog-schedule giving the times, days, classroom locations and course descriptions is printed for each semester and will be available at the college and public libraries prior to registration. The catalog-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 Catalog-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 elsewhere in this catalog. 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 Administrative Management. Additional certificate programs are planned for the future. A cooperative education program is also offered in which students receive units leading to certificates in business management, industrial management, administrative 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 Evening College Catalog Schedule.

## **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.

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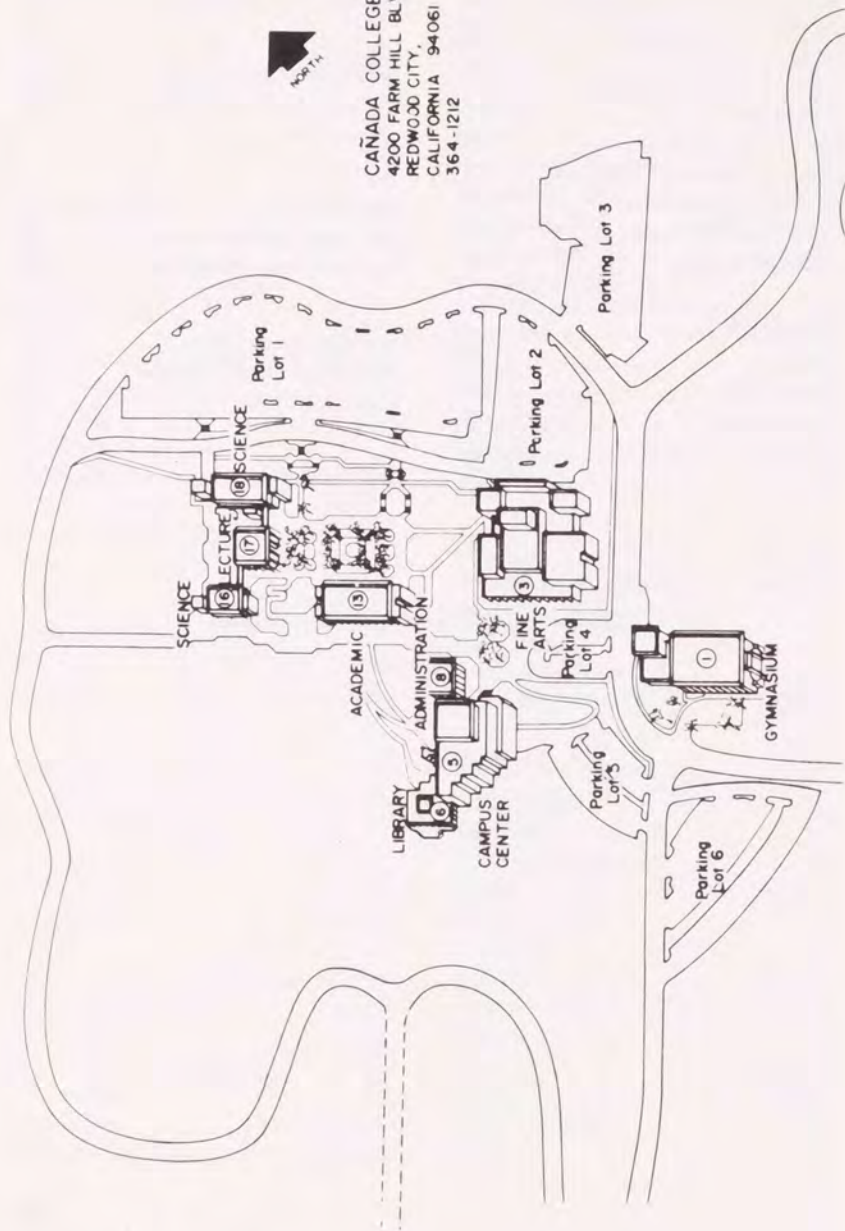
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