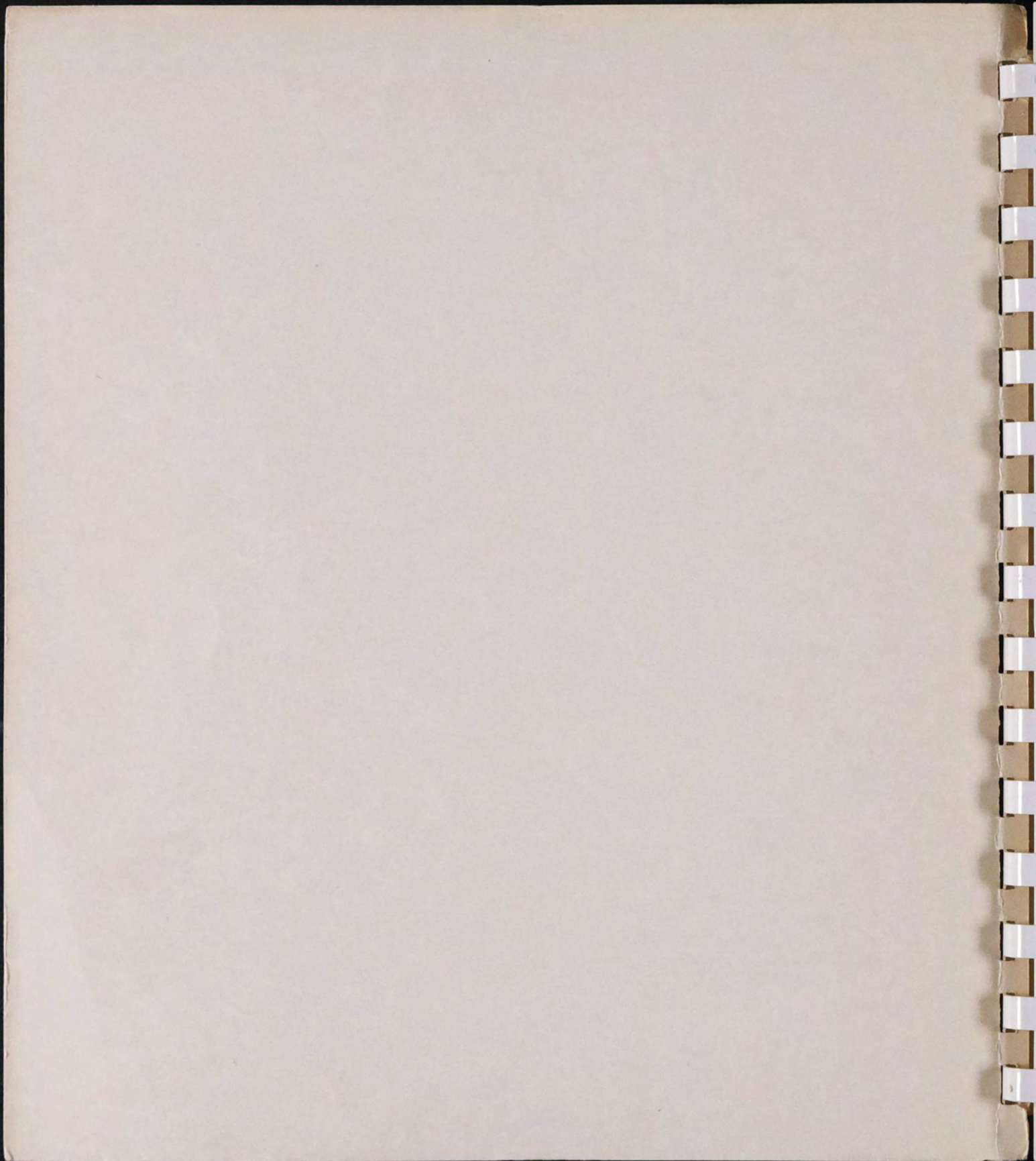


Mary Delaney



Cañada College Catalog 1974-75



1974-75
Cañada College Catalog

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

4200 Farm Hill Blvd., Redwood City, California 94061 Phone (415) 364-1212

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Calendar for 1974-75

- June 24-Aug. 2, 1974** Six-week summer session
June 24-Aug. 16, 1974 Eight-week summer session

FALL SEMESTER

- Sept. 2** Labor Day holiday
Sept. 3,4,5 Registration, new students
Sept. 4 (6:30-9:30 p.m.) Registration, new special students
Sept. 5 (9 a.m. - noon) Registration, new special students
Sept. 9 Admission Day holiday
Sept. 10 Day and evening classes begin
Sept. 20 Last day to add new classes
Sept. 30 Census day
Oct. 14 Applications available for spring semester
Nov. 1 Mid-term grade reports due
Nov. 11 Veterans Day holiday
Nov. 28-29 Thanksgiving recess
Dec. 2-20 Counseling, continuing students
Dec. 6 Last day to apply for graduation
Dec. 23-Jan. 3 Winter recess
Jan. 14-22 Final examinations
Jan. 20 Evening College classes close
Jan. 22 Day College classes close

SPRING SEMESTER

- Jan. 20-23** Registration, new and returning students
Jan. 20,22 (6:30-9:30 p.m.) Registration, high school mid-year graduates
Jan. 23 (6:30-9:30 p.m.) Registration, new special students
Jan. 24 (10 a.m.-2 p.m.) Registration, new special students
Jan. 27,28,29 Registration, general
Feb. 3 Day and evening classes begin
Feb. 7 Last day to add new classes
Feb. 12 Lincoln Day holiday
Feb. 17 Washington Day holiday
Feb. 24 Census day
March 14 Applications available for fall semester
March 24-28 Spring recess
April 4 Mid-term grade reports due
April 18 Last day to apply for graduation
May 12-30 Counseling, continuing students
May 26 Memorial Day holiday
June 3-11 Final examinations
June 9 Evening College classes close
June 10 Commencement
June 11 Day College classes close
June 23-Aug. 1, 1975 Six-week summer session
June 23-Aug. 15, 1975 Eight-week summer session

Board of Trustees Administration

BOARD OF TRUSTEES

Eleanore D. Nettle
(Since 1956)
Housewife

Francis W. Pearson, Jr.
(Since 1963)
Certified Public Accountant

Robert A. Tarver
(Since 1953)
Attorney

James R. Tormey, Jr.
(Since 1971)
Attorney

Carl E. Ward
(Since 1960)
Financial Consultant

Glenn P. Smith
Chancellor-Superintendent

COLLEGE ADMINISTRATION

James W. Duke
President

John H. Rhoads
Administrative Assistant

INSTRUCTION SERVICES

Leland H. Mahood
Dean of Instruction

Gilberto S. Villarreal
Assistant Dean of Instruction,
Continuing Education

Frederick L. Gilman
Assistant Dean of Instruction,
Occupational Education

Florence M. Chan
Chairman, Library

Pasquale S. D'Epiro
Chairman, Audio-Visual

Ruth K. Nagler
Assistant for Community Services

STUDENT SERVICES

William J. Walsh
Dean of Students

Patricia O'Brien
Associate Dean of Students

Joseph J. Marchi
Assistant Dean of Students-Counseling

(To be named)
Head,
Student Development Program

Ella E. Gray
Assistant Head,
Student Development Program

Lynn E. Carlyle
Assistant for Registration

DIVISION CHAIRMEN

Louis E. Yaeger
Business

Robert Stiff
English and Foreign Languages

John H. Krueger
Fine Arts

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

James R. Loughrey
Mathematics and Engineering

Richard W. Anderson
Recreation and Physical Education

Samuel J. Nicolopoulos
Athletic Director

Ross W. Westover
Physical Sciences

Melvyn E. Pratt
Social Sciences

Faculty 1974-75

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

- Aarons, Bernard L.** (1960)
Geology, Geography
B.S., Pennsylvania State College
M.S., Univ. of California,
Berkeley
- Anderson, Richard W.** (1970)
Temporary Chairman,
Physical Education
and Recreation Education Division
B.A., San Jose State College
M.A., Stanford University
- Andrew, Alan** (1968)
Mathematics and Physics
B.S., University of Nebraska
M.S., Ph.D., California Institute of
Technology
- Ashley, Lyman C.** (1968)
Physical Education
B.S., M.A., California State
Polytechnic College
- Batch, Robert W.** (1965)
Chemistry
B.S., Tufts University
M.S., Northeastern University
- Bates, Herman D.** (1971)
Psychology
A.B., Western Reserve Univ.
A.M., University of Michigan
- Berdon, Jean D.** (1969)
Mathematics
B.S., Tufts University
M.S., University of Connecticut
- Blanton, Donald J.** (1964)
Biology, Botany
B.A., Aquinas College
M.S., University of Michigan
- Branstrom, Marvin J.** (1970)
Biology, Health Education
B.A., M.A., San Jose State College
- Campbell, Lester S.** (1969)
Psychology, Counselor
B.S., Bethune Cookman
M.A., San Francisco State College
- Chan, Florence M.** (1968)
Library
B.A., University of British
Columbia
M.L.S., Univ. of California,
Berkeley
- Cline, Alec O.** (1968)
Food Technology, Instructor-Chef
- Coleman, Gaylord W.** (1969)
Counselor
A.B., Northwest Missouri State
College
M.A., Stanford University
- Collins, James E.** (1954)
Economics, Counselor
A.B., Syracuse University
A.M., Stanford University
- Cory, Genevieve H.** (1968)
Home Economics
B.S., University of Nevada
M.A., Ph.D., Univ. of California,
Berkeley
- Cowan, Curtiss** (1974)
Interior Design
B.A., Reed College
- Crockett, R. Kent** (1965)
Speech, English
B.A., M.A., San Jose State College
- Cunningham, Lois** (1971)
Social Science, Sociology
B.A., Briar Cliff College
M.A., St. Louis University
- Curtis, Robert M.** (1967)
English
B.A., M.A., San Francisco
State College
- Damon, Rosemary W.** (1970)
Business
B.S., Univ. of California, Berkeley
M.B.A., Stanford University
- de la Rocha, Gilberto P.** (1968)
Counselor, English
A.A., Grant Technical College
B.A., Sacramento State College
- Del Gaudio, Joan A.** (1965)
Business, Counselor
B.S., Cen. Connecticut State
College
M.Ed., Boston University
- D'Epiro, Pasquale S.** (1961)
Library, Audio-Visual
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
- Duke, James W.** (1971)
President
B.S., M.A., Louisiana State
Ed.D., Univ. of Southern California
- Eakin, J. David** (1968)
Spanish, French
A.B., M.A., University of Oregon
- Earnhardt, Eldon D.** (1969)
Anthropology
B.A., M.A., San Francisco State
College

- Easter, Stanley E.** (1969)
Music, Counselor
B.M., University of Rochester
M.M.Ed., University of Oklahoma
Ed.D., Columbia University
- Egan, Philip F.** (1971)
Art
B.A., Indiana University
B.F.A., Kansas City Art Institute
M.F.A., Pennsylvania State Univ.
- Elkins, Samuel W.** (1948)
Biology
B.A., University of California
Berkeley
M.A., Columbia University
- Ellett, Melvin K.** (1952)
Drama
A.B., M.A., Ph.D., Stanford
University
- Eyer, Dianne M.** (1970)
Home Econ., Psychology
Counselor
B.S., M.S., Purdue University
- Fahey, Frank M.** (1956)
History
A.B., University of Washington
A.M., Ph.D., Stanford University
- Festa, Angelo R.** (1966)
Physical Education
B.S., Michigan State University
M.S., Southern Illinois University
- Forsythe, John C., Jr.** (1957)
Chairman, Life Sciences and
Health Education Division,
Counselor
A.A., San Mateo Junior College
A.B., A.M., Stanford University
- Fraknoi, Andrew G.** (1972)
Astronomy, Physics
B.A., Harvard College
M.A., Univ. of California,
Berkeley
- Fries, Robert D.** (1973)
Art
B.A., California State
University, L.A.
M.A., University of California
Berkeley
- Friesen, John B., Jr.** (1963)
English
A.B., M.A., Univ. of California,
Berkeley
- Fryckman, Robert C.** (1969)
Assigned District Office 1974-75
B.A., Baptist Bible College
M.A., University of Colorado
- Garlington, Philip C.** (1958)
Veterans' Coordinator, English
A.B., Montana State University
M.A., Univ. of California,
Berkeley
- Gilman, Frederick L.** (1956)
Assistant Dean of Instruction,
Occupational Education
B.S., Univ. of California, Berkeley
M.A., San Francisco State College
- Giuntoli, Mervin A.** (1966)
Biology, Zoology
B.A., M.A., San Jose State College
- Glessing, Robert J.** (1968)
Journalism, English
B.A., Marquette University
M.A., Univ. of California, Berkeley
- Gray, Ella E.** (1969)
Asst. Head, Student
Development Program
B.S., Southern University,
Louisiana
M.S., University of Nebraska
- Gray, Gordon M.** (1958)
Physical Education and Recreation
Education
B.A., Univ. of California, Santa
Barbara
M.A., San Francisco State College
- Gunderson, Peter K.** (1973)
Geography
B.S., Michigan State
University
M.A., Wayne State University
- Hancock, Michael P.** (1969)
Sociology
B.A., San Francisco State College
M.S.W., San Francisco State
College
- Harris, Donald C.** (1969)
Spanish
B.A., Howard University
M.A., San Francisco State College
- Heidsiek, Richard C.** (1968)
Art
B. of Art Ed., M.F.A., California
College of Arts and Crafts
- Hergert, Loretta J.** (1969)
Health Education and Health
Counselor
B.A., M.A., University of Colorado
Ph.D., University of Utah
- Hoffman, Craig R.** (1965)
English
B.A., Univ. of California, Berkeley
M.A., San Francisco State College
- Holcomb, Nancy C.** (1973)
Radiologic Technology
A.A., College of San Mateo
B.A., California State
University, San Francisco
- Holle, Fredric A.** (1968)
Art
B.A., M.A., San Diego State
College
- Hurley, Gale E.** (1968)
Business
A.B., San Jose State College
M.A., San Francisco State College
- Ienni, Philip C.** (1969)
Music
B.S., M.S., Juilliard School of
Music

- Jacques, Lois S.** (1967)
Chairman, Physical Education
and Recreation Education
Division - On Leave 1974-75
B.A., University of Nevada
M.A., San Jose State College
- Jeppson, Joseph** (1963)
History
A.M., Stanford University
B.S., LL.B., J.D., University of
Utah
Ph.D., Univ. of California,
Berkeley
- 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., University of
California, Berkeley
- Katz, Sandra M.** (1964)
Business
B.S., M.S., Western
Illinois University
- Kennedy, Kenneth D.** (1967)
Political Science, History
A.A., College of San Mateo
B.A., M.A., San Francisco State
College
- Kenney, William C.** (1968)
English
A.A., College of San Mateo
B.A., Stanford University
M.A., San Jose State College
- Keys, Elijah James** (1969)
English, Counselor
B.S., University of Minnesota
M.A., San Francisco State College
- Kilpack, Bennett B.** (1969)
Sociology, Education
A.A., College of San Mateo
B.S., M.S., Southern Oregon
College
- Krueger, John H.** (1968)
Chairman, Fine Arts Division
B.S.M.E., University of Cincinnati
B.M., Cincinnati Conservatory of
Music
M.A., Colorado College
- La Berge, Robert R.** (1969)
Administration of Justice
B.A., M.A., San Jose State College
- Leavitt, James S.** (1971)
Administration of Justice
B.A., San Jose State College
M.P.A., Golden Gate University
- Le Bow, Diane** (1968)
English
A.B., Douglass College
M.A., Univ. of California, Berkeley
- Lepisto, Martin M.** (1968)
Drama
B.S., Midland College
M.A., Northwestern University
- Loughry, Alice P.** (1970)
Home Economics
B.S., University of Maryland
M.S., New York State College
of Home Economics
- Loughrey, James R.** (1963)
Chairman, Math-Engineering
Division
B.S., St. Michael's College,
Vermont
M.S., Rensselaer Polytechnic Inst.
- Mahood, Leland H.** (1964)
Dean of Instruction
B.A., Whittier College
B.D., University of Chicago
- Manning, Patrick** (1968)
Social Science, History
B.S., California Institute of
Technology
M.S., Ph.D., Univ. of Wisconsin
- Marchi, Joseph J.** (1968)
Assistant Dean of Students-
Counseling
B.A., San Francisco State College
M.A., Columbia University
Teachers College
- McGill, Sally J.** (1971)
Nutrition and Disease
B.A., University of Oklahoma
M.A., University of California
Berkeley
- McNamara, Cheryl J.** (1968)
Physical Education
B.A., San Jose State College
M.A., San Francisco State College
- Meek, Austen B. Jr.** (1968)
Mathematics
B.A., San Jose State
University
M.A., Bowdoin College
- Messner, Gerald M.** (1964)
English
A.B., Stanford University
M.A., Los Angeles State College
- Nagler, Ruth K.** (1968)
Assistant for Community Services
B.B.A., City College of New York
M.A., New York University
- Nicolopoulos, Samuel J.** (1968)
Physical Education, Athletic
Director
A.A., College of San Mateo
B.A., San Jose State College
M.A., Stanford University
- Nissen, Robert M.** (1969)
Art
A.B., San Jose State College
M.A., Stanford University
- Norman, Timothy H.** (1968)
Mathematics
B.A., St. Procopius College
M.S., University of Notre Dame
- O'Brien, Patricia** (1968)
Associate Dean of Students
B.A., Michigan State University
M.A., University of Maryland
- Owyang, Walter M.** (1970)
School Psychologist, Psychology
A.B., Univ. of California, Berkeley
M.A., San Jose State College
Ph.D., Univ. of Nebraska

- Pagels, Guerd G.** (1956)
English
A.B., Western Washington College
A.M., Ed.D., Stanford University
- Paresa, Robert F.** (1969)
Administration of Justice
A.A., College of San Mateo
B.S., San Jose State
University
- Plunkett, Charles R.** (1965)
English
A.B., Stanford University
M.A., San Francisco State College
- Pratt, Melynn E., Jr.** (1954)
Chairman, Social Sciences Division
A.B., Stanford University
B.D., Yale University
Ph.D., Stanford University
- Ramos, Richard M.** (1967)
Spanish
A.A., Yuba Junior College
B.A., University of Pacific
M.A., Stanford University
- Raney, Donald C.** (1953)
Chemistry
A.B., San Jose State College
A.M., Stanford University
- Reller, Theodore L., Jr.** (1968)
Political Science, History
A.B., M.A., Univ. of California,
Berkeley
- Rodriguez, Ernest** (1970)
Counselor, Student Development
Program
A.B., M.A., San Francisco State
College
- Rogers, Deborah G.** (1973)
Music
B.A., San Jose State
University
M.A., San Jose State
University
- Schey, Robert E.** (1970)
Counselor
B.A., M.A., San Francisco State
College
- Simmons, Gordon T.** (1964)
Anatomy, Biology
B.S., D.V.M., Univ. of California,
Davis
- Siringer, Norman W.** (1969)
English
B.A., M.A., Western Reserve
University
- Sitton, Carl V.** (1968)
Music
B. Mus., Texas Wesleyan College
M.A., Mills College
- Skinner, Byron R.** (1968)
Social Sciences, History
B.A., Western Michigan University
M.A., Illinois State Teachers
College
- Smart, Francis A.** (1954)
Business Administration
B.S., Univ. of California, Berkeley
L.L.B., Hastings College of Law
- Smith, Kurtwood L.** (1969)
Drama
A.A., College of San Mateo
B.A., San Jose State College
M.F.A., Stanford University
- Spangenberg, Ruth B.** (1968)
Psychology, Counselor
B.A., Pomona College
M.A., Stanford University
- Stegner, Paul F.** (1970)
Psychology
B.S., Pennsylvania State University
M.A., Fresno State College
Ph.D., Washington State
- Steidel, James N.** (1971)
History, Ethnic Studies
B.A., Kenrick College
M.A., Univ. of Southern California
- Stein, Pamela D.** (1969)
English
A.B., M.A., Univ. of California,
Berkeley
- Stiff, Robert** (1961)
Chairman, English and Foreign
Languages Division
A.B., M.A., San Francisco State
College
- Stoney, James M.** (1959)
Bacteriology, Biology
B.A., M.A., San Francisco State
College
- Stringari, Lawrence T.** (1969)
Psychology
B.A., M.A., San Francisco State
College
- Sutherland, Kenton** (1970)
English
B.A., University of Americas
M.A., Univ. of California, Los
Angeles
- Sweatt, Maurice L.** (1966)
Biology
A.B., Univ. of California, Berkeley
M.S., University of Oregon
- Swenson, Jack S.** (1964)
English
B.A., University of Minnesota
M.A., San Francisco State College
- Szabo, Rosalee** (1969)
English
B.S., Cornell University
M.A., University of Rochester,
N.Y.
- Thein, Van Raymond** (1970)
Music
B.A., M.A., San Francisco State
College
- Tovissi, Joseph A.** (1965)
Mathematics, Counselor
B.S., Kent State University
A.M., Stanford University
M.S., Purdue University
- Upton, James M.** (1968)
Philosophy, Statistics
A.B., A.M., Gonzaga University
M.S., Seattle University
- Varner, Harold W.** (1970)
Psychology, Sociology, Religion
B.S., Morehouse
M.Div., D. Th., D.D., Chicago
Lutheran Sch. of Theology,
Chicago Univ. and American
Foundation of Religion and
Psychiatry, New York City

Vial, Silvano A. (1964)
Physical Education
B.S., University of Idaho
M.A., Stanford University

Villarreal, Gilberto S. (1968)
Assistant Dean of Instruction,
Continuing Education
B.A., San Jose State University
M.A.T., Stanford University

Walsh, William J. (1956)
Dean of Students
A.A., Glendale College
A.B., Univ. of California, Berkeley
M.S., Northwestern University

Westover, Ross W. (1962)
Chairman, Physical Sciences
Division
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

Young, Frank C.C. (1969)
Philosophy
B.A., University of Florida
M.A., San Francisco State College

Zingales, Thomas J. (1964)
French, German
B.A., University of Notre Dame
A.M., Stanford University



General Information

The College

Cañada College opened in 1968. Its 131-acre site is located in the western foothills of Redwood City and overlooks the Bay. The College takes its name from Cañada Road, which winds its way through the valley to the west of the college; the Spanish word "cañada" means "long valley."

Cañada is one of three community colleges in the San Mateo Community College District and its primary service area is the southern portion of San Mateo County.

The College expects to enroll some 7,300 day and evening students in the current semester. Instructional offerings cover all of the broad and essential areas of human knowledge, including the arts, sciences, literature, and vocational courses which are offered through a variety of learning environments.

The College's classrooms are small by design and offer the opportunity for students to become personally acquainted with their instructors. A comprehensive student services program includes academic, vocational, health and personal counseling services, financial aids, tutorial assistance and a full range of student activities.

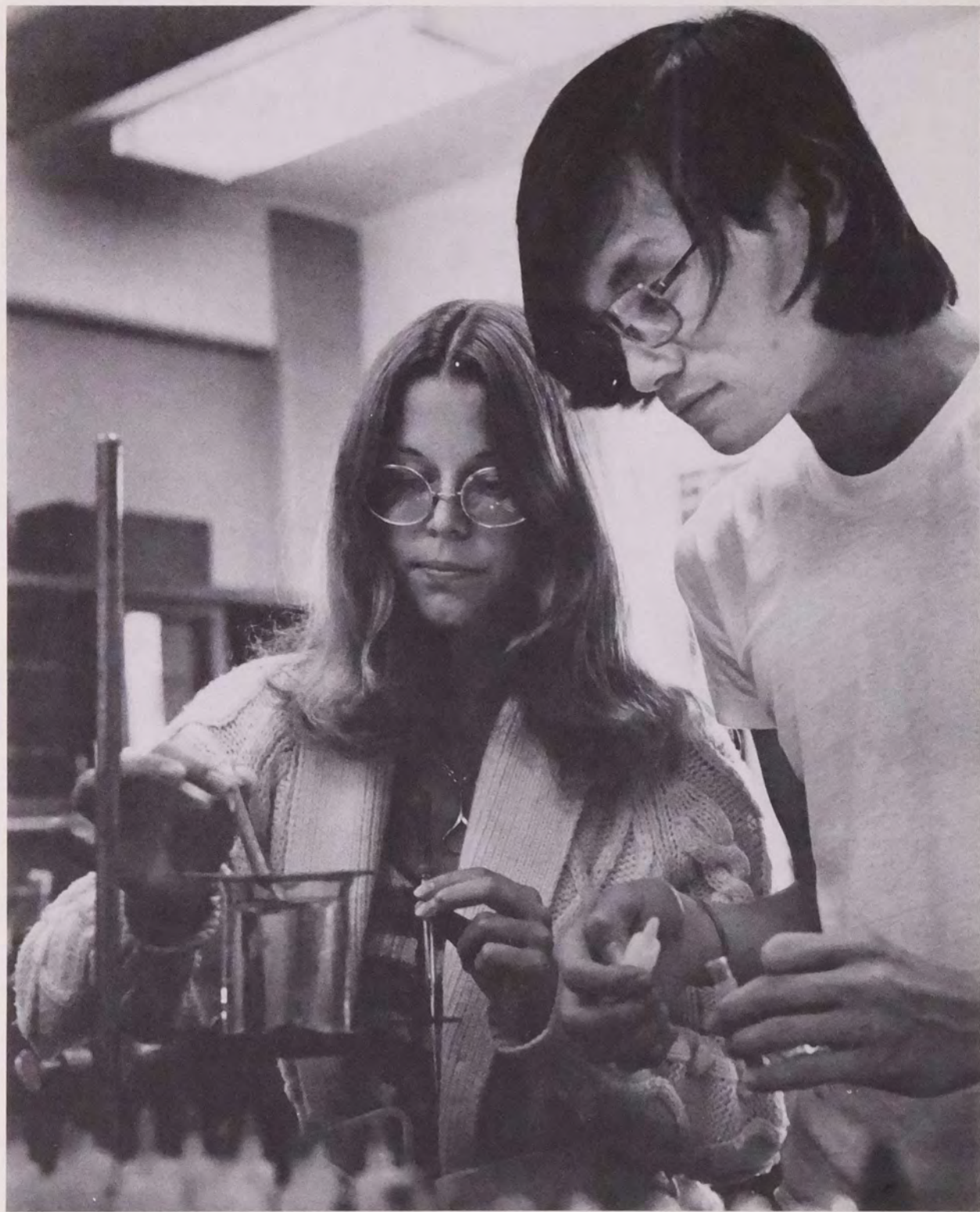
Cañada is a friendly and open campus. Teachers, students and administrators share delegated responsibilities for curriculum development, the learning processes and the general campus environment as full voting members of various College committees which provide guidance and assistance to the College President.

Philosophy of the College

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

1. We believe that the individual possesses dignity, and we encourage him to recognize his worth and to make his own unique contributions to our society.
2. We believe that we must exert educational leadership in identifying and serving the educational needs of the community.
3. We recognize that each discipline has its own integrity and that the College has a responsibility to achieve a balance between specialization and generalization in the organizing and presenting of subject matter.
4. We think it is important to include all members of the College community in the shaping of class content, curriculum and College policy.





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

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

Objectives of the College

Specifically, Cañada College provides its students with:

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

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

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

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

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

1. To develop useful skills.

2. To think critically.

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

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

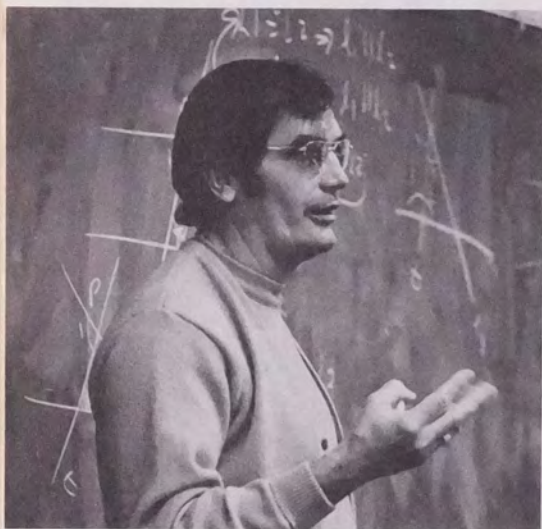
5. To appreciate and enjoy our pluralistic cultural heritage.

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

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

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





Role of the Faculty and Students

Cañada College is governed by policies approved by the Board of Trustees of San Mateo Community College District. These policies encourage individuality among the three colleges of the District directed toward the needs and characteristics of the areas they serve.

Cañada College seeks the counsel of its faculty and students through a system of permanent committees and informal consultation. The regular committees are organized under the Faculty Senate, which operates through a Governing Council (elected by the teaching faculty). Student members of committees are appointed by the Associated Students Council.

Accreditation

Cañada College is fully accredited by the Western Association of Schools and Colleges, which is affiliated with the federation of Regional

Accrediting Commissions of Higher Education. The College is also approved by the Office of the Chancellor of the California Community Colleges and the Veterans Administration.

Summer Session

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

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

Saturday College

Cañada College offers instruction in a wide variety of subject areas on Saturdays. The expanded course offerings allow residents of the community the opportunity to participate in a program of continuing education at their convenience.

Library

The College Library is housed in the westernmost section of the lower two floors of the Campus Center, with a book collection of some 34,000 volumes and approximately 500 current subscriptions. On the lower floor are the three main areas. The Circulation/ Reserve Area is where restricted loan materials, college catalogs and taped tour of the Library are available. The Reference and Periodical Area serves the research needs of students. Shelved here are the periodical and newspaper holdings, the indexes, microfilm collection, reference sources and the card catalog. The bulk of our book collection is shelved in the Reading Room in a central stack area. Surrounding the stack is table and carrel seating for some 150 students. This room affords a panoramic view of the wooded slopes of Skyline ridge and is an inviting place for quiet study.

Media Learning Center

The Media Learning Center is located on the second floor of the Campus Center, directly above the Library. The Center provides an audio-visual laboratory where students can use new technologies and programs in pursuit of learning experiences: remedial, review, enrichment, exploration and reinforcement. The facilities include 8 audio-visual study carrels, 68 listening stations, a recording lab with 12 stations, and TV and 16 m.m. viewing. In addition, there is a circulating collection of 2,500 phono-discs, 40 cassette players and nearly 2,000 tapes, cassettes and media-kits in a wide range of subject interests. Starting with the fall '74 semester, it is expected that the Writing Lab will be part of the Media Learning Center.

Parking

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





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 180 classes are offered in 12 instructional areas each semester.

A schedule of classes giving the times, days, and classroom locations is printed each semester and is available at the College and public libraries prior to registration.

A registration fee of \$10 is charged to persons 21 years of age and older for enrollment in each class for each semester. In those classes using special supplies, all students are assessed an additional fee. Students purchase their own textbooks, notebooks, and supplies.

Registration procedures will be described in the Evening College Schedule and should be carefully noted.

Classes in the Evening College program are open to persons who are over 18 years of age or who are high school graduates.

Requirements for the Associate in Arts degree are listed in the College catalog obtainable in the College bookstore. Requirements for the A.A. degree and the certificate programs may be fulfilled through attending Evening College classes.

The Evening College offers certificate programs in Business Management, Industrial Management, Supermarket Management, Public Administration, Small Business Management, Banking and Finance Management, Accounting, Para-Legal Assistant, Occupational Safety and Health, Dietary Technician (Level I & II), Nursery School Assistant, Teacher Assistant, Interior Design (options: Assistant Designer, Display, Home Furnishings Merchandising) and Tourism. Additional certificate programs are planned for the future. A Cooperative Education

program is also offered in which students receive units toward the certificate and the Associate in Arts 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

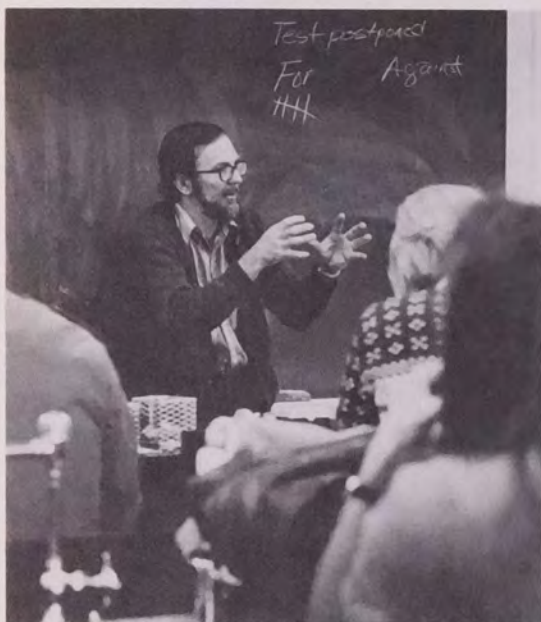
Day students who plan to attend Evening College classes should first discuss those classes with their day counselor and receive his approval. Counseling services are also provided by the Evening College for persons who wish assistance in planning programs of evening study. For information concerning 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.

Eligibility

Certain classes have prerequisites which are described in the Evening College Catalog. Please check prior to registration.

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.



Admissions Information

Admission Eligibility

High school graduates and/ or persons 18 years of age or over who are legal residents of the San Mateo Community College District may be admitted to Cañada College. (Please refer to "Residence Requirements for Admission" on a following page for information regarding persons who are not legal residents of California for school attendance purposes or who are residents of another California community college district.)

Non-High School Graduates

Persons 18 years of age or older who have not graduated from high school may enroll in College courses leading toward the Associate in Arts degree and/ or transfer to a four-year college or university or in courses recommended by the appropriate high school leading toward the completion of a high school diploma. However, students who use College credits to satisfy high school requirements cannot use these same credits for College graduation or transfer.

High School Juniors and Seniors

Students who are still attending high school but have special educational needs which cannot be met through high school programs may also enroll at Cañada. Interested students should see their high school counselors regarding the feasibility of concurrent enrollment at Cañada. Written permission and placement recommendations from high school counselors are required before the College will consider applications from high school students.

Transfers from other Colleges

Academic records for students who have attended accredited colleges and universities will be evaluated by the Office of the Registrar, and credit will be given for lower-division work completed. Grade point deficiencies will be treated in accordance with Cañada Academic Standards Policy. (Please refer to "Academic Standards" section of this catalog for additional information.)

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, 211 Main St., San Francisco, or 590 Hamilton Street, 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. Tutorial assistance is available if needed.

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

Veterans are encouraged to see the Cañada College veterans coordinator in the Administration Building regarding tutorial assistance and other services.

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

Part-Time Students (One or Two Courses Only)

Students taking only one or two courses must submit applications during filing dates, but are not required to submit transcripts; however, part-time students taking courses toward career preparation or transfer are encouraged to have transcripts on file for counseling purposes.

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.

Applicants from outside the United States must:

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

Tuition for foreign students is \$676 per year.

Advanced Placement Credit

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

CLEP - College Level Examination Placement

CLEP enables those who have reached the college level of education outside the classroom to demonstrate their achievement and to use



the test results for college credit. Those students will be granted six units of credit for each of the five sections of the General Examination of CLEP if they score 500 or more. Credit for Subject Examinations will be given in those areas where there are similar courses offered at Cañada College.

Cañada is a CLEP examination center. For further information, contact the counseling secretary.

Residence Requirements for Admission

Attendance at any one public community college in California is conditioned by certain residence qualifications.

Basically, a California resident for purposes of attendance at a community college is a person 18 years of age or over who has resided in the State for more than one year immediately preceding the first day of classes.

An applicant who is a resident of the San Mateo Community College District may attend Cañada College, College of San Mateo (San Mateo) or Skyline College (San Bruno). An applicant who is a resident in a part of California not included in a district which maintains community college classes may also attend Cañada College. An applicant who is a legal resident of another community college district must submit a written permit from the district of residence granting permission to enroll in Cañada College.

Non-Resident Fee

Non-residents will pay a fee of \$999 for the academic year 1974-75. This fee is payable at the time of registration at the rate of \$499.50 per semester or \$33.30 per unit. Residence status will be determined by the Registrar.

Costs to Students

While there is no tuition at Cañada College for students whose legal residence is in the San Mateo Community College District, there are living and incidental costs which should be anticipated. All fees are subject to change by the Board of Trustees and, when applicable, by local, State and Federal statutes. These, together with their normal expectable amounts, will include:

Books and supplies	\$150 per year
Health Fee	\$7.50 per year
Student activity card	\$10 per year, \$6 for spring semester
Meals and Housing	\$1900 per year
Transportation	\$500 per year
Personal expenses (laundry, recreation, medical)	\$400 per year

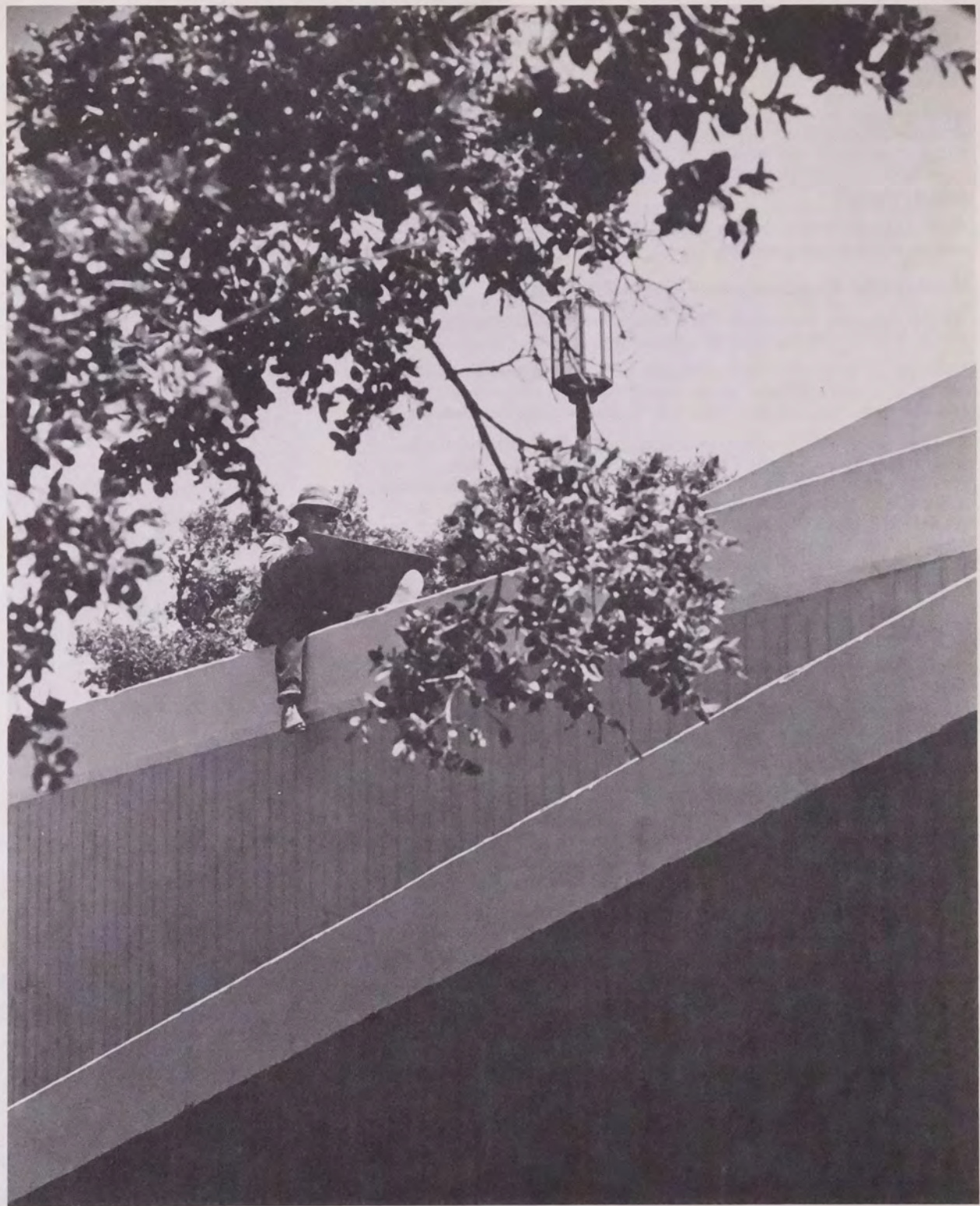
Application for Admission

(See 1974-75 Calendar for application filing dates.)

Students applying for admission to Cañada College are required to:

1. File a written application for admission (forms available from the College).
2. Submit two complete transcripts of records from the high school from which you graduated, or which you last attended, and from each college attended.





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 may register only after receiving program approval from a counselor.

Unit Load Limitations

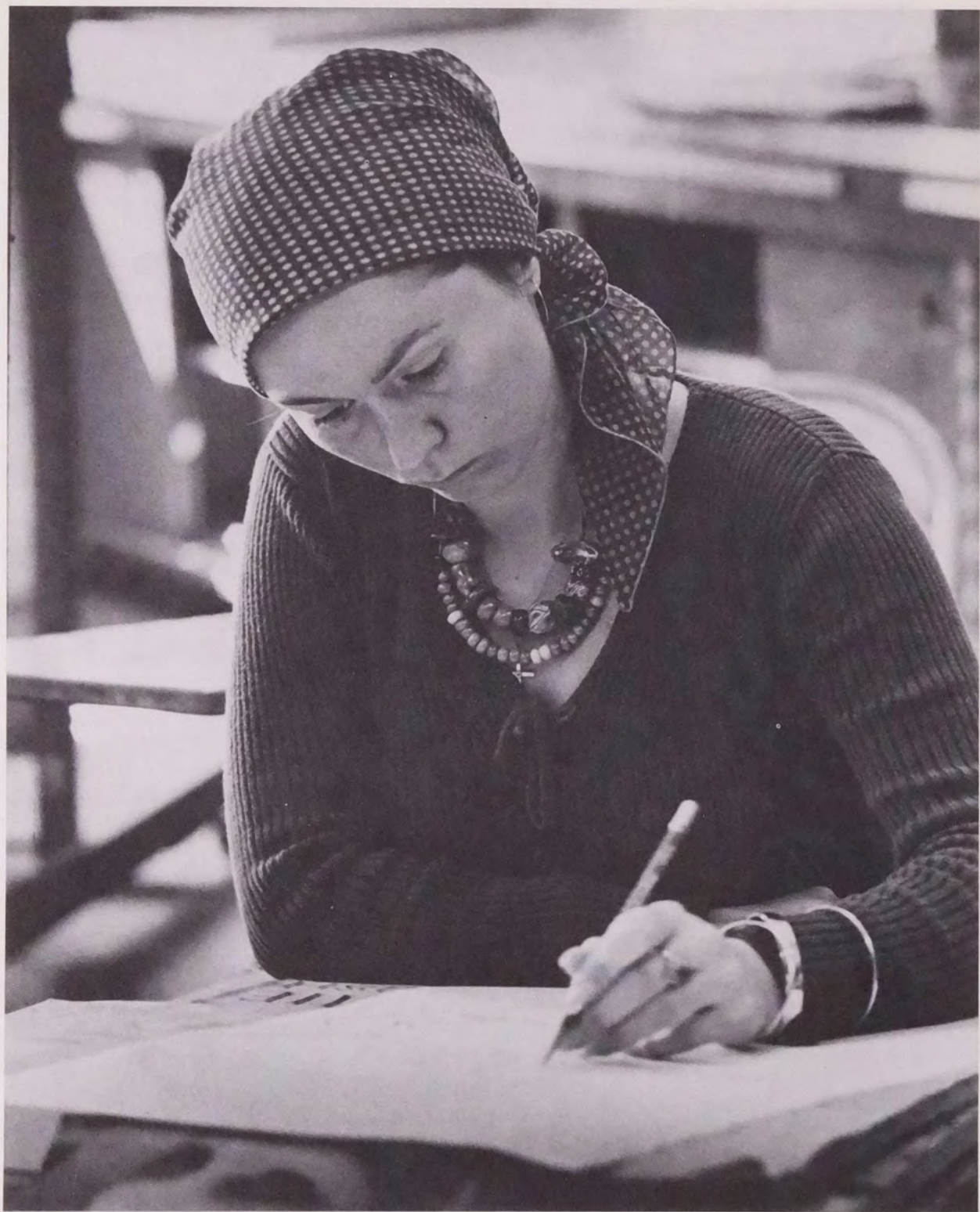
A normal class load will be 15 units; students enrolling in 12 or more units are considered full-time. Students are discouraged from taking more than 17 units without special authorization from their counselors.

Auditing is not permitted in any course offered for credit.

Program Changes

Program changes will be permitted only for students who have valid reasons for such requests and who have obtained written permission from their counselors.

A student may not add a new class after the 10th day of the semester except by written permission of the instructor and the endorsement of the Registrar. A student who formally withdraws from a class or from College before the last meeting of the class will receive a "W" grade. If the student does not formally withdraw, the instructor may assign an appropriate grade.



Grades and Scholarship

Units of Work and Credit

A "unit" represents one lecture or recitation hour weekly, for one semester, or three hours in laboratory or other exercises not requiring homework for preparation.

A 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
F-Failed.....	0 grade points per unit
INC-Incomplete.....	Not considered in determining grade point average
CR-Credit.....	Not considered in determining grade point average
NCR-No credit.....	Not considered in determining grade point average
W-Withdrawn.....	Not considered in determining grade point average

A grade of "Incomplete" may be given only if the student is unable to take the final examination or complete a major course assignment due to illness or extreme personal emergency. In this case, it is the student's obligation to give the instructor notification of the reason for his inability to complete the course requirements and to make arrangement for completion of the work. The "Incomplete" must be made up by the end of the following semester. Additional time may be provided upon approval of the instructor and the Registrar. If the course is satisfactorily repeated, the student may petition to have the grade of "Incomplete" removed.

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

Grade Point Average

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.

Credit/ No Credit

In addition to courses in which only a letter grade may be assigned, each division of the College may determine sections of some courses in which a student may elect either a letter grade or a "credit/ no credit." These sections will be so indicated on the class schedule. Students in these sections must notify the instructor in writing by the end of the ninth





week whether they wish a letter or a credit/ no credit grade. No changes are permitted after this time.

College divisions may also identify courses in which only credit/ no credit grades are offered.

A student is limited to a maximum of 12 units of credit/ no credit courses, excluding Cooperative Education. This limitation does not apply to students who have achieved an A.A. or higher degree.

The four-year colleges and universities vary widely in the number of credit/ no credit courses they accept. Students should consult the catalog of the college to which they may transfer for their regulations in this regard.

Repeated Courses

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

Upon satisfactory completion of a repeated course, the student may petition the Registrar to remove the units attempted, units completed and grade points for the previous course from the cumulative totals on his permanent record. Upon approval of the petition, all units and grades attempted or earned will appear on the permanent record, but only the last grade will be included in determining academic standing and grade point average, and only those units will be counted toward graduation. The evaluation of transfer credit from another institution may also be adjusted in this manner upon receipt of adequate documentation proving the parallel content of the transfer course and the Cañada course. Petitions which are not approved will be reviewed by the Appeals Committee at the request of the student.

Grade Reports

Grade reports are sent directly to each student at mid-semester. The mid-term grade report is not made a part of a student's permanent record; it is for information purposes only. Following final examinations at the end of the semester, the student is sent the report of his final semester grades, which become a part of his permanent record.

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. A nominal fee is charged for transcripts.

Personal Recommendations

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

Personal recommendations are used to provide information on students' personal characteristics and will be sent to prospective employers or colleges at the student's request.





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 1/2 units in one semester and 15 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.

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

Disqualification

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

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

Dismissal

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

Immediate readmission of a dismissed student is not considered. Only



after the lapse of at least two semesters may a dismissed student petition for readmission; then consideration is given only on the basis of evidence of academic work or other constructive achievement during the student's absence from college.

Transfer Students

Students who have been placed on probation or disqualified by another community college will not be admitted in the semester immediately following their attendance at that junior college. Such students may be admitted, subject to the Academic Standards Policy of Cañada College, after one semester's absence. This Academic Standards Policy will be applied to transfer students from other community colleges on admission. These students must complete all admission requirements.

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

Student Obligations

Conduct

The principle of personal honor is the basis for student conduct. The honor system rests on the sincere belief that the college student is mature and self-respecting, and can be relied upon to act as a responsible and ethical member of society. Each individual has the obligation of knowing and upholding College rules.

Regulations governing student conduct are subject to change by the Board of Trustees and, when applicable, by local, State and Federal statutes. These rules are given in the Student Guide which is included in the packets supplied to each student at the time of registration.

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

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

Secret Organizations

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

Fines

Fines are assessed for failure to comply promptly with library and other campus regulations, and students are required to pay for careless or unnecessary damage to College property. Students who are delinquent in their financial obligations to the College may not receive grade 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 urged to request emergency leave from the Student Health Center.

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 Student Activities office.

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

Any student absent for any length of time may contact his instructors or other students in his classes for assignments missed.

Withdrawal From College

A student who formally withdraws from a class or from college before the last meeting of the class shall receive a "W" grade. If the student does not formally withdraw, the instructor may assign an appropriate grade.

A student finding it necessary to withdraw at any time after registration must obtain a petition for withdrawal from his counselor. The completed form must be returned within five college days to the Registrar.



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.

Counselors are assigned according to the majors which students have declared. Because it is felt that the relationship between the counselor and the counselee is most important, a student may request a change of counselor by seeing the Dean of Students, Building 8, Room 205.

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

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

The office of the Assistant Dean of Students-Counseling 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 Associate Dean of Students or directly by the student with the school psychologist. Each semester the office of Psychological Services offers self-awareness training groups. (See the offerings under "Guidance" heading in "Announcement of Courses" section of this catalog.)

SPEED

(Student Program for the Educationally and Economically Disadvantaged)

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

Testing

The Office of the Associate Dean of Students maintains a service in aptitude, personality, interest 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 from their counselor.

College Orientation

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

Career Information

The Cañada Career Center provides career counseling, testing and current occupational information. It is located in the Counseling Center, Bldg. 5, room 208, and is open daily from 8 a.m. to 4:30 p.m.

Health Service

Assistance with health-related problems is provided by the Health Counselor located in the Health Center, room 213, of the Student Center. Drug counseling, pregnancy counseling, referral to community agencies and services are examples of the available services.

Students are required to submit a health information card with their college application form. In addition, all students are required to submit an emergency card at registration time.

All students are covered by an insurance policy for accidents and emergency illness that occur on the campus or in school sponsored activities. Reports of all accidents must be filed in the Health Office before payment can be authorized.





Student Health Insurance Program

The College offers accident and health insurance coverage to students on a voluntary basis. Most students who are over 18 years of age are no longer eligible for coverage on their parents' group insurance programs. Additional information and literature can be obtained in the Health Center or the Student Activities Office.

Placement Services

The College maintains a placement office, located in the Administration Building, room 203, 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 Student Activities Office maintains a housing file for use by Cañada students. Most of these listings are rooms in private homes; a few are available on the basis of work in exchange for room and board. All arrangements are made between the owner and the student. Dormitories or college-sponsored housing facilities are not available.

Financial Aids

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

The Associated Students have made a limited loan fund available to students who have purchased a student activity card and have an emergency need. The Cañada College Patrons Association, Redwood City Rotary Club, PTA, and Madelyn Cutten have established small emergency loan funds. Students desiring further information should contact the Financial Aids Office.





Student Government

All enrolled students are members of the Associated Students of Cañada College, whose purpose is to promote the general welfare of the students, to guarantee equality of opportunity among the students, to offer an experience in practice of American democratic government, and to encourage student participation in planning and direction of student activities.

Student Activities and Organizations

To gain the most from College life, students are encouraged to participate in the activities program and College clubs, which offer diversified opportunities for making both social and educational contacts. Because financial support for these programs comes from the sale of activity cards, students are urged to purchase their cards during registration.

Student Publications

The Weathervane, a weekly publication, provides full coverage of activities on campus and offers invaluable experience to journalism students. The college newspaper is primarily student-controlled.

The **Student Guide** contains information about student organizations, services of the College, College rules, student rights, student disciplinary due process procedures, and the College's staff and governance structure.

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

Athletics

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

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

The following basic principles pertain to all matters of eligibility:

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

Intramural Activities

The Physical Education and Recreation Education Division, in cooperation with the Student Council, offers a wide range of Intramural Activities

for men and women that include flag football, volleyball, basketball, table tennis, softball, tennis, soccer, dance, badminton, and bicycling.

Additionally, sports days are scheduled with neighboring colleges, universities, and community colleges. One-half unit of credit is available.

Performing Arts

Cañada College offers the following performance groups for your participation: A Cappella Choir, College Chorale, Peninsula Master Chorale; Orchestra, Cañada Symphony Orchestra, Symphonic Band, Cañada Concert Band; Musical Theatre and Opera; Instrumental Ensemble and Stage Band; and numerous drama presentations, including both faculty - and student-directed shows. Interested persons should contact the Fine Arts Division Office.

Foreign Travel and Study

A file of current overseas programs for study and travel are kept by one of the counselors. Check with Coordinator of Counselors for more information.

Services for Handicapped

Today more and more individuals are extending and expanding their education. This is certainly true of the handicapped and disabled person, and Cañada College is striving to develop services that might particularly assist these individuals.

The program is designed to meet individual needs. Through supportive services, the College hopes to meet individuals where they are and not isolate them, but encourage and assist them in the "mainstream." Involved is the recognition of the variety of limitations individuals may experience - orthopedic handicaps, blindness and visual impairments, hearing loss and deafness, as well as educational and learning handicaps. Students involved will undergo a diagnostic and prescriptive program that will allow them the pursuit of a growing educational experience.

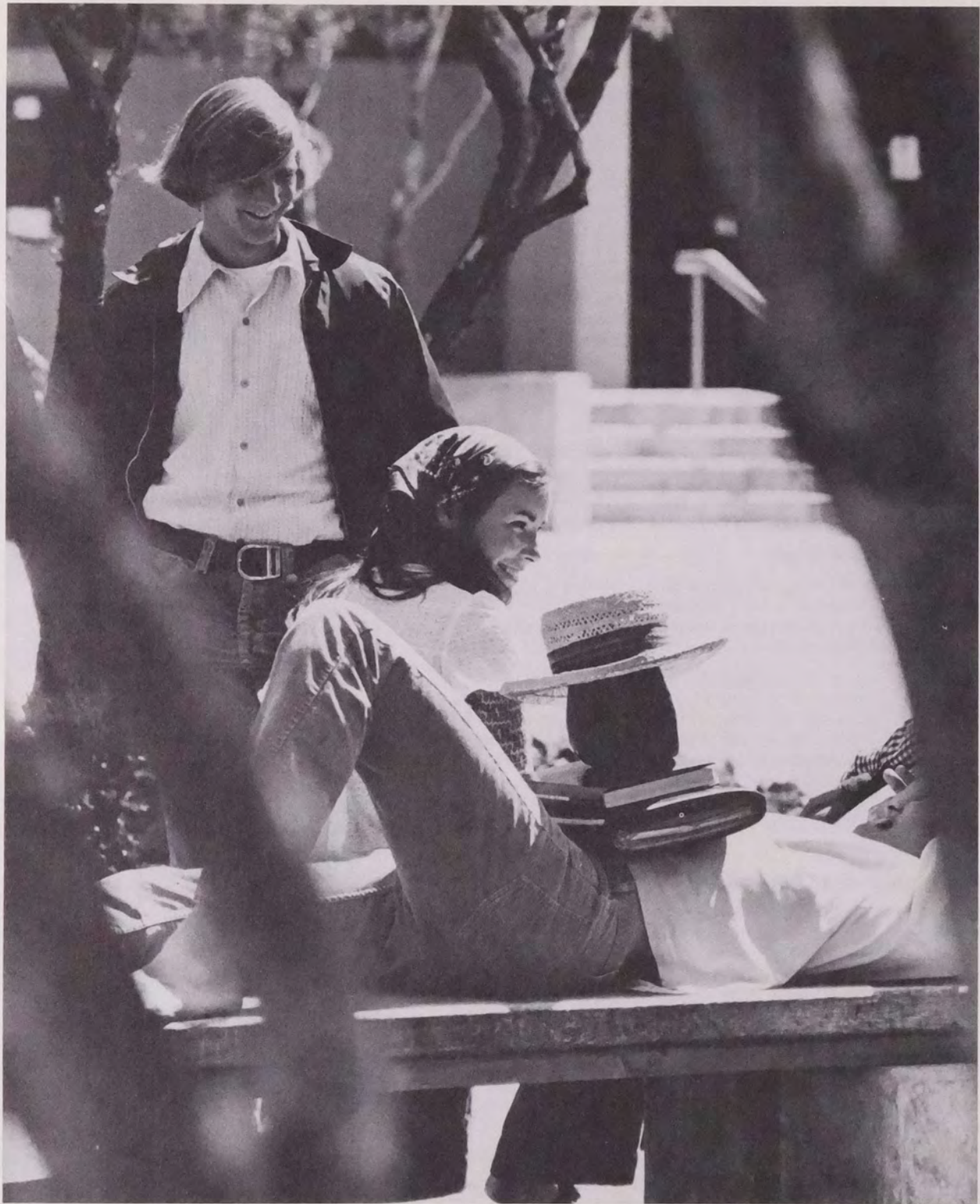
Student Development Program

The Student Development Program was inaugurated by the College in the fall of 1969 to provide supporting services to students who had not been able to participate fully in the educational and cultural experience of the community. The program was designed principally for minority students, although all students are welcome to participate.

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

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





Scholarships

Cañada College provides a scholarship program to recognize and honor outstanding students. Individuals and organizations provide scholarships for the program. One application form entitles a student to be considered for all scholarship awards available in the program. Application deadlines are March 15 for continuing and transferring students and April 15 for new students. Requests for applications and information should be directed to the Scholarship office. The Scholarship Committee meets each spring to review applications and select recipients for the following school year. Scholarships generally available are:

Donor	Criteria	Amount
Alpha Gamma Sigma, Cañada College	Continuing student with 3.0 gpa or higher	(2) \$50 ea.
Associated Students of Cañada College	Cañada student activity card holder	\$100
Atkinson Foundation	Cañada students continuing as sophomores	(2) \$150 ea.
John A. Blume & Associates, Engineers	Continuing or transferring student in engineering or closely related field	\$150
California School Employees Association, Chapter 33	Continuing or transferring students with 2.75 gpa or higher	(2) \$100
Cañada College Choir	Vocal music student with B average or higher. Selection by audition	\$100
Ruth Castle Scholarship Fund	Continuing as a sophomore with 2.0 gpa or higher	\$100
Cinco de Mayo	Latin American background, carrying 9 units or more	(several) \$100 ea.
Faculty Wives of Cañada	Continuing student at Cañada	\$100
Dorothea Gansburg Memorial	Continuing Food Technology student at Cañada	\$150
Golden Gate University Scholarship	Graduating student, 60 units, 3.25 gpa, entering Golden Gate University in fall	Tuition
William A. Goss Scholarship Fund	Unrestricted	(3) \$100 ea.
Emily Gresser Liebowitz Scholarship	Life science major—leading to hospital work, continuing or transferring	\$250
Ethel Lindauer Scholarship	Unrestricted	\$100-\$150
Patrons of Cañada College	Students attending Cañada College	(2) \$100 ea.
Redwood City Bobbies	Student in field of Law Enforcement	(1 or 2) \$100 ea.
(Wm. L. Faulstich Scholarship)	Minority students from this area	(1 to 3) \$100 ea.
Redwood City Citizens Against Racism	Minority students continuing or transferring	(1 or 2) \$200 ea.
Redwood City Clergy Association	Award rotates among 3 colleges.	
San Mateo County Association of Educational Office Employees	Business majors: one male, one female	(2) \$100 ea.
San Mateo County Retired Teachers Association	Award rotates among 3 colleges. Graduating student, transferring to 4-year college	\$300
Seventeenth District, California PTA, San Mateo County	Students attending Cañada College	(3) \$50 ea.
Victoria Station Incorporated	Continuing Food Technology student at Cañada	\$100
X-Ray Technology Scholarship	Student enrolled in Cañada's X-Ray Technology Program	\$100
Carl E. Ward Scholarship Fund	Unrestricted	\$50



Program Planning

This special catalog section is designed to help a student plan his academic program if he is seeking training or background related to a particular field or major.

The college offers a Certificate of Completion for specialized training and an Associate in Arts degree in an occupational program and for transfer to another educational institution to complete training. Students planning to transfer will find general information regarding the state colleges and universities and the University of California in this section. Cañada College also offers the lower division requirements for transfer to most majors in other colleges and universities. Since the requirements vary, it is essential that the student—with his counselor—plan his program at Cañada from the catalog of the university or college to which he plans to transfer. In this planning, he should review both the degree requirements and the departmental requirements for his major. It is important also for the transfer student to plan with his counselor from the catalog and departmental requirements of the transfer institution.

Certificate of Completion

A Certificate of Completion (generally 18 to 30 units) is awarded in certain occupational fields upon satisfactory completion of a specific course of study. These programs, developed in cooperation with community advisory committees, have been designed to assist in upgrading persons who are already employed in business, industry or government or those preparing for employment who desire to take all their work in specialized pre-employment courses.

In order to qualify for a certificate, a student must complete required and elective courses with at least a grade point average of 2.0 (C). Parallel courses completed at other accredited institutions upon approval of the division chairman in which the certificate is being earned may be applied toward the certificate. The last 12 units must be taken at Cañada College. Applications for certificates are available from the program coordinator.

Units earned in obtaining a certificate may be applied toward the 60 units required for an A.A. degree and may also satisfy the major requirement.

A list of certificates offered by the college follows the Associate in Arts degree requirements.

A.A. Degree Requirements

Graduation from Cañada College with the Associate in Arts degree is based upon the completion of 60 units of lower-division college work, including the requirements listed below. An application for the degree must be filed in the Registrar's Office during last semester of attendance.

A. Residence

The last 12 units or a total of 48 of the 60 units must be completed at Cañada College.

B. Scholarship

A minimum overall grade point average of 2.0 (C) for the last 60 units.

C. Major

A major consists of at least 18 semester units 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.

D. 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 contribute to his balanced development. The 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.

I. Natural Sciences

One or more courses from among the following for a minimum of 3 units.

- Anatomy 1, 51, 62a.
- Anthropology 1, 4.
- Astronomy 10, 12, 17.
- Bacteriology 10.
- Biology 1, 2, 3, 10, 39.
- Biology/ Home Economics 9/ 9, 15/ 15, 18/ 18.
- Botany 1, 10.

Chemistry 1a, 10, 30a.
 Conservation 1.
 Ecology 1.
 Electronics 10.
 Environment 1, 3.
 Forestry 1.
 Geography 1a.
 Geology 1a, 1b, 10, 15.
 Health Education 1, 3, 4, 5, 6, 7, 8, 9, 10.
 Home Economics/ Biology 9/ 9, 15/ 15, 18/ 18.
 Meteorology 1.
 Music 9/ Physics 9.
 Oceanography 10.
 Physical Science 10.
 Physics 2a, 4a, 10, 62.
 Physics 9/ Music 9.
 Physiology 1.
 Zoology 1.

2. Social Sciences: American Institutions

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

Group 1—National: Economics 11; History 4c, 8a, 17a, 17b, * 32, * 33; Political Science 7, * 13, 21; Social Science 2.

* Ethnic Studies course

Group 2—State and Local: Environment 2, 4; History 22, 26, 31; Political Science 23, 24, 28; Social Science 1.

Group 3—American Institutions: National, State and Local: Political Science 25, 27.

3. Humanities

One or more courses from among the following for a minimum of 3 units.

Anthropology 37.
 Art 1a, 1b, 1c, 2a, 3, 6a, 7a, 10, 13a, 13b, 22a,
 Art/ Music 44/ 44.
 Business 58.
 Drama 1a, 1b, 10, 14a.
 Drama/ English 24/ 24, 25/ 25.
 English 2, 21, 23, 26, 27, 28a, 30, 36, 37, 42a, 42b, * 43, * 44,
 46a, 46b.
 English/ Drama 24/ 24, 25/ 25.
 French 3, 4, 25a, 25b.
 German 3, 4.
 History 4a, 4b, 9a, 9b, 13, 14.
 Home Economics 60.
 Home Economics/ Interior Design 40/ 1, 41/ 2.
 Home Economics/ Social Science 35/ 35, 36/ 36, 37/ 37.
 Interior Design/ Home Economics 1/ 40, 2/ 41.
 Music 1, 6, 8, 11, 19, 22, 23, 24, 25, 26, 27, 33, 34, 36, 40, 43.
 Music/ Art 44/ 44.
 Philosophy 6a, 6b, 7, 20, 21, 23, 24, 25, 27, 28, 35.

Psychology 4, 6, 10, 12.
 Social Science * 33, * 34.
 Social Science/ Home Economics 35/ 35, 36/ 36, 37/ 37.
 Spanish 3, 4, 25a, 25b.
 Speech-Communication 11, * 12, 30a, 30b.

* Ethnic Studies Course

4. Learning Skills

a. Initial English course for a minimum of 3 units, one of which must be English 1a, 50a, 50b or (for foreign students) 57a.

b. Written and Oral/ Quantitative Communications (one course) from among the following:

Business 11, 12, 35, 50, 51, 56, 66, 91.
 Business Administration 1a.
 Economics 1a, 1b, 7, 19.
 English 1a, 1b, 9, 50b, 57b.
 Home Economics/ Social Science 6/ 6.
 Management 50, 52, 65.
 Mathematics 10, 11, 11a, 12, 13, 16, 18, 19, 20, 21, 23a, 28,
 29, 30.
 Mathematical Philosophy 17/ 12.
 Philosophy/ Mathematics 12/ 17.
 Psychology 43.
 Research and Development/ Statistics 1/ 1.
 Research and Development/ Social Science 10/ 10, 11/ 11,
 12/ 12.
 Social Science/ Home Economics 6/ 6.
 Social Science/ Research and Development 10/ 10, 11/ 11,
 12/ 12.
 Speech-Communication 1a, 10.
 Statistics 2.
 Statistics/ Research and Development 1/ 1.

5. Additional Requirements

a. English—one course, for a minimum of 3 units. Any English or Speech-Communication course listed under 3 or 4b, above, will satisfy this category requirement.

b. Ethnic Studies—one course from among the following:

Anthropology 36.
 English * * 43, * * 44.
 History * 32, * 33, 36.
 Political Science * 13.
 Psychology 7.
 Social Science 30, 32, * * 33, * * 34.
 Sociology 3.
 Speech-Communication * * 12.

* Course meets partial requirement for Social Science.

* * Course meets Humanities requirement.

E. Physical Education

Each student is required to complete two activity courses in Physical Education. This requirement may be waived in accordance with College regulations.

Certificate Programs

A Certificate of Completion (generally 18 to 30 units) is awarded in certain occupational fields upon satisfactory completion of a specific course of study. These programs, developed in cooperation with community advisory committees, have been designed to assist in upgrading persons who are already employed in business, industry or government, or those preparing for employment who desire to take all their work in specialized pre-employment courses.

In order to qualify for a Certificate, a student must complete required and elective courses with a grade point average of at least 2.0 (C). Parallel courses completed at other accredited institutions upon approval of the division chairman in which the Certificate is being earned may be applied toward the Certificate. The last 12 units must be taken at Cañada College. Applications for Certificates are available from the program coordinator.

Units earned in obtaining a Certificate may be applied toward the 60 units required for an A.A. degree and may also satisfy the major requirement.



A.A. DEGREE AND CERTIFICATE OCCUPATIONAL PROGRAMS

The following Associate in Arts degree and Certificate programs are offered at Cañada College. For information on other occupational programs offered in the San Mateo Community College District, see the catalogs of, or call, College of San Mateo, 574-6161, or Skyline College, 355-7000.

Division	Occupational Area	Curriculum	A.A. Degree	Certificate		
Business	Business	Accounting*	X	X		
		Business Administration	X	X		
		Clerk-typist		X		
		Court Reporting	X	X		
		Credit & Finance Management	X	X		
		General Clerical	X			
		Home Furnishings-Merchandising	X	X		
		Merchandising Management	X	X		
		Para-Legal Assistant*	X	X		
		Professional Office Careers		X		
		Secretarial	X	X		
Food Technology & Management	Food Technology & Management Dietary Technician*		X	X		
			X			
Home Economics	Interior Design* Options: Assistant Designer Display Home Furnishings Merchandising		X	X		
Fine Arts	Art	Commercial Art	X			
Life Science Physical Science Social Science	Environmental Technology	Environmental Technology	X			
Life Science	Radiologic Technology	Dental X-Ray Technology	X			
		X-Ray Technology	X			
Management	Management	Business Management*	X	X		
		Banking & Credit Management*	X	X		
		Industrial Management*	X	X		
		Occupational Safety & Health*	X	X		
		Public Administration Management*	X	X		
		Small Business Management*	X	X		
		Supermarket Management	X	X		
Physical Education	Recreation	Recreation Education	X			
Social Science	Public Service	Administration of Justice Options: Corrections Law Enforcement Industrial/Retail Security	X			
		Mental Health Assistant	X			
		Nursery School Assistant	X	X		
		Research & Development	X	X		
		Social Service Community Worker	X			
		Special Education	X			
		Teacher Assistant	X	X		
		Tourism*	X	X		

* See Evening College Programs & Schedule

California State University and Colleges

A student planning to transfer to a California State University or 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 full time 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. The student may write directly to the Registrar or Dean of the institution of his choice to obtain catalogs, circulars of in-

formation 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 General Education curriculum of the California State University and Colleges.

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

California State University and Colleges General Education Requirements

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

I. NATURAL SCIENCES (Must complete 1 Life Science and 1 Physical Science Course—1 of which must be with laboratory) * indicates Lab course							

Life Sciences							
* Anat 1	Anth 3	* Biol 3	* Biol 40	For 1	* Zool 1		
Anat 51	* Bact 1	Biol 9	* Bot 1	H Ec 9	_____	<input type="checkbox"/>	
* Anat 62a	Bact 10	Biol 10	* Bot 10	* H Ec 15	_____		
* Anat 62b	* Biol 1	* Biol 15	Cons 1	H Ec 18			
Anth 1	Biol 2	Biol 18	Envr 1	* Psio 1			

Physical Sciences							
Astr 10	Chem 10	Geog 1a	* Mus 9	* Phys 4a	Phys 62		
Astr 12	Chem 10L	* Geol 1a	Ocen 10	* Phys 4b	_____	<input type="checkbox"/>	
Astr 17	* Chem 30a	* Geol 1b	PSci 10	* Phys 4c			
* Chem 1a	* Chem 30b	* Geol 10	* Phys 2a	* Phys 9			
* Chem 1b	Envr 3	Mete 1	* Phys 2b	Phys 10			

II. SOCIAL SCIENCES (Must complete American Institutions requirement: 1 course marked ' and 1 course marked '' or a single course marked ''') (Minimum of 2 courses)					
Anth 2	Geog 3	''Hist 26	PISc 5	Psyc 5	SSci 20
Anth 36	Geog 4	Hist 30	'PISc 7	Psyc 6	SSci 29
Anth 37	Geog 5a	''Hist 31	'PISc 13	Psyc 7	SSci 30
Econ 1a	Geog 5b	'Hist 32	'PISc 21	Psyc 10	SSci 32
Econ 1b	Geog 5c	'Hist 33	''PISc 23	Psyc 12	SSci 35
Econ 7	'Hist 4c	Hist 40	''PISc 24	Psyc 33	SSci 36
'Econ 11	Hist 5	H Ec 6	''PISc 25	Soci 1	SSci 37
Econ 14a	Hist 6a	H Ec 35	''PISc 27	Soci 2	_____
Econ 19	'Hist 8a	H Ec 36	''PISc 28	Soci 3	_____
Econ 27	Hist 8b	H Ec 37	PISc 40	Soci 5	_____
''Envr 2	'Hist 17a	PISc 1	Psyc 1a	''SSci 1	_____
''Envr 4	'Hist 17b	PISc 2	Psyc 1b	''SSci 2	_____
Geog 1b	''Hist 22	PISc 3	Psyc 4	SSci 6	_____

III. HUMANITIES (Choose 1 course from any 2 categories for a minimum total of 2 courses)					
Fine Arts	H Ec 60	Mus 34	Engl 38	Phil 24	Hist 9b
Art 1a	Intd 1	Mus 36	Engl 42a	Phil 25	Span 3
Art 1b	Intd 2	Mus 43	Engl 42b	Phil 27	Span 4
Art 1c	Mus 1	Mus 44	Engl 43	Phil 28	Span 25a
Art 2a	Mus 6	Literature	Engl 44	Phil 35	Span 25b
Art 2b	Mus 8	Drma 1a	Engl 46a	Soci 15	SSci 33
Art 3	Mus 11	Drma 1b	Engl 46b	Foreign and	SSci 34
Art 10	Mus 19a	Drma 24	SpCm 30a	Ethnic Culture	_____
Art 13a	Mus 19b	Drma 25	SpCm 30b	Anth 37	_____
Art 13b	Mus 19c	Engl 21	Philosophy	Fren 3	_____
Art 44	Mus 19d	Engl 23	Hist 13	Fren 4	_____
Drma 10	Mus 22	Engl 24	Hist 14	Fren 25a	_____
Drma 14	Mus 23	Engl 25	Phil 6a	Fren 25b	_____
Drma 16	Mus 24	Engl 27	Phil 6b	Germ 3	_____
Drma 17	Mus 25	Engl 28a	Phil 7	Germ 4	_____
Drma 20	Mus 26	Engl 30	Phil 20	Hist 4a	_____
H Ec 40	Mus 27	Engl 36	Phil 21	Hist 4b	_____
H Ec 41	Mus 33	Engl 37 (2)	Phil 23	Hist 9a	_____

IV. BASIC SUBJECTS (Choose any 2 courses)					
Engl 1a	Germ 1	Math 17	Math 23b	SSci 10	Stat 1
Engl 1b	Germ 2	Math 18	Math 28	SSci 11	Stat 2
Engl 2	H Ed 1-10	Math 19	Math 29	Span 1	_____
Engl 4	Math 10	Math 20	Math 30	Span 2	_____
Fren 1	Math 13	Math 21	Math 31	SpCm 1a	_____
Fren 2	Math 16	Math 23a	Phil 12	SpCm 10	_____

V. ELECTIVES (Maximum 8 units permitted)

Bus 10	Bus 92r	H Ec 4	Mus 40	PE 26a	R Ed 42
Bus 11	BuAd 1a	H Ec 7	Nsry 11a	PE 26b	R Ed 43
Bus 12	BuAd 18a	H Ec 20	Nsry 11b	PE 26c	R Ed 44
Bus 35	Drma 15	H Ec 21a	Nsry 20	PE 26d	SSci 3
Bus 51	Engg 10	H Ec 21b	Nsry 21	PE 27a	Span 49
Bus 58	Fren 49	H Ec 22	Nsry 22	PE 27b	_____
Bus 64	Germ 49	H Ec 24	PE 20	PE 27c	_____
Bus 66	Guid 1	Mgmt 61	PE 22	PE 27d	_____
Bus 83a	Guid 2	Mgmt 65	PE 25a	Psyc 11a	_____
Bus 84	Guid 3	Mgmt 85	PE 25b	Psyc 11b	_____
Bus 91	Guid 4	Mgmt 99	PE 25c	R Ed 40	
Bus 92a	Guid 10		PE 25d	R Ed 41	

**COURSES FROM CAÑADA COLLEGE
TRANSFERABLE TOWARD BACCALAUREATE DEGREE CREDIT
AT CALIFORNIA STATE UNIVERSITY AND COLLEGES**

Administration of Justice - 1, 2, 3, 4, 7a, 7b, 12, 17, 18, 19, 21, 30, 32, 35, 38, 42, 44, 46, 47, 49, 100.

Anatomy - 1.

Anthropology - 1, 2, 3, 4, 36, 37, 49.

Art - 1a, 1b, 1c, 2a, 2b, 3, 4, 5a, 5b, 6a, 6b, 7a, 7b, 10, 12, 13a, 13b, 15, 17a, 17b, 22a, 22b, 44, 45, 56, 73.

Astronomy - 10, 12, 17.

Bacteriology - 1, 10.

Biology - 1, 2, 3, 9, 10, 15, 18, 39, 40, 49.

Botany - 1, 4, 10.

Business - 2, 3, 10, 11, 12, 35, 36, 37, 38, 47, 51, 56, 58, 61, 64, 65, 66, 67, 81, 83a, 84, *90a, *90b, *90c, *90r, *90Sa, *90Sb, 91, *92a, *92b, *92c, *92r, 93, 100, 101, 102, 110, 116, 117, 120, 124, 150, 151, 152, 153, 154, 155, 156, 157.

Business Administration - 1a, 1b, 18a.

Chemistry - 1a, 1b, 5, 8, 9, 10, 10L, 12a, 30a, 30b.

Conservation - 1.

Cooperative Education - 47.

Drama - 1a, 1b, 10, 13a, 13b, 13c, 13d, 14a, 14b, 14c, 14d, 14aL, 14bL, 14cL, 15, 16, 17, 20L, 24, 25, 49.

Ecology - 10.

Economics - 1a, 1b, 7, 11, 14a, 19, 27, 49.

Education - 1, 2, 3, 47, 49.

Electronics - 10.

Engineering - 10, 20, 22, 35, 36, 37, 38, 48, 49.

English - 1a, 1b, 2, 4, 9, 21, 23, 24, 25, 27, 28a, 28b, 30, 36, 37, 42a, 42b, 43, 44, 46a, 46b, 48, 49, 50a, 50b, 57a, 57b.

Environment - 1, 2, 3, 4, 5a, 5b, 5c, 47, 49.

Forestry - 1.

French - 1, 2, 3, 4, 25a, 25b, 46, 49.

Geography - 1a, 1b, 3, 4, 5a, 5b, 5c, 49.

Geology - 1a, 1b, 10, 15, 49.

German - 1, 2, 3, 4, 49.

Guidance - 1, 3, 4, 10.

* The maximum transfer credit to be allowed for typewriting courses is 6 units; for shorthand courses, 8 units.

Health Education - 1, 3, 4, 5, 6, 7, 8, 9, 10.

History - 4a, 4b, 4c, 5, 6, 8a, 8b, 9a, 9b, 13, 14, 17a, 17b, 22, 26, 29, 30, 31, 32, 33, 36, 40, 49.

Home Economics - 4, 5, 6, 7, 9, 15, 18, 20, 21a, 21b, 22, 24, 30, 35, 36, 37, 39a, 39b, 40, 41, 47, 49, 55, 60, 81, 82, 83, 90, 91, 92.

Interior Design - 1, 2, 3, 4, 5a, 6.

Journalism - 1, 2, 15, 49.

Management - 47, 50, 52, 54, 55, 61, 63, 65, 71, 72, 75, 77, 80, 85, 90, 91, 92, 93, 94, 96, 99, 104, 105, 106, 109, 110, 111.

Data Processing - 12, 65.

Quality Control - 61.

Mathematics - 10, 13, 16, 17, 18, 19, 20, 21, 23a, 23b, 25, 28, 29, 30, 31, 32, 34, 49.

Mental Health - 47.

Meteorology - 1.

Military Science - 1a, 1b, 2a, 2b.

Music - 1, 2a, 2b, 4a, 4b, 5a, 5b, 6, 8, 9, 10, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d, 16, 19a, 19b, 19c, 19d, 20, 22a, 22b, 22c, 22d, 23a, 23b, 23c, 23d, 24a, 24b, 24c, 24d, 25a, 25b, 25c, 25d, 26a, 26b, 26c, 26d, 27a, 27b, 27c, 27d, 28a, 28b, 28c, 28d, 29a, 29b, 29c, 29d, 30a, 30b, 30c, 30d, 31a, 31b, 31c, 31d, 33a, 33b, 33c, 33d, 34a, 34b, 34c, 34d, 35a, 35b, 35c, 35d, 36a, 36b, 36c, 36d, 37a, 37b, 37c, 37d, 40, 41, 42, 43, 44, 49.

Nursery School - 11a, 11b, 47.

Oceanography - 10.

Philosophy - 6, 7, 12, 20, 21, 23, 24, 25, 28, 35, 38, 48, 49.

Physical Education - 3, 4, 5, 6, 7, 8, 9, 20, 21, 22, 25a, 25b, 25c, 25d, 26a, 26b, 26c, 26d, 27a, 27b, 27c, 27d, 30, 31, 32, 33, 34a, 34b, 35, 35b, 36a, 36b, 37, 38, 39a, 39b, 40, 41, 42a, 42b, 43a, 43b, 44, 45, 46a, 46b, 47, 48, 49, 50a, 50b, 51, 52, 53, 54, 56, 57, 58a, 58b, 59, 60, 61, 62, 63a, 63b, 64, 65, 66a, 66b, 67, 68, 69a, 69b, 70, 71, 72.

Physical Science - 10.

Physics - 2a, 2b, 4a, 4b, 4c, 9, 10.

Physiology - 1.

Political Science - 1, 2, 3, 5, 7, 13, 21, 23, 24, 25, 27, 28, 40, 41, 49.

Psychology - 1a, 1b, 4, 5, 6, 7, 10, 11a, 11b, 12, 21, 22, 33, 42, 43, 44, 45, 46, 48, 49.

Recreation Education - 40, 41, 42, 43, 44, 47.

Research and Development - 1, 10, 11, 12.

Social Science - 1, 2, 3, 6, 10, 11, 12, 20, 29, 30, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 47a, 47b, 48, 49.

Sociology - 1, 2, 3, 5, 15, 43, 47, 49.

Spanish - 1, 2, 3, 4, 25a, 25b, 46, 49.

Speech-Communication - 1a, 10, 30a, 30b, 49, 57.

Statistics - 1, 2.

Student Government - 1, 2.

Urban Studies - 47.

Zoology - 1.

NOTES: "48" and "49" courses are transferable unless otherwise indicated. A few courses which do not appear on the list above were offered prior to 1973 and were transferable at the time. They will continue to be transferable.

University of California

A student planning to transfer to one of the campuses of the University of California can usually complete the first two years of his work at Cañada. In some cases, students may wish to make up high school course deficiencies or grade point average deficiencies. It is important to work with your counselor from the general catalog of the University campus you plan to attend. The current issue of the University publication "Prerequisites and Recommended Subjects" is a helpful planning guide. It lists the requirements for admission, breadth requirements and requirements for the major, all of which should be carefully considered in planning your program at Cañada.

Not all Cañada courses are designed for transfer to the University of California. The following is a list of those that are transferable to all campuses of the University. Some others may be accepted for transfer credit by a particular campus depending upon your major. This list does not include new courses adopted during the 1973-74 college year.

COURSES FROM CAÑADA COLLEGE ACCEPTABLE AT UNIVERSITY OF CALIFORNIA (ALL CAMPUSES)

- Anatomy** - 1 (W/Lab 4).
Anthropology - 1 (3); 2 (3); 3 (3); 4 (3); 36 (3); 37 (3); 49 (See Independent Study).
Art - 1 ab (3,3); 1c (3); *2ab (3,3); *3 (3); *4 (2); *5 ab (3,3); *6ab (3,3); *7ab (3,3); 10 (3); +12 (2); *13ab (3,3); *15 (2); +17ab (2,2); +22ab (3,3); 44 (3); +45 (3).
 *Any or all of these courses combined: maximum credit allowed, 18 units.
 + Any or all of these courses combined: maximum credit allowed, 12 units.
Astronomy - 10 (3); 12 (3).
Bacteriology - 1 (W/Lab 5); 10 (3).
Biology - 1 (W/Lab 4); 2 (3); 9 (3); 15 (W/Lab 3); 18 (3); 20 (W/Lab 3); 40 (W/Lab 3); 49 (See Independent Study).
Botany - 1 (W/Lab 5); 4 (W/Lab 3); 10 (W/Lab 3).
Business - 12(3); 35(3).
Business Administration - 1 ab (4,4); 18a (3).
Chemistry - *1 ab (W/Lab 5,5); 5 (W/Lab 4); *8 (3); *9 (Lab 2); *10 (3); *12a (W/Lab 5); *30ab (W/Lab 4,4).
 *10 following 1a or 30a; no credit for 10. 8 and 9 combined with 12a: maximum credit allowed, 5 units.
 *30a following 1a; no credit for 30a.
 *30b and 1b combined: no credit for 30b.
Conservation - 1 (3).
Drama - 1 ab (3,3); 10 (3); *13ab (3,3); *13cd (3,3); +14a (3); +14bcd (3,3,3); 14aLbLcLdL (1-2); *15 (1/2-2); *16 (1/2-2); *17 (1/2-2); *49 (See Independent Study).
 *Any or all of these courses combined: maximum credit allowed, 12 units.
 + Any or all of these courses combined: maximum credit allowed, 12 units.
Economics - 1 ab (3,3); *7 (3); 11 (3); 14a (3); 19 (3); 27 (3); 49 (See Independent Study).
 *No credit for 7 following 1a or 1b.
Education - 1 (3).
Engineering - 10 (2); 20 (2); 22 (2); 35 (3); 36 (3); 37 (3); 38 (3).
English - 1a (3); 1b (3); 9ab (3,3); 21 (3); 23 (3); 24 (3) (Same as Drama 24); 25 (3) (Same as Drama 25); 26 (3); 27 (3); 28a (3); 30 (3); 31ab (3,3); 34 (3); 36 (3); 37 (1-3); 41 (3); 42ab (3,3); 43 (3); 44 (3); 45 (3); 46abc (3,3,3); 49 (See Independent Study).
Environment - 1 (3); 2 (3); 3 (3); 5abc (3,3,3); 49 (See Independent Study).
Forestry - 1 (3).
French - 1 (5); 2 (5); 3 (5); 4 (3); 25ab (3,3); 30 (1-2).
Geography - 1a (3); 1b (3); 4 (3); 5abc (3,3,3) (Same as Env. 5abc); 49 (See Independent Study).
Geology - *1a (W/Lab 4); 1b (W/Lab 4); *10 (W/Lab 3); 49 (See Independent Study).
 *1a and 10 combined: maximum credit allowed, 1 course.
German - 1 (5); 2 (5); 3 (5); 4 (3); 30 (1-2).
Health Education - *1 (1); *2 (1); *3 (1); *4 (1); *5 (1); *6 (1).
 *Any or all of these courses combined: maximum credit allowed, 3 units.
History - 4ab (3,3); *4c (4); 5 (3); 6 (3); 8ab (3,3); 9ab (3,3); 13 (3); 14 (3); *17ab (3,3); 22 (3); 26 (3); 29 (3); 31 (3); 32 (3); 33 (3); 36 (3); 40 (3); 49 (See Independent Study).
 *4c and 17ab combined: no credit for 4c.
Home Economics - 6 (3); **9 (3) (Same as Bio 9); o15 (W/Lab 3) (Same as Bio 15); **18 (3) (Same as Bio 18); *20a (3); *20b (3); 22 (3); *24 (2); 35 (3); 37 (3); +40 (3); +41 (3).
 *20a, 20b and 24 combined: maximum credit allowed, 1 course.
 **9, 18 and Biology 18 combined: maximum credit allowed, 1 course.
 + 40 and 41 combined: maximum credit allowed, 1 course.
 o15 and Biology 15 combined: maximum credit allowed, 1 course.
Independent Study - (Maximum credit allowed: 5 semester units per term).
Interdisciplinary Studies - Engl. 1 ab - Hist. 17ab (6,6); Engl. 42a - Hist. 4a (3,3).
Journalism - 1 (3); *2 (3); *15 (2).
 *Any or all of these courses combined: maximum credit allowed, 1 year.
Mathematics - 10 (3); 13 (3); 16 (3); +17 (3); 18 (3); *23 ab (4,4); 28 (3); 29 (5); *30 (5); *31-32 (5,4); 34 (3); 49 (See Independent Study).

*Check for duplication of credit.

+17 and Philosophy 12 combined: maximum credit allowed, 1 course.

Meteorology - 1 (3).

Military Science - 1 ab (2,2); 2ab (2,2). Offered at California State University at San Jose.

Music - 1 (2); 2ab (2,2); 4ab (3,3); 5ab (3,3); 6 (3); 8 (3); 10 (3); *11abcd (1,1,1,1); *12abcd (1,1,1,1); *16 (1); *19abcd (1,1,1,1); 20 (3); *22abcd (2,2,2,2); *23abcd (2,2,2,2); *24abcd (1,1,1,1); *25abcd (1,1,1,1); *26abcd (1,1,1,1); *27abcd (1,1,1,1); *28abcd (1,1,1,1); *29abcd (1,1,1,1); *30abcd (1,1,1,1); *31abcd (1/2, 1/2, 1/2, 1/2); *33abcd (2,2,2,2); *34abcd (1,1,1,1); *35abcd (1,1,1,1); *36abcd (1,1,1,1); *37abcd (1,1,1,1); *40 (1-3); *42 (1); *43 (1); o44 (3); 49 (See Independent Study; 51, 99 (No Credit).

* Any or all of these courses combined: Maximum credit allowed, 12 units.

Philosophy - 6ab (3,3); 7 (3); 20-21 (3,3); 23 (3); 24 (3); 25 (3); 28 (3); 35 (3); 38 (3); 48 (1-3); 49 (See Independent Study).

Physical Education - Varsity Sports: *1 through 11 (1 or 2 units each); Physical Education Competencies: +20abcd, 30abcd, 50abcd (2,2,2,2) (2,2,2,2) (2,2,2,2); 40 (2); +42 (2); +41abw (1,1); +41m (2).

*Any or all of these courses combined: maximum credit allowed, 4 units.

+ Any or all of these courses combined: maximum credit allowed, 8 units.

Physical Science - 10 (3).

Physics - *2ab (W/Lab 4,4); *4abc (W/Lab 4,4,4); +9 (W/Lab 3); *10 (3).

*2a + 4a: deduct 3 units from 2a

*2a + 4c: deduct 1 unit from 2a

*2b + 4b: deduct 2 units from 2b

*2b + 4c: deduct 2 units from 2b

*10 following 2a or 4: no credit for 10

Physiology - 1 (W/Lab 5).

Political Science - 1 (3); 2 (3); 3 (3); 5 (3); 7 (3); 13 (3); *21 (3); *23 (2); 24 (2); *25 (5); 27 (5); 49 (See Independent Study).

*21, 23, and 25 combined: maximum credit allowed, 5 units.

Psychology - *1a (3); 1b (3); 4 (3); 5 (3); 6 (3); 7 (3); *10 (3); 12 (3); 33 (3); 43 (3); 44 (3); 45 (3); 49 (See Independent Study).

*1a + 10 maximum credit allowed, 1 course.

Recreation Education - 40 (2); 44 (2).

Social Science - 1-2 (3,3); 6 (3); 11 (3); 12 (3); 20 (3); 29 (3); 30 (3); 32 (3); 33 (3); 34 (3); 35 (3); 37 (3).

Sociology - 1 (3); 2 (3); 3 (3); 49 (See Independent Study).

Spanish - 1 (5); 2 (5); 3 (5); 4 (3); 25ab (3,3); 30 (1-2).

Speech - 1a (3); 10 (3); 30ab (3,3).

Statistics - *1 (3); *2 (4).

*1 and 2 combined: maximum credit allowed, 1 course.

Zoology - 1 (W/Lab 5).

Suggested Curricula

The following suggested curricula are provided to help a student plan his program each semester to qualify for a Certificate, an Associate in Arts degree and/or transfer.

Administration of Justice

Associate in Arts Degree with a Major in Administration of Justice

The Administration of Justice program at Cañada College is designed to meet the needs of the students and the community. The program emphasizes the professionalization of police officers by training men and women in criminal law, investigative techniques and other related courses. However, just as important, the program also emphasizes the human relations aspect of police work and the need for officers to appreciate and understand people of all races, ethnic, and religious backgrounds.

To achieve this end all Administration of Justice majors are expected to enroll in at least one course of Black or Chicano Studies; and in addition, do course work in community relations, contemporary subcultures and other related areas.

The program now includes three options: Law Enforcement, Corrections (Probation); and Industrial and Retail Security. The Corrections option will prepare pre-service students for positions in community based delinquency prevention and diversion programs and will prepare the continuing student for advanced work leading to employment in probation. The program of Industrial and Retail Security is intended to provide the individual entering the security field with a well rounded educational background so as to prepare him for a professional career. To keep pace with the rapid technical changes taking place in the field of security, it is necessary for security personnel to stay abreast of current standards. Therefore, the curriculum emphasizes basic principles and practical applications in the security field.

The Administration of Justice program at Cañada College is geared so that a student, if he wishes, may transfer upon completion of the necessary course work to a California State University as an upper division student, and at the same time be prepared at the A.A. degree level for an effective law enforcement career.

	Units	
	F	S
Freshman Year		
AJ 1—Introduction to Justice System	3	—
AJ 3—Concepts in Criminal Law	—	3
AJ 19—Patrol Procedures & Report Writing	—	3
English 1a	3	—
Social Science 40	3	—
American Institutions	2	3
Ethnic Studies	3	—
Speech 1a	—	3
Elective	—	2
Physical Education	1	1
	<hr/> 15	<hr/> 15

	Units	
	F	S
Sophomore Year		
AJ 4—Legal Aspects of Evidence	—	3
AJ 7a—Criminal Investigation	3	—
AJ 38—Community Relations	3	—
AJ 47—Coop Education-Internship	—	2
Sociology (Soc. 2 strongly recommended)	3	—
Humanities	—	3
Life Science	3-4	—
Physical Science	—	3-4
Electives	3	4
	<hr/> 15-16	<hr/> 15-16

	Units
REQUIRED CORE CURRICULUM	
AJ 1—Introduction to Justice System	3
AJ 3—Concepts in Criminal Law	3
AJ 4—Legal Aspects of Evidence	3
AJ 7a—Criminal Investigation	3
AJ 19—Patrol Procedures & Report Writing	3
AJ 38—Community Relations	3
AJ 47—Cooperative Education-Internship (Law Enforcement, Probation, Security)	2

Administration of Justice Options

Industrial/Retail Security Option

- AJ 30—Introduction to Industrial & Retail Security
- AJ 32—Security Administration
- AJ 35—Current Security Problems
(See Evening College Programs and Schedule)

Law Enforcement Option

- AJ 2—Principles & Procedures of the Justice System
- AJ 12—Traffic Control
- AJ 17—Police Organization & Administration
- AJ 21—Police Report Writing
- Soc. Sci. 29—Juvenile Problems and Procedures

Corrections Option

- AJ 18—Alternatives to Incarceration
 AJ 42—History & Practice of Juvenile Placement
 AJ 46—Introduction to Counseling

Other Recommended Electives

- AJ 7b—Criminal Investigation
 AJ 44—Drugs: Effects on Individuals & Society
 AJ 100—Police Management
 Soc. 43—Introduction to Criminology & Penology

Adolescent Group Worker (Certificate Program — Proposed)

The current trend in closing state mental and correctional institutions, combined with the national trend to open more professional foster homes, satellite centers and community-based centers, is creating a need for the practitioner who is trained to work with adolescents in group homes, emancipation houses, the street workers, and operations other than the traditional institutions. The courses in this new curriculum are designed for both the paraprofessional and the professional in the field who wish to upgrade their skills and for the student who seeks to serve in a variety of public and private community based organizations.

REQUIRED CORE CURRICULUM**Fall Semester**

	Units
Psych. 1A—General Psychology	3
Soc. Sci. 40—Introduction to Social Service	3
Soc. Sci. 42—History & Practice of Juvenile Placement	3
Soc. Sci. 45—Juvenile Rights & Court Law	1
Soc. Sci. 47—Cooperative Education (Minimum 10 hours per semester for two semesters.) (Placement must be in a licensed Group Foster Home)	2-4
Ethnic Studies (May be taken in summer or fall)	3

Spring Semester

Psych. 42—Introduction to Treatment Modalities	3
Psych. 46—Introduction to Counseling	3
Soc. Sci. 10—Interaction & Communication	3
Soc. Sci. 29—Juvenile Problems and Procedures	3
Soc. Sci. 43—Educational Resources	1
Soc. Sci. 47—Cooperative Education (Minimum 10 hours per semester for two semesters.) Placement must be in a licensed Group Foster Home	2-4

Strongly Recommended Electives

- Soc. Sci. 36—Life Cycles
 Psych. 45—Group Interaction
 Psych. 44—Drugs: Effects on Individual & Society
 Sociology 2—Social Problems
 Soc. Sci. 6—Consumer

- Business 35—Personal Money Mgmt.
 Spanish
 Recreation (directive)
 Typing

In addition, the student desiring an A.A. Degree with this major must fulfill the general education requirements specified by the college.

Afro-American Studies

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

Architecture**Transfer Program**

	Units
Math. 18/25—Computer-Basic, Fortran	3-6
* Math. 23 a, b—Calculus	10
* Physics 2 a, b—General	8
Foreign Language	0-12
Engin. 1a—Surveying	3
Engin. 10—Engineering and Environment	2
Engin. 22—Graphics	2
Art 2a—Form and Composition	3
Engin. 20 (recommended)—Descriptive Geometry	2

* Math. 30, 31, 32 and Physics 4a, b, c sequence in place of Physics 2a, b are recommended for those contemplating transfer to California State Polytechnic Colleges.

Art

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

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

Art (Commercial)

Associate in Arts Degree with a Major in Commercial Art

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

Freshman Year

	Units	
	F	S
Art 1b—History of Art	—	3
Art 2a—Form and Composition	—	3

Art 4—Perspectives	—	2
Art 5a—Design	3	—
Art 10—Introduction to Art	3	—
Art 12a—Lettering	2	—
Art 12b—Layout	—	3
English 1a	3	—
English 1b or Speech Communication 1a	—	3
State and Local Government	2	—
Biology 10	3	—
Physical Education	—	1
	<hr/>	<hr/>
	16	15

Sophomore Year

	Units	
	F	S
Art 1c—History of Art	3	—
Art 3—Color	—	3
Art 6a—Painting (or Art 7a)	3	—
Art 13a-13b	3	3
Art 18—Commercial Design	—	3
Ethnic Studies	3	—
American Institutions	—	3
Physics 10 (or Geol. 10 w/ lab)	3	—
Electives, General Education	—	1
Physical Education	—	1
	<hr/>	<hr/>
	15	14

Suggested Electives

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

Career Opportunities

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

Art (Fine Arts)**I—Associate in Arts Degree
with a Major in Fine Arts, Painting****Freshman Year**

	Units	
	F	S
Art 1b—History of Art	—	3
Art 2a-2b—Form & Composition	3	3
Art 13a-13b—Drawing	3	3
Art 10—Introduction to Art	—	3
English 1a	3	—
English 1b or Speech Com. 1b	—	3
State and Local Government	2	—
Biology 10	3	—
Physical Education	1	—
	<hr/>	<hr/>
	15	15

Sophomore Year

	Units	
	F	S
Art 1c—History of Art	—	3
Art 3—Color	—	3
Art 6a-6b—Painting	3	3*
Art 7a-7b—Water Color	3	—*
Art 15—Life Drawing	2	—
American Institutions	—	3
Ethnic Studies	3	—
Physics 10	3	—
Electives, General Education	—	3
Physical Education	—	1
	<hr/>	<hr/>
	14	16

* Art 6b and 7b are interchangeable.

Suggested Electives

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

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

	Units	
	F	S
Art 1a-1b—History of Art	3	3
Art 2a—Form and Composition	3	—
Art 5b—Design	—	3
Art 13a-13b—Drawing	3	3
English 1a	3	—
English 1b or Speech Com. 1a	—	3
American Institutions	3	—
Biology 1 (w/ lab)	—	3
Physical Education	1	—
	<hr/>	<hr/>
	16	15

Sophomore Year

	Units	
	F	S
Art 1c—History of Art	3	—
Art 10—Introduction to Art	3	—
Art 15—Life Drawing	2	—
Art 22-22b—Sculpture	3	3
Ethnic Studies	—	3
State and Local Government	2	—
Physics 10	3	—
Electives, General Education	—	6
Physical Education	—	1
	<hr/>	<hr/>
	16	13

Suggested Electives

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

Asian Studies

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

Banking and Finance

(Certificate Program)

The Banking and Finance Program at Cañada College, developed in cooperation with the banking industry, is designed primarily for the following two groups of students: (1) those currently employed in the financial industry who wish to upgrade themselves on their jobs and qualify for advancement and promotion, and (2) those who wish to prepare for future employment in a financial organization.

Three areas of specialization offered in the program are Bank Operations, Credit and Lending, and Bank Management and Supervision. Certificates of achievement are awarded in each area to students who complete all required and elective courses with a "C" or better. No course may be applied toward more than one college certificate of achievement. If a course has already been applied toward another certificate, an additional course from the elective list must be completed as a substitute.

Students who are employed can attain important milestones in career development through the two-year degree program and/or the specialized Certificates of Achievement. Both may be earned simultaneously. Courses taken from the approved list may also be applied toward credit for certificates offered to bank employees through the American Institute of Banking. Students who enter the banking industry at a later date may receive retroactive credit for AIB certificates.

Bank Operations Specialization

This certificate requires 18 units from the required list and 6 units from the elective list.

Required	Units
Bus. 38—Principles of Bank Operations	3
Bus. Ad. 18a—Commercial Law	3
or	
Bus. 64—Business Law	3
Bus. 51—Business Mathematics	3
D.P. 65—Data Processing for Managers	3
or	
Bus. 12—Introduction to Data Processing	3
Bus. 58—Human Relations in Business	3
or	
Psych. 1a—General Psychology	3
Spch-Com. 1a—Basic Public Speaking	3

Electives

Bus. 35	Bus. 93	Mgt. 90
Bus. 56	Eng. 1a	Mgt. 92
Bus. 90abc	Eng. 57ab	Mgt. 99
Bus. 91	Mgt. 47	Psych. 1a
Bus. 92abc	Mgt. 85	Spch-Com. 1a

Credit and Lending Specialization

This certificate requires 20 units from the required list and 4 elective units.

Required	Units
Bus. Ad. 1a, b—Principles of Accounting	4-4
Bus. ()*—Analysis of Financial Statements	3
Bus. ()*—Installment Credit	3
Econ. 1a, b—Principles of Economics	3-3

Electives

Bus. 64	Bus. 38	Bus. 110
Bus. Ad. 18a	Bus. 51	Bus. 124
Bus. 11	Bus. 56	Eng. 1a
Bus. 35	Bus. 81	Eng. 57ab
Bus. 36	Bus. 83a	Mgt. 50
Bus. 37	Bus. 91	Bus. ()*

Bank Management and Supervision Specialization

This certificate requires 19 units from the required list and 5 units from the elective list.

Required	Units
Bus. 65—Small Business Management	3
or	
Bus. 110—Fundamentals of Salesmanship	3
Bus. 124—Marketing	4
Bus. Ad. 1a—Principles of Accounting	3
Mgt. 50—Financial Management	3
Mgt. 92—Techniques of Supervision	3
Mgt. 96—Organization for Management	3

Electives

Bus. Ad. 1b	Bus. 83a	Mgt. 63
Bus. Ad. 18a	Bus. 91	Mgt. 72
Bus. ()*	Bus. 110	Mgt. 80
Bus. ()*	Bus. 124	Mgt. 85
Bus. ()*	D.P. 65	Mgt. 90
Bus. 11	Mgt. 47	Mgt. 93
Bus. 12	Mgt. 52	Mgt. 94
Bus. 58	Mgt. 54	Mgt. 99
Bus. 64	Mgt. 55	Psych. 1a
Bus. 65	Mgt. 61	

* In the planning stages for offering in the 1975-76 College year.

Biology and Applied Fields

Transfer Program

(Biology, Agriculture, Physiology, Microbiology, Botany, Entomology, Zoology, Physical Therapy, Public Health, Medical Technology, etc.)

	Units
* Math. 23a, b—Calculus	10
Chem. 1a, b—General	10
Chem. 8 & 9—Elementary Organic	
or	
Chem. 12a—Organic	5
* Chem. 5—Quantitative Analysis (recommended)	4
Physics 2a, b—General	8
Biology 1—Principles	4
Botany 1—General	5
Zoology 1—General	5
* Foreign Language	0-12

* The student should consult the catalog of the intended transfer institution concerning the necessity of appropriateness of these courses.

Business Administration

Transfer Program

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

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

Students planning to transfer to California State University at San Jose should complete Math. 19 or 20, Math 13, and Statistics 2. Students transferring to other State universities should complete Math. 19 or 20 and Statistics 2. Math. 23 a/ b is also recommended.

Business 51, Business Mathematics, is recommended for students who are weak in basic math.

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

Students planning to transfer to the University of California should consult their catalog and the bulletin for the School of Business Administration.

Business

(Career Programs)

The following career programs are designed to qualify a student for employment upon completion of a certificate or two-year curriculum. 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.

Clerk-Typist, Secretarial, Credit and Finance Management, or Merchandising Management certificates are awarded with or without the AA degree to students who complete the required courses in the certificate program.

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

18 units in Business courses.

Business 50 or 51, or a satisfactory score on a Business

Mathematics competency exam.

Business 10-Introduction to Business

Business (Banking and Finance)

(See Evening College programs and schedule)

Business (General Clerical)

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

Freshman Year

	Units	
	F	S
Health Education	—	2
Bus. 92a, b or c—Typing	3	—
Bus. 91—Bus. English	3	—
English	—	4
General Education Elective	—	3
Bus. 50 or 51—Bus. Math	3	—
Bus. 56—Bus. Comm.	—	3
Bus. 58—Human Relations	—	3
Bus. 10—Intro. to Bus	3	—
Bus. 11—Cont. Bus. Econ. Issues	3	—
Physical Education	1	1
	16	16

Sophomore Year

	Units	
	F	S
Bus. 12—Intro. to Data Processing	3	—
Bus. 93—Machine Calculation	—	2
Soc. Sci.	3	3
Bus. 100—Office Procedures	—	4
General Education Elective	3	—
Business Elective	—	3
English	—	4
Business 92b or c—Typing	3	—
Bus. 66—General Accounting	3	—
Physical Education	1	1
	16	17

Suggested Electives

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

CLERK-TYPIST CERTIFICATE PROGRAM

Remedial Courses (if required by testing)

Core Courses

	Units
Bus. 10—Introduction to Business.....	3
Bus. 92b, c—Typing (through 92c).....	3-6
Bus. 100—Office Procedures.....	4
Bus. 93—Machine Calculation.....	2
Bus. 50 or 51.....	3
Related Courses.....	3
Bus. 91—Bus. English.....	3
Electives.....	3
	24-27

Note: Certificate is awarded with or without the AA degree to students who complete the required courses in the certificate program.

Business (Secretarial)**Associate in Arts Degree with a Secretarial Major**

(Recommended Program)

Freshman Year

	Units	
	F	S
Bus. 92a or 92b—Typing.....	3	—
Bus. 91—Bus. English.....	3	—
English.....	—	3
Bus. 66—General Acc't.....	3	—
Bus. 50 or 51—Arithmetic.....	3	—
Bus. 93—Mach. Calculation.....	—	2
Bus. 10—Intro. to Bus.....	—	3
Bus. 90a-b or c—Shorthand (Gregg) or Bus. 90S a/ b—Mach. Shorthand.....	—	5
General Education.....	3	3
Physical Education.....	1	1
	16	17

Sophomore Year

	Units	
	F	S
Health Education.....	—	1
Bus. 92b or 92c—Typing.....	3	—
Bus. 90 b, c—Shorthand (Gregg) or Bus. 90S a/ b—Mach. Shorthand.....	7	5
Bus. 100—Office Procedures.....	—	4
Social Science Requirement.....	3	3
General Education.....	3	—
Bus. 56—Bus. Communications.....	—	3
Physical Education.....	1	1
	17	17

See Business section for division requirements for all Business majors.

Suggested Electives

Guid. 1, 2, 3 or 4—Guidance Class (1-1-1-1)
 Bus. 35—Personal Money Management (3)
 Bus. 11—Cont. Bus. Econ. Issues (3)
 Bus. 58—Human Relations (3)
 Bus. 64—Bus. Law (3)
 Bus. 81—Security Investments (3)

SECRETARIAL CERTIFICATE PROGRAM REQUIREMENTS**Core Courses**

	Units
Bus. 10—Introduction to Business.....	3
Bus. 92b-c—Typing (through 92c).....	3-6
Bus. 90 a-b—Shorthand (through 90b) Gregg or 90S a/ b—Mach. Shorthand.....	5-12
Bus. 100—Office Procedures.....	4
Bus. 93—Machine Calculation.....	2
Business Elective.....	3
Bus. 50 or 51.....	3
Bus. 91—Bus. English.....	3
	26-36

Note: Certificate is awarded with or without the AA degree to students who complete the required courses in the certificate program.

Business Administration**Associate in Arts Degree in Business with an Emphasis in Business Administration**

(Recommended Program—18 units in Business required. This curriculum is for the Business student who does not wish to specialize.)

Freshman Year

	Units	
	F	S
Bus. 10—Intro. to Business.....	3	—
Bus. 12—Intro. to Data Processing.....	—	3
Bus. 50 or 51—Bus. Math.....	3	—
Health Education.....	2	—
Bus. 92—Typing.....	—	3
English.....	—	4
Bus. 66—Gen. Acc't. or Bus. Admin. Ia.....	3-4	—
Social Science Requirement.....	3	3
Bus. 64/ Bus. Ad. 18a.....	—	3
Physical Education.....	1	1
	15-16	17

Sophomore Year

	Units	
	F	S
Bus. 91—Bus. Engl.....	3	—
Bus. 11—Cont. Bus. Econ. Issues.....	3	—
Bus. 93—Machine Calculation.....	—	2
General Education Electives.....	3	3
Bus. Elective.....	3	3
Bus. 58—Human Relations.....	3	—

Bus. 56—Bus. Communications	—	3
Bus. 65—Small Business Management	—	3
Physical Education	1	1
Health Education	—	2
	<hr/>	<hr/>
	16	17

Suggested Electives

Bus. 35—Personal Money Management (3)
Bus. 110—Fundamentals of Salesmanship (2)
Bus. 116—Prin. of Retail Merchandising (2)
Bus. 47—Cooperative Education (1-4)
Bus. 36/ 37—Credit Management (3-3)
Bus. 38—Prin. of Bank Operations (3)
Bus. 18—Security Investment (3)
Guid. 1, 2, 3 or 4—Guidance Class (1-1-1-1)

Business Administration**Certificate Programs****Business Administration Certificate Requirements**

Core requirements	15	units
One group of Business options	15	units

REQUIRED CORE COURSES

(Common to any of the Business options)		Units
Bus. 50/ 51—Business Arithmetic		3
Bus. 10—Introduction to Business		3
Bus. 58—Human Relations		3
Business Elective		3
Bus. 47—Cooperative Education (Recommended)	1-4	
Bus. 91/ 11—Bus. Engl./ Contemporary Bus. Econ. Issues		3
	<hr/>	<hr/>
	15-19	

BUSINESS OPTIONS

(In addition to core courses)

Credit and Finance Management Option

Bus. 64/ Bus. Ad. 18a	3
Bus. 35—Personal Money Management or Bus. 38—Prin. of Bank Operations	3
Bus. 36—Consumer Credit Management	3
Bus. 37—Credit Management	3
Bus. 66/ Bus. Ad. 1a—Accounting	3-4
	<hr/>
	15-16

Merchandising Option

Bus. 65—Small Business Management	3
Bus. 110—Salesmanship	2
Bus. 116—Prin. of Retail Merchandising	2
Bus. 117—Modern Retail Operation	2
Bus. 120—Advertising	3
Bus. 124—Marketing	3
	<hr/>
	15

Home Furnishings—Merchandising Option

Art 3a—Form and Color	3
Home Ec. 40—Your Home and Environment	3
Home Ec. 41—Interiors	3
Bus. 65—Small Business Management	3
Bus. 116—Prin. of Retail Merchandising	2
Bus. 117—Modern Retail Operation	2
	<hr/>
	16

Note: Certificate is awarded with or without the AA degree to students who complete the required courses in the certificate program.

Business Administration—General Option

Any combination of course options as listed above 15

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

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

(Recommended Program—18 units in Business required.)

Freshman Year

	Units	
	F	S
Bus. 35—Pers. Money Mgmt. or Bus. 38—Bank Operation	—	3
Bus. 50 or 51—Bus. Arith.	3	—
Bus. 11—Cont. Bus. Econ. Issues or Econ. 1a—Prin. of Econ.	3	—
Bus. 10—Intro. to Bus.	3	—
Bus. 58—Human Relations	—	3
Bus. 66 or Bus. Ad. 1a—Accounting	—	3-4
Bus. 91—Bus. English	3	—
English	—	3
General Education	—	3
Health Education	2	—
Physical Education	1	1
	<hr/>	<hr/>
	15	16-17

Sophomore Year

	Units	
	F	S
Bus. 36—Consumer Credit Management	3	—
Bus. 37—Credit Management	—	3
Bus. 56—Bus. Communications	—	3
Bus. 64 or Bus. Ad. 18a—Bus. Law	—	3
Mgmt. 92—Tech. of Supervision	3	—
Elective	3	—
English	3	—
General Education	—	3

American Institutions	3	3
Physical Education	1	1
	16	16

Business Elective	3	3
Physical Education	1	1
	15	16

Suggested Business Electives

- Bus. 92 a/ r—Typing (3)
- Bus. 93—Machine Calculation (2)
- Bus. 47—Cooperative Education (1-4)
- Mgmt. 80—Personnel Mgmt. (3)
- Bus. 38—Prin. of Bank Operations (3)
- Mgmt. 52—Report Writing (3)
- Bus. 12—Intro. to Data Processing (3)
- Bus. 65—Small Business Mgmt. (3)
- Bus. 116—Prin. of Retail Merchandising (2)

Suggested Business Electives

- Bus. 11—Contemporary Business Economic Issues (3)
- Bus. 12—Introduction to Data Processing (3)
- Bus. 35—Personal Money Management (3)
- Bus. 36/ 37—Credit Management (6)
- Bus. 47—Cooperative Education (1-4)
- Bus. Ad. 1a—Accounting (4)
- Bus. 56—Bus. Communications (3)
- Bus. 64—Business Law (3)
- Bus. 91—Business English (3)
- Bus. 93—Machine Calculation (2)
- Bus. 92a—Beginning Typing (3)

Business (Legal Assistant)

(See Evening College Programs and Schedule)

Business (Merchandising-Management)

Associate in Arts Degree in Business with Specialization in Merchandising

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. (Recommended Program—18 units in Business required.)

Freshman Year

	Units	
	F	S
Bus. 50 or 51—Bus. Arithmetic	3	—
Bus. 10—Intro. to Bus	3	—
Mgmt. 92—Supervision	—	3
Bus. 120—Advertising	—	3
Bus. 58—Human Relations	—	3
Bus. 110—Fundamentals of Salesmanship	2	—
English	—	4
Health Education	2	—
Elective	—	3
Physical Education	1	1
Bus. 116—Prin. of Retail Merchandising	2	—
Bus. 91—Bus. English	3	—
	16	17

Sophomore Year

	Units	
	F	S
Bus. 124—Marketing	—	3
Bus. 66—Gen. Acc't.	3	—
Bus. 65—Small Business Mgmt	—	3
Social Science	3	3
General Education Elective	3	3
Bus. 117—Modern Retail Operation	2	—

Chemistry

Transfer Program

	Units
Math. 30, 31, 32—Calculus	15
Math. 33—Linear Algebra and Differential Equations	5
Physics 4a, b, c—General	12
Chem. 1a, b—General	10
Chem. 5—Quantitative Analysis	5
Chem. 12a—Organic	5
Foreign Language	0-12

Corrections/ Criminology

See "Administration of Justice."



Court Reporting

(See Machine Shorthand Reporting.)

Dental Hygiene

Transfer Program

High School Preparation: Chemistry, Mathematics through Trigonometry.

	Units
Chem. 1a—General	5
Chem. 8 & 9—Elem. Organic	5
Biology 1—Princip	4
Zoology 1—General	5
Psych. 1a, b or 33	6
Foreign Language	0-12

Dental Laboratory Radiography

Associate in Arts Degree with a Major in Dental Laboratory Radiography

Cañada College offers a program that combines clinical experience with study in the basic sciences to



prepare men and women for careers in Dental Laboratory Radiography. Dental Laboratory Radiographers may work as independent agents providing that filming is requested by a licensed dentist.

The program at Cañada College is offered in cooperation with several Dental Radiographic Laboratories in close proximity to the College. The program is approved by the American Society of Dental X-Ray Technologists.

Prerequisites: High school graduation or equivalent, completion of a course in algebra within two years and a written and oral examination. Biology is recommended. A grade of "C" or better is necessary for progression in the sequence.

First Year

	Units	
	F	S
Anatomy 62a and b	3	3
Physics 62	4	—
Psychology 1a or 10 and 5	3	3
English 1a	3	—
Health Education	—	2
Social Science 1 and 2	3	3
Nursing 62	—	3
Radiologic Technology 1a	—	2
Physical Education	1	1
	17	17

Summer Session (8 weeks)

	Units
Radio Technology 2	2
Radio Technology 2 lab	4
	6

Second Year

	Units	
	F	S
Radio Technology 3 and 4	2	2
Radio Technology 3 lab and 4 lab	4	4
Bus. 65—Small Business	—	3
Bus. 66—General Accounting	3	—
Photography	—	1
Speech-Communication 1a or 10	3	—
Humanity elective	3	—
	15	10

Pre-Dentistry

Transfer Program

High School Preparation: Chemistry, Mathematics through Trigonometry.

	Units
Chem. 1a, b—General	10
Chem. 5 (recommended)—Quantitative Analysis	4
Chem. 8 & 9 or 12a (recommended)-Organic	5

Physics 2a, b—General	8
Biology 1—Principles	4
Zoology 1—General	5
Psych. 1a, b or 33	6
Foreign Language	0-12

Drama

Associate in Arts Degree with a Major in Drama

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

Freshman Year	Units	
	F	S
Drama 10—Introduction to Theatre	3	—
Drama 13a—Stage Production	—	3
Drama 14a-14b—Acting, Practice and Theory	3	3
Drama L14a-L14b—Acting Lab	2	2
Drama 15—Play Production	½-2	½-2
English 1a	3	—
English 1b or Spch-Com. 1a	—	3
Biology 10	—	3
Physics 10	3	—
Physical Education	1	—
	<hr/>	<hr/>
	15½-17	14½-16

Sophomore Year	Units	
	F	S
Drama 1a-1b—Masterpieces of Drama	3	3
Drama 14c-14d—Advanced Acting	3	3
Drama L14c-L14d—Acting Lab	2	2
Drama 15—Play Production	½-2	½-2
Drama 16—Production Shop	—	½-2
Drama 17—Costume-Fashion Design and Prep. Make-up	—	½-2
Engl/ Drama 24—Modern Drama	3	—
State & Local Government	2	—
American Institutions	—	3
Ethnic Studies	—	3
Physical Education	1	—
	<hr/>	<hr/>
	14½-16	15½-20

Suggested Electives

	Units
Drama 13b, 13c, 13d—Stage Production	3-3-3
Drama 15—Play Production (Repeatable for credit) ..	½-2
Drama 16—Production Shop (Repeatable for credit) ..	½-2
Drama 17—Costume-Fashion Design and Prep. Make-up (Repeatable for credit)	½-2

Drama 20—Intro. to Direction (Repeatable for credit)	3
Drama 24—Modern Drama	3
Drama 25—Intro. to Shakespeare	3
Drama 49—Individual Projects	1-2

Other Electives

Art 1a-1b—History of Art	3-3
Art 2a-2b—Form and Composition	3-3
Art 4—Perspectives	3
Music 6—Music Appreciation and Survey	3
Phys. Ed. 42a—Elementary Folk Dance	1
Phys. Ed. 50a—Elementary Modern Dance	1
Speech Comm. 1a—Fundamentals	3
Speech-Comm. 30a—Oral Interp. of Literature	3

Electronics

Transfer Program

	Units
Electronics 10—Introduction	3
Engin. 10—Engineering and Environment	2
Engin. 38—Circuits & Devices	3
Math. 30, 31, 32—Calculus	15
Math. 25—Computers-Fortran	3
Physics 4a, b, c—General	12
Chem. 1a, b—General	10
Bus. 10—Introduction	3

Engineering

The Engineering programs detailed below have been designed to prepare a student to transfer to the Engineering Department of many four-year colleges and universities at the end of the sophomore year. It is very important that the student refer to the catalog of the transfer college of his choice and work through the Mathematical/Engineering Division Counselor.

The following core subjects were approved unanimously by representatives of all the California State Colleges and Universities and all branches of the University of California at the fall meeting of the Engineering Liaison (ELC) Committee in November, 1970.

	Units
Mathematics (beginning with Analytic Geometry and Calculus and completing a course in Ordinary Differential Equations)	16
Chemistry (for engineers and scientists)	8
Physics (for engineers and scientists)	12
Statics	3
Graphics and Descriptive Geometry	3
Computers (digital)	2
Orientation and Motivation	1
Properties of Materials	3
Electrical Circuits and Devices	3
Electives	11-15

The Engineering Liaison Committee (ELC) strongly recommends that any transfer student from a community college complete all his Mathematics, Physics and Chemistry **before** going on to the four-year institution. *Recommended High School Preparation: Mathematics (four years), Chemistry (one year), Physics (one year), Mechanical Drawing (one year).*

Engineering (Civil, Mechanical, Chemical, Electrical, Environmental, Materials, and Other Principal Branches) (Recommended Program)

	Units
Math. 30, 31, 32—Calculus.....	15
Math. 33—Linear Algebra and Differential Equations.....	5
Physics 4a, b, c—General.....	12
Chem. 1a, b—General.....	10
Engin. 10—Engineering and Environment.....	2
Engin. 20—Descriptive Geometry.....	2
Engin. 22—Graphics.....	2
Engin. 35—Vector Statics.....	3
Engin. 36—Vector Dynamics.....	3
Engin. 37—Strength of Materials.....	3
Engin. 38—Circuits & Devices.....	3
Math. 25—Computers-Fortran.....	3

Engineering (Technical Program)

Freshman Year Required	Units	
	F	S
Engin. 10 Engineering and Environment.....	2	—
Math. 23a, b Calculus.....	4	4
Chem. 30a, b Intro. Chem.....	4	4
Physics 2a, b.....	4	4
English 1a.....	3	—

Recommended	Units
Math. 18 Computers (basic).....	— 3
Physical Education.....	— 1
	<hr/> 17 16

Sophomore Year Required	Units	
	F	S
Engineering Elective.....	3	2-3
American Institutions.....	2-3	3
English or Speech-Com.....	3	—
Life Science or Humanities.....	—	3

Recommended	Units
Math. 25 Computer (Fortran).....	— 3
Physical Education.....	1 —
Electives.....	5-6 3-5
	<hr/> 15-16 15-16

For other Engineering programs available, see the math/engineering counselor.

Please note that other engineering courses are available to adapt the above programs to your needs. Example: Evening College; courses related to non-destructive testing and drafting.

Environmental Technology

(Science Oriented)

Freshman Year	Units	
	F	S
Environment 1 or 3.....	3	—
Environment 2 or 4.....	—	3
English 1a or 50a.....	3-4	—
English 1b or 50b or Speech-Comm. 1a.....	—	3-4
Chemistry 30a or 1a.....	4-5	—
Chemistry 30b.....	—	4
Physical Education.....	1	1
Math 11 or 11a.....	5-3	—
(or more advanced if qualified)		
Biology 1.....	—	4
	<hr/> 14-18	<hr/> 15-16

Sophomore Year	Units	
	F	S
Physics 2a.....	4	—
Bacteriology 1.....	—	5
Political Science 21.....	3	—
Political Science 24.....	—	3
Short Courses (see below).....	3	3
General Education Requirement (Suggest Bus. 12 or Bus. Ad. 1a).....	3	—
(Suggest Economics 1a).....	—	3
Electives.....	—	3
Humanities Gen. Ed.....	3	—
	<hr/> 16	<hr/> 17

Cooperative Education Work Experience
(Summers) Maximum 4-8 units

Courses in the following subjects are being developed. These are short courses of one unit each from which a student would select based on area of specialization or interest. These are presently numbered 48.

Hydraulics and Pumps I & II
Instrumentation and Controls I & II
Electrical Motors
Fresh Water
Sewage Treatment
Chemistry of Water Quality Control
Biology of Water Quality Control
Environmental and Health Laws
Use of Handbook & Blueprint Reading
Biology of Solid Wastes
Chemistry of Solid Wastes
Chemistry of Air Pollution
Vector Control
Housing Planning

Fisheries

Transfer Program

High School Preparation: Chemistry, Mathematics through Trigonometry.

	Units
Biology 1—Principles	4
Botany 1—General	5
Zoology 1—General	5
Chem. 1a, b—General	10
Math. 23a or 30—Calculus	5
Physics 2a, b—General	8
Cons. 1—Essentials	3
Stat. 2—Introductory	3

Food Technology and Management

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

First Semester (fall)

	Units
F.T. 50a-51a—Quantity Food Preparation	6
or	
F.T. 50b-51b	5
F.T. 56a—Dining Room Service	1
F.T. 65—Menu Planning	2
F.T. 68—Sanitation & Safety for Hospitality Industry	1
Bus. 50 or 51—Bus. Arith or Bus. Math	2-3
General Education (A.A. requirements)	4
Physical Education * (optional)	1

16-18



Second Semester (spring)

	Units
F.T. 50b-51b—Quantity Food Preparation	5
or	
F.T. 50a-51a	6
F.T. 60—Food Purchasing	2
F.T. 90—Intro. to Food Service/ Hospitality Industry	2
General Education (A.A. requirements)	3
Physical Education * (optional)	1
F.T. 47—Cooperative Education	1-4

14-18

Third Semester

	Units
F.T. 52—Food Preparation Supervision	3
F.T. 54a—Advanced Food Preparation	4
F.T. 55a—Modern Baking	2
F.T. 70—Foods Management Problems	2
General Education (A.A. requirements)	6
Physical Education * (optional)	1
F.T. 47—Cooperative Education	1-4

19-22

Fourth Semester

	Units
F.T. 47—Cooperative Education	1-4
F.T. 54b—Advanced Food Preparation	4
F.T. 55b—Modern Baking	2
General Education (A.A. requirements)	6
Physical Education * (optional)	1

14-17

(* Two semesters Physical Education required)

Recommended Electives

	Units
F.T. 47—Cooperative Education	1-4
F.T. 55c—Advanced Baking and Decorating	2
F.T. 56b—Dining Room Service-Advanced	4
F.T. 67—Kitchen Aide Training	no credit
Bus. 10—Introduction to Business	3
Bus. 12—Introduction to Data Processing	3
Bus. 66—General Accounting	3
Bus. 91—Business English	3
Bus. 92a—Beginning Typing	3
Bus. 110—Fundamentals of Salesmanship	2
Bus. Ad. 1a—Principles of Accounting	4

Certificate Program

	Units
F.T. 47—Cooperative Education	4
F.T. 50a-51a—Quantity Food Preparation	6
F.T. 50b-51b—Quantity Food Preparation	5
F.T. 52—Food Preparation Supervision	3
F.T. 54a—Advanced Food Preparation	4
F.T. 56a—Dining Room Service	1
F.T. 60b—Quantity Food Purchasing	2
F.T. 65—Menu Planning	2
F.T. 68—Sanitation & Safety for Hospitality Industry	1

28

Students are encouraged to complete the certificate program and also the requirements for the Associate in Arts degree.

Forestry**Transfer Program**

High School Preparation: Chemistry, Mathematics through Trigonometry.

	Units
Biology 1—Principles	4
Botany 1—General	5
Chem. 1a—General	5
Math. 23a or 30—Calculus	5
Physics 2a	4

Geology**Transfer Program**

	Units
Math. 30, 31—Calculus	10
Stat. 1—Research	4
Physics 2a, b—General	8
Geology 1a—General	4
Geology 1b—Historical	4
or	
Geology 15—Environmental	3
Chem. 1a, b—General	10
Engin. 1a—Surveying	3

Math, 30, 31, 32 and Physics 4a, b, c sequence in place of Physics 2a, b are recommended for those contemplating graduate work or those who plan to major in geophysics.

Home Economics**Associate of Arts Degree
with a Major in Home Economics****Freshman Year**

	Units	
	F	S
English and or Speech-Communication	3	3
H.Ec. 21a—Fashion Sewing	3	—
H.Ec. 21b—Creative Fashions	—	3
H.Ec. 4—Creative Food Preparation	3	—
H.Ec. 6—Consumer Education	3	—
H.Ec. 36—Life Cycles	—	—
or		
H.Ec. 37—Sociology of Women	—	3
Psych. 1a—General or		
Psych. 10—Psych. in Prac.,		
or		
Psych. 33—Psych of Adjust	—	3
Health Ed	2	—
H. Ec. 7—Home Management	—	2
Physical Education	1	1
Electives	1	1
	16	16

Sophomore Year

	Units	
	F	S
Amer. Institutions	3	2
Psych. 4—Marriage	3	—
Sociology 2—Soc. Prob. or		
Sociology 3—Minorities		
or		
H.Ec. 36—Life Cycles		
or		
Anthropology 2 or H. Ec. 37	—	3
H. Ec. 21b—Creative Fashions	3	—
H. Ec. 9—Nutrition	3	—
H. Ec. 35—Child in the Home	3	—
H. Ec. 22—Textiles	—	3
H. Ec. 40—Your Home and your Environment	—	3
Physical Education	1	1
Electives	—	3
	16	15

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

Suggested Program for Transfer (General)

	Units
H. Ec. 4—Creative Food Preparation	3
H. Ec. 5—Careers	1
H. Ec. 6—Consumer in the Marketplace	3
H. Ec. 9—Nutrition	3
or	
H. Ec. 15—Essentials of Nutrition	3
H. Ec. 21a—Fashion Sewing	3
H. Ec. 21b—Creative Fashions, Construction and Designing	3
H. Ec. 22—Textiles	3
H. Ec. 35—Child in the Home	3
H. Ec. 39—Communication in H. Ec	3
H. Ec. 40—Your Home and Your Environment	3

**Home Economics with Major
in Clothing and Textiles**

H. Ec. 22—Textiles	1-3
H. Ec. 24—Fashion Analysis & Apparel Selection	2
H. Ec. 60—Textile Arts	2

**Home Economics with Major
in Fashion Merchandising**

H. Ec. 30—Fashion Merchandising	2
---------------------------------------	---

**Home Economics with Major
in Interior Design**

(See Evening College programs and schedule)

**Home Economics with Minor
in Social Studies**

H. Ec. 36—Life Cycle: Families in Crisis	3
H. Ec. 37—Sociology of Women	3
H. Ec. 35—Child in Home	3

Individualized Major

Students interested in pursuing a major area of their own choice (at present not listed in the catalog) should contact their particular counselor. Courses can be drawn from several fields of study and references can be made to instructors in specialized areas so that individual programs and goals can be established.

The purpose is to facilitate and encourage students with individual goals and interests to pursue them with the aid of several qualified faculty members, and to allow examination of several fields of study combined in a concise, meaningful format.

Upon completion of the program a certificate is awarded, detailing for potential employers and transfer institutions the work accomplished.

Industrial Arts

Transfer Program

	Units
Math. 29—Mathematics Analysis	5
Chem. 30a—Introduction to Inorganic	4
Physics 2a—General	4
Engin. 20—Descriptive Geometry	2

The following may be required depending on transfer school:

Physics 2b—General	4
Chem. 30b—Introduction to Organic	4

Interior Design

Associate in Arts Degree with a Major in Home Furnishings Merchandising

First Semester	Units
Int. Des. 1—Your Home and Environment	3
Art 5a—Design	3
Art 3—Color	3
Bus. 110—Salesmanship	2
English 1a or 50a—Reading and composition or Reading and Writing	3-4
	14-15

Second Semester	Units
Int. Des. 2—Space Planning	3
Int. Des. 6—History of Interiors	3
Int. Des. 5a—Display Design	3
Bus. 50—Business Arithmetic	3
National Government	3
Physical Education	1
	16

Third Semester

	Units
Int. Des. 4—Practicum	3
Art 5b—Design	3
* Int. Des. 5b—Advanced Display	3
Bus. 116 or 117—Retail Merchandising or Modern Retail Operation	2
English or Speech-Communication	3
State and Local Government	2
	16

* Being developed

Fourth Semester

	Units
* * Int. Des. 49—Independent Study (Portfolio Project)	3
Art 1b or 1c—History of Art	3
Home Econ. 22—Textiles	3
Bus. 124—Marketing	3
Natural Science	3
Ethnic Studies	3
Physical Education	1
	19

* * Portfolio projects by arrangement with instructor

Suggested Electives

Art 2a—Form and Composition
Art 12—Lettering
Home Economics 6—Consumer in Market Place
Business 10—Introduction to Business
Business 36—Consumer Credit Management
Business 56—Business Communications

Certificate Program in Home Furnishings Merchandising

First Year	Units
Int. Des. 1—Your Home and Environment	3
Art 5a—Design	3
Art 3—Color	3
Int. Des. 5a—Display Design	3
Bus. 110—Salesmanship	2
Int. Des. 2—Space Planning	3
Int. Des. 6—History of Interiors	3
Bus. 50—Business Arithmetic	3
	23

Second Year

	Units
Int. Des. 4—Practicum	3
Art 5b—Design	3
* Int. Des. 5b—Advanced Display	3
Bus. 116 or 117—Retail Merchandising or Modern Retail Operation	2
* * Int. Des. 49—Independent Study (Portfolio Project)	3
Home Econ. 22—Textiles	3

Bus. 124—Marketing	3
Art 1b or 1c—History of Art	3
Home Econ. 6—Consumer in Market Place	3
	26

* Being developed

* * Portfolio projects by arrangement with instructor.

Suggested Electives

Art 2a—Form and Composition
Art 12—Lettering
Art 73—Photography
Bus. 10—Introduction to Business
Bus. 36—Consumer Credit Management
Bus. 56—Business Communications
Int. Des. 3—Colors in Interiors

**Associate in Arts Degree
with a Major in Interior Design
Assisting or Display Design**

First Semester

	Units
Int. Des. 1—Your Home and Environment	3
Int. Des. 3 or Art 3—Color in Interiors or Color	3
Art 5a—Design	3
Draft. 55—Basic Architectural Drafting	2
English 1a or 50a—Reading and Composition or Reading and Writing	3-4
Physical Education	1
	15-16

Second Semester

	Units
Int. Des. 2—Space Planning	3
Int. Des. 5a—Display Design	3
Art 5b—Design	3
Art 12 or 4—Lettering or Perspectives	2
Speech-Comm. 1a—Fund. of Speech-Communication	3
American Institutions	3
	17

Third Semester

	Units
Int. Des. 4 or * 5b—Practicum or * Advanced Display	3
Int. Des. 6—History of Interiors	3
Bus. 116 or 117—Retail Merchandising or Modern Retail Operation	2
Home Econ. 6 or Int. Des. 47—Consumer in Market Place or Coop Educ.	3
American Institutions	2
Ethnic Studies	2
	16

* Being developed

Fourth Semester

	Units
* Int. Des. 49—Independent Study (Portfolio Project)	1-3

Home Econ. 22—Textiles	3
Art 1c—History of Art	3
Bus. 110 or 117—Salesmanship or Modern Retail Operation	2
Natural Science	3
Physical Education	1
Communication (Written, Oral or Quantitative)	3
	16-19

* * Portfolio projects by arrangement with instructor; limited enrollment (11 max.)

Suggested Electives

Art 2a—Form and Composition
Art 73—Photography
Bus. 10—Introduction to Business
Bus. 56—Business Communications
Bus. 124—Marketing

**Certificate Program in Interior Design
Assisting or Display Design**

First Year

	Units
Int. Des. 1—Your Home and Environment	3
Int. Des. 2—Space Planning	3
Art 5a—Design	3
Draft. 55—Basic Architectural Drafting	2
Int. Des. 3 or Art 3—Color in Interiors or Color	3
Int. Des. 5a—Display Design	3
Art 12 or 4—Lettering or Perspectives	2
Bus. 110 or 117—Salesmanship or Modern Retail Operation	2
	21

Second Year

	Units
Int. Des. 4 or * 5b—Practicum or * Advanced Display	3
Art 2a—Form and Composition	3
Art 1c—History of Art	3
Int. Des. 6—History of Interiors	3
* * Int. Des. 49—Independent Study (Portfolio Project)	1-3
Home Econ. 22—Textiles	3
Home Econ. 6—Consumer in Market Place	3
Bus. 116 or 117—Retail Merchandising or Modern Retail Operation	2
	21-23

* Being developed

* * Portfolio projects by arrangement with instructor; limited enrollment (11 max.)

Suggested Electives

Art 5b—Design
Art 73—Photography
Bus. 10—Introduction to Business
Bus. 56—Business Communications
Bus. 124—Marketing

Pre-Law

Transfer Program

There is no prescribed pre-legal curriculum. Students are generally admitted to law schools after they have received their B.A. degrees and passed the Law School Admission Test. Most pre-legal students major in economics, business administration, political science or liberal arts. Courses in English, speech, psychology, philosophy, accounting, mathematics, economics, history and political science form a basic recommended core.

Machine Shorthand Reporting (Court Reporting) Certificate Program

The certificate program in machine shorthand reporting is intended to provide students with the skills for working in any of the satellite fields around court reporting; namely; notereading, transcribing, selected dictation areas or various stenography positions using the machine, for those who do not wish to be directly employed in the courts or other certification positions. To qualify for the State Court Reporting Examination, more comprehensive training is necessary.

	Units
Business Machine Shorthand Theory I (160a).....	5
Business Machine Shorthand II, III, IV, V, VI (160b-f).....	18
Business English 91 (or equivalent).....	3
Business Communications 56 (or equivalent).....	3
Vocabulary and Spelling 163.....	2
Anatomy 51.....	4
Medical Terminology 166.....	2
Legal Terminology 164.....	2
Library Resources and References/ Legal Procedures 167.....	1
Business Law 18a or 64.....	3
Typewriting 92b (or 55 w.p.m.).....	3
Typewriting 162a (Machine Transcription).....	2
Courtroom Orientation and Survey 168.....	2
General Education elective.....	3

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Management

AA Degree and Certificate Program

Management programs are offered on weekday evenings and Saturday mornings during both fall and spring semesters. Classes meet once a week for three hours and carry three units of credit.

All programs lead to a Certificate of Completion, which verifies that you have acquired the specialized training, knowledge and skills needed for management-level advancement. A certificate can be attained by completing 24 units of credit with a grade average of "C."

The Management Programs include both required courses and elective courses which may be selected from a variety of available electives, according to your needs and interests. After earning a certificate in one program, you may earn a certificate in another program by completing the additional required courses and necessary units of elective work in that second program. For each additional certificate, a minimum of 12 new units is required, including the required core courses from the new certificate field.

Required Core Courses for all

Management Certificates	Units
Mgt. 65—Business & Industrial Economics.....	3
Mgt. 92—Techniques of Supervision.....	3
Mgt. 96—Organization for Management.....	3

Required Courses in Specialized Certificate Area Business Management

Required core courses (9 units), 12 units of Management electives and:

	Units
Mgt.99—Introduction to Business Management.....	3

Industrial Management

Required core courses (9 units), 6 units of Management electives and:

	Units
Mgt. 77—Industrial Engineering Methods.....	3

and two of the following:

Q.C. 61—Introduction to Quality Control.....	3
Stat. 2—Introductory Statistics.....	3
Mgt. 61—Industrial Relations.....	3
Mgt. 71—Materials Management.....	3
Mgt. 72—Motion Study, etc.....	3
Engin. 50—Introduction to Materials Evaluation.....	3

Public Administration Management

Required core courses (9 units), 9 units of Management electives and:

	Units
Mgt. 110—Public Services.....	3
Mgt. 111—Public Administration Management.....	3

Small Business Management

Required core courses (9 units), 6 units of Management electives and:

	Units
Mgt. 99—Introduction to Business Management.....	3
Bus. 65—Small Business Management.....	3
Mgt. 50—Financial Management.....	3

Supermarket Management

Required core courses (9 units), 9 units of Management electives and:

	Units
Mgt. 105—Supermarket Operations.....	3
Mgt. 106—Supermarket Merchandising.....	3

Occupational Safety & Health

Required core courses (9 units) and:

	Units
Mgt. 130—Introduction to Occupational Safety and Health	3
Mgt. 131—Safety & Health Standards, Codes & Regulations	3
Mgt. 132—Physical Hazards Control I	3
Mgt. 133—Physical Hazards Control II	3
Mgt. 134—Safety Program Management	3

Electives

Mgt. 47—Cooperative Education (1-4)	
Mgt. 50—Financial Management (3)	
Mgt. 52—Report Writing (3)	
Mgt. 54—Management Communications (3)	
Mgt. 55—Dynamics of Group Communications (3)	
Mgt. 61—Industrial Relations (3)	
Mgt. 63—Management Planning, Budgeting & Control (3)	
Mgt. 71—Materials Management (3)	
Mgt. 72—Motion Study & Method Analysis (3)	
Mgt. 77—Industrial Engineering Methods (3)	
Mgt. 80—Management of Human Resources (3)	
Mgt. 81—Management Styles & Employee Involvement (3)	
Mgt. 82—Employee, Information & Organizational Success (3)	
Mgt. 85—Organizational Behavior (3)	
Mgt. 90—Office Management & Procedures (3)	
Mgt. 91—Sales Management (3)	
Mgt. 93—Leadership in Organization (3)	
Mgt. 94—Creative Problem Solving (3)	
Mgt. 99—Introduction to Business Management (3)	
Mgt. 105—Supermarket Operations (3)	
Mgt. 106—Supermarket Merchandising (3)	
Mgt. 107—Supermarket Management: Special Problems (3)	
Mgt. 110—Public Services (3)	
Mgt. 111—Public Administration Management (3)	
Mgt. 130—Introduction to Occupational Safety & Health (3)	
Mgt. 131—Safety & Health Standards, Codes & Regulations (3)	
Mgt. 132—Physical Hazards Control I (3)	
Mgt. 133—Physical Hazards Control II (3)	
Mgt. 134—Safety Program Management (3)	
Bus. Ad. 18a—Commercial Law (3)	
Bus. 36—Credit Management (3)	
Bus. 37—Credit Management (3)	
Bus. 38—Principles of Bank Operations (3)	
Bus. 58—Human Relations In Business (3)	
Bus. 65—Small Business Management (3)	
Bus. 120—Advertising (3)	
Bus. 124—Marketing (3)	
D.P. 65—Data Processing for Managers (3)	
Engin. 50—Introduction to Materials Evaluation (Nondestructive Testing) (3)	
Q.C. 61—Introduction to Quality Control (3)	
Stat. 2—Introductory Statistics (3)	

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.

	Units
Math. 30, 31, 32—Calculus	15
Math. 33—Linear Algebra/ Differential Equations	5
Math. 25—Computers-Fortran	3
* Physics 2a, b—General	4
* Foreign Language	0-12

* The student should consult the catalog of the intended transfer institution concerning the necessity or appropriateness of these courses.

Medical Sciences**Transfer Program**

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

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

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

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

Pre-Medicine**Transfer Program**

High School Preparation: Chemistry, Mathematics - Four years of college preparatory Math, Physics.

	Units
Chem. 1a, 1b—General	10
Chem. 5—Quantitative Analysis	5
Chem. 8, 9—Elementary Organic or	
Chem. 12a—Organic	5
Biology 1—Principles	4
Zoology 1—General	5
Physics 2a, 2b—General	8
* Foreign Language	0-8
* Math, 23a, b	10

* Students are advised that college math through calculus is mandatory for those seeking a career in medical research and desirable for all medical students. Since medical school requirements vary widely, the student should consult the appropriate medical school bulletins.

Mental Health Assistant

Associate in Arts Degree with a Major in Mental Health

Cañada College in cooperation with local mental health agencies has designed and implemented a two-year degree program to develop a mental health generalist. The program combines classroom knowledge with actual experience working on a paid or volunteer basis in various mental health agencies to develop an individual to work with disturbed and disadvantaged individuals. Actual experience in the mental health agencies early in the program provides a basis for the student to evaluate his vocational pursuits.

A suggested program is listed below; however, each student interested in the Mental Health Assistant training program should arrange for an interview with the Program Director, Dr. Stegner (364-1212, Ext. 371), to design his program according to his needs and eventual goals. Requirements for the A.A. degree should be ascertained by consulting a counselor at Cañada College.

Core Curriculum	Units
Psych. 1a—General	3
Psych. 33—Psychology of Adjustment	3
Psych. 42—Introduction to Treatment Modalities	3
Psych. 44—Drugs: Effects on Individuals and Society	3
Psych. 45—Principles of Group Interaction	3
Psych. 46—Introduction to Counseling	3
Soc. Sci. 10—Interaction and Communication for the Paraprofessional	3
Soc. Sci. 40—Introduction to Social Service	3
	<hr/> 24
Cooperative Education (MHHS 47)	8
	<hr/> 32

Recommended Specialty Electives

Psych. 1b—Experimental Psychology
Psych. 4—Marriage
Psych. 5—Child Development
Psych. 7—Psychological Experience of
La Raza in the U.S.
Psych. 43—Psychological Assessment
Soc. 2—Social Problems
Soc. Sci. 30—Contemporary Cultures
Home Econ. 9—Nutrition
Stat. 1—Research Methods & Statistical Analysis
Spanish Courses
Typing Courses
Ethnic Studies Courses

Mexican-American Studies

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

Military Science

(Reserve Officers Training Corps)

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

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

Students may obtain enrollment forms from their counselor or the Departments of Military Science, California State University, San Jose, or Santa Clara University.

Music

Associate in Arts Degree with a Major in 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.

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

Freshman Year

	Units	
	F	S
Music 1—Musicianship	2	—
Music 2a—Advanced Musicianship	—	2
Music 4a-4b—Harmony	3	3
Music 6—Appreciation and Survey	3	—
Applied Music	1	1
11—Piano*		
24—Brasses		
25—Woodwinds		
26—Strings		
36—Voice		
Performance Groups	2	2
Music 22—Orchestra		
Music 23—Band		
Music 33—A Cappella Choir		
Music 34—College Chorale		
Music 41—Recitals	½	½
English 1a	3	—
English 1b or Speech-Com. 1a	—	3
American Institutions	—	3
Physical Education	—	1
	14½	15½

Sophomore Year

	Units	
	F	S
Music 2b—Advanced Musicianship	2	—
Music 5a-5b—Advanced Harmony	3	3
Applied Music	1	1
11—Piano*		
24—Brasses		
25—Woodwinds		
26—Strings		
36—Voice		
Performance Groups	2	2
Music 22—Orchestra		
Music 23—Band		
Music 33—A Cappella Choir		
Music 34—College Chorale		
Music 41—Recitals	½	½
Ethnic Studies	3	—
Art 10	—	3
Physics 9—Sound and Music (lab)	3	—
Biology 10	—	3
State and Local Government	—	2
Physical Education	1	—
	15½	14½

Suggested Electives

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

* Music 11 is strongly recommended for all music majors for 4 semesters, in addition to their applied music.

Natural Resources**Transfer Program**

	Units
Biology 1—Principles	4
Botany 1—General	5
Zoology 1—General	5
Chem. 1a, 1b—General	10
Math. 19 or 20—Intermediate Algebra or (Math 23a or 30 recommended)	5
Geol. 1a—General	4
Cons. 1—Essentials	3
Stat. 2—Introductory	4
Art 2a—Form and Comp	3

Nursery School

The Nursery School program at Cañada College is designed to prepare qualified nursery school assistants who, upon completion of the curriculum, are capable of performing the duties of a teaching assistant in a variety of different preschool programs, such as children centers, "Head Start," public and private nursery schools, cooperatives, church-affiliated schools and nursery schools for handicapped children. The program is also



appropriate for both elementary school teaching preparation and as practical experience for wives and mothers who desire more training to benefit their own families.

CERTIFICATE PROGRAM

Core Curriculum

	Units
Psych. 10 or 1a	3
Psych. 12 or Social Science 35	3
Psych. 11a—Nursery School Principles & Practices	3
Psych. 11b—Early Childhood Education Curriculum	3
Psych. 5—Child Development	3
Music/ Art 44—Fine Arts for Preschool Children	3
Cooperative Education	1-4
	19-22

A.A. DEGREE AND TRANSFER PROGRAM

All courses listed in the certificate program core curriculum Plus the following	19-22
American Institutions (choice of five subjects)	3
Calif. State & Local Govt. (choice of five subjects)	2-3
English 50a or 1a (by eligibility)	3-4
Humanities (Soc. Sci. 33 or 34 recommended)	3
Science or Math (see requirements in catalog of school of possible transfer)	3-7
Speech-Comm 10 or Speech- Comm. 1a	3
Physical Education (see catalog for exemp- tions)	2
First Aid (if not taken in high school or do not have First Aid Certificate)	(1)
Electives	10-19
	60
Minimum	60

For transfer to state colleges with an A.A. degree, students are advised to see the "science requirements" in catalog of their chosen school.

Recommended Electives

Biology/ Home Econ. 9	Sociology 1
Children's Literature	Sociology 3
Anthropology 2	Nature Study course

The Nursery School Assistant program at Cañada College is being revised. A new brochure will be published later in the year.

Nursing

Transfer Program

High School Preparation: Chemistry, Intermediate Algebra.

	Units
* Chem. 30a, b—Intro	8
Anatomy 1—Intro	4
Physiology 1—Intro	5
* Bacteriology 1—General	5
Biology 9—Nutrition	3
Sociology 1—Introduction or Anthro. 2—Cultural	3
Psych. 1a, 5, 33	9

* Consult appropriate catalog for specific requirements. University of California requires Chem. 1a, 1b and does not require Bacteriology.

Nutrition

See "Home Economics."

Oceanography

Transfer Program

High School Preparation: Chemistry, Physics, four years of college prep math.

	Units
Math. 30, 31, 32—Calculus	15
Chem. 1a, 1b—General	10
Physics 4a, b, c—General	12
Biology 1—Principles	4
Geol. 1a—General	4
Zool. 1—General	5
Bot. 1—General	5
Stat. 2—Introductory	4

Occupational Therapy

See "Medical Sciences."

Optometry

Transfer Program

High School Preparation: Chemistry, Physics, Foreign Language, four years of college preparatory math.

	Units
Math 23a, b—Calculus	10
Chem. 1a & 10—General	10
Chem. 8 & 9—Elementary Organic	5
Physics 2a, b—General	8
Biology 1—Principles	4
Zoology 1—General	5
Stat. 1—Research	4
Psych. 1a—General	3
Foreign Language	0-12

Paleontology/Parasitology

See "Medical Sciences."

Pharmacy

Transfer Program

High School Preparation: Physics, Chemistry, four years of college preparatory math.

	Units
Math 23a, b—Calculus	10
Chem. 1a, b—General	10
Chem. 5—Quantitative Analysis	4
Physics 2a, b—General	8
Biology 1—Principles	4
Zoology 1—General	5
Foreign Language.....	0-12

Physical Education

Transfer Program

	Units
1. Complete requirements for general education	40
2. Complete requirements for the major	19-23
Biology 1 (4)	
Anatomy 1 (4)	
Physiology 1 (5)	
PE 20 (2)	
3. Other requirements: Students should refer to the catalog of the transferring institution for specific requirements for the major. This may include: English 1b, Speech-Comm. 1a, Statistics 1, Sociology 1, Chemistry 1a, Anthropology 2, Recreation 40, Psychology 1a and others.	

Physical Therapy

See "Medical Sciences."

Physics

Transfer Program

High School Preparation: Physics, Chemistry, four years of college preparatory math.

	Units
Math. 30, 31, 32—Calculus	15
Math. 33—Linear Algebra and Differential Equations	5
Math. 25—Computer/ Fortran	3
Chem. 1a, b—General	10
Physics 4a, b, c—General	12

Probation

See "Administration of Justice."

Professional Office Careers

The Professional Office Careers program is an open entry/ open exit program, geared to raising the skills level of students in various areas to a point where the students can be reasonably assured of employment. Individualized instruction and a flexible schedule will assure that a student who masters a skill or concept quickly is able to proceed on to the next area at her own pace. Subject matter areas: Business English and Correspondence, Basic Mathematics, Calculating and Adding Machines and Secretarial Bookkeeping, Advanced Typing, Office Procedures, Duplicating and Transcription, and (optionally) Shorthand Transcription.

Psychology

See "Social Service" and "Mental Health Assistant."

Radiologic Technology

(X-Ray Technology)

Associate in Arts Degree with a Major in Radiological Technology

Completion of the program enables the student to write the examination given by the American Registry of Radiological Technologists and become verified as a registered technologist. Basic science and General



Education courses are given on the Cañada campus, with the clinical courses taught at one or more of the affiliating hospitals. Job opportunities exist in physicians' offices, hospitals, and clinics.

Prerequisites: High school graduation or equivalent, completion of a course in algebra within two years and a written and oral examination. Biology is recommended. A grade of "C" or better is necessary for progression in the sequence.

In addition to the College admission application, all students enrolling in the Radiologic Technology program must complete a separate application available from the Life Science Division office. Applications for new or continuing students are available each January for the following fall semester.

Freshman Year

	Units	
	F	S
Anatomy 62a-b X-Ray	3	3
Physics 62 X-Ray	4	—
Psychology 1a, 5	3	3
Social Science 1, 2	3	3
English 1a	3	—
Health Education	—	2
Nursing 62 X-Ray	—	3
Radiological Tech. 1 Introduction	—	2
Physical Education	1	—
	17	16

Sophomore Year

	Units	
	F	S
Radiological Tech. 3, 4 Inter. & Adv.	6	6
Speech-Comm. 1a	3	—
Humanity Elective	—	3
Physical Education	1	—
	10	9

Summer Session (9 weeks)

Radiological Tech. 2 Basic	6
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Second Summer Session (12 weeks)

Radiological Tech. 5a Internship	6
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Fall Semester—Third Year (24 weeks)

Radiological Tech. 5b Internship	6
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Range Management

Transfer Program

	Units
Biology 1—Principles	4
Botany 1—General	5
Zoology 1—General	5
Chem. 1a, b—General	10
Physics 2a, b—General	8
Math. 19 or 20—Intermediate Algebra or (Math. 23a or 30)	5
Geol. 1a—General	4
Cons. 1—Essential	3
Stat. 2—Introductory	4

Recreation Education

Transfer Program

	Units
1. Complete requirements for general education	40
2. Complete requirements for the major	15-18
Recreation 40 (2)	
Recreation 41 (3)	
Recreation 42 (2)	
Psychology 1a, 1b (6) or Sociology 1, 2 (6)	
Anthropology 2 (3)	
3. Other requirements: Students should refer to the catalog of the transferring institution for specific requirements for the major. This may include: PE 20, Music 6, Art 10, Environment 2 and 3, and others.	

Religions Studies

An interdisciplinary Religions Studies major is currently being offered. Courses now existing under this major are:

- History 13—The Bible as History (3)
 - History 14—Religion in America (3)
 - Philosophy 6, Option "A"—Introduction to Philosophy with special emphasis on religion (3)
 - Philosophy 23—Introduction to Ethnics (3)
 - Philosophy 24—Introduction to Religion: Religions of the World (3)
 - Philosophy 25—Western Religious Philosophy (3)
 - Philosophy 35—Asian Philosophy (3)
 - Sociology 15—Religion and Society: Toward a Sociology of Religion (3)
- A fine Arts course, Religion in the Arts, is also under consideration.

Research and Development Assistant

The program in Research and Development is designed to train personnel who can assist in research investigation, development, evaluation and communication of results, applying innovative information gathering techniques to the changing community needs.

Skilled R & D technicians can apply their knowledge of data analysis, summary, evaluation and communication to provide day-by-day or week-by-week decision-making information for the purpose of improving operations of business, industry and public agencies. R & D courses have general educational value to students in most major fields.

The program in Research and Development Assistant was developed with the assistance of the Far West Consortium, a group of public and private research and development agencies in the Bay Area which has cooperated to help produce the program at Cañada College.

There are no prerequisites for any of the courses in the Research and Development Assistant program. For evening classes, registration takes place at the first meeting of the class. For day courses, students follow regular college admission procedures. There are no admission examinations. For further information about the A.A. degree and certificate programs contact Cañada College Registration Office and obtain the free brochure on the Research and Development Assistant program.

Social Service

Associate in Arts Degree with Major in Social Service Community Worker

Cañada College, with the cooperation of numerous local, county, state, federal and private social service organizations, offers a two-year training program that will: (1) assist students in exploring the many social services, the entry level requirements and the opportunities for placement; (2) assist students in deciding whether or not they have the aptitude, interest and personality appropriate for one of these social services; (3) provide classroom and field education designed to prepare students for paraprofessional positions, meet the requirements of the A.A. degree and at the same time complete lower-division requirements for those who may go on to four-year institutions.

Freshman Year

	Units	
	F	S
Soc. Sci. 10—Interaction & Communication.....	3	—
Soc. Sci. 36—Life Cycles	3	—
Soc. Sci. 40—Introduction to Social Service	3	—
Soc. Sci. 41—Community Worker	—	2
Soc. Sci. 47—Cooperative Education	—	1
Bus. 35—Personal Money Management	—	3
English by eligibility	3	—
Spch-Com. 1a is recommended	—	3
Electives (See recommended lists below).....	2	3
P.E.....	1	1
Sociology 1 is recommended	—	3
	15	16

Sophomore Year

	Units	
	F	S
Psych. 1a—General Psychology	3	—
Soc. Sci. 38—Community Relations	3	—
Soc. 2—Social Problems	3	—
Ethnic Studies (student choice)	—	3
American Institutions (Strongly recommended Soc. Sci. 1 & 2)	3	3
Life or Physical Science	3	—
Psychology (student choice)	—	3
Electives (See recommended lists below).....	—	6
	15	15

Required Core Curriculum

	Units
Soc. Sci. 10—Interaction & Communication	3
Soc. Sci. 36—Life Cycles	3
Soc. 38—Community Relations	3
Soc. Sci. 40—Introduction to Social Service	3
Soc. Sci. 41—Community Worker	2
Soc. Sci. 47—Cooperative Education	1-4
Bus. 35—Personal Money Management	3
Ethnic Studies course	3
Psych. 1a—General Psychology	3
Soc. 2—Social Problems	3

Strongly Recommended Electives

Psych 33—Psychology of Adjustment
 Psych. 45—Group Interaction
 Psych. 46—Introduction to Counseling
 Guid. 3—Occupational Planning
 Guid. 4—Special Interest Discussion Groups
 Ethnic Studies, such as Social Science 30, 33, 34, etc.

Other Recommended Electives

Psych. 4—Marriage
 Psych. 6—Social
 Psych. 44—Drugs: Effects on Indiv. & Society
 Pol. Sci. 23 or 24
 Soc. Sci. 6—Consumer
 Spanish
 Typing

Social Work

See "Social Services."

Special Education Assistant

Special Education involves work with the individual who is different. There is a national shortage of trained individuals to work in this area. Cañada College has developed a program designed to enable students to major in this area (Certificate for Special Education Assistant) and/or complete a more traditional major for transfer to a four-year institution. The program in Special Education includes preparation for those interested in work in schools or community service agencies with handicapped children and adults. Resources in education, psychology, counseling and guidance, and other related fields are utilized. Individualized internship programs are available in this area through the Cooperative Education Program.

CERTIFICATE PROGRAM

Core Curriculum	Units
Psych. 1a or 10	3
Psych. 5—Child Development	3
Psych. 11b—Early Childhood Education Curriculum ..	3
Psych. 12—Child, Family and Community	3
Psych 21—Introduction to the Exceptional Child	3

Psych 22—Introduction to the Mentally Retarded	3
Psych. 46—Introduction to Counseling	3
Psych. 47—Cooperative Education	1-4
	<hr/>
	22-25

Suggested Electives

	Units
Psych. 33—Psychology of Adjustment	3
Soc. Sci. 40—Introduction to Social Service	3
Soc. Sci. 10—Interaction/ Communication for the Paraprofessional	3
Psych. 45—Principles of Group Interaction	3
Biol./ H. Ec. 9—Nutrition	3
Soc. Sci. 49—Individual Projects	1-2

In addition to the above required core curriculum, students desiring an A.A. degree in a more traditional major or transferring to a four-year institution must fulfill the general education requirements specified by the college.

Teacher Assistant

This program is designed to equip students to assume the role of teacher assistants in the public schools. The program includes a balance of course work at the college as well as college-supervised experience under the Cooperative Education program. The student is prepared to serve as a paraprofessional member of the teaching team. The teacher assistant works under the direction of a professional teacher in performing a wide variety of tasks in the classroom. The program provides the opportunity to work toward the completion of either the Cañada certificate program or the Associate in Arts degree. Upon completion of the Associate in Arts degree program, units earned are transferable to a four-year college.

CERTIFICATE PROGRAM

Core Curriculum	Units
Educ. 1—Introduction to Education	3
Educ. 2—The Teacher Assistant	2
Educ. 3—Reading in the Public Schools (This requirement may be fulfilled by enrolling in Reading Lab 67 (1 unit) and simultaneously enrolling in Education 49 (2 units). This provides the student with first hand reading lab experience and also an opportunity to work as an assistant to reading lab instructor.)	3
Educ. 47—Cooperative Education	1-4
Typing—Business 92a, 92b, 92r, or proof of typing competency	3
Spch-Com. 10 or 1a—Speech (by advice of counselor)	3
Psych. 1a, 10 or 33—Psychology (by advice of counselor	3
Elective	3
	<hr/>
	21-24

A.A. DEGREE PROGRAM

All courses listed in Core Curriculum	Units
Plus the following:	21-24
American Institutions (choice of five subjects)	3
Anth. 2—Cultural Anthropology	3
Art 44—Fine Arts for Children	3
Calif. State & Local Government (choice of five subjects)	2-3
Choice of Biology 1, Environment 1, Nature Study, or one of three Health Educ. courses	3-4
English—Children's Literature	3
English 50a or 1a (by eligibility)	3-4
First Aid (if not taken in high school or do not have First Aid Certificate	(1)
Psych. 5—Child Development	3
Soc. 1—Introduction to Sociology or Sociology 2—Social Problems	3
Physical Education (see catalog for exemptions)	2
Electives	8-10
	<hr/>
Minimum	60

For transfer to state colleges with an A.A. degree, students see "science requirements" in catalog of their chosen school. Also students planning to attend any other university or college must check the catalog from that school for specific course requirements.

(The Teacher Assistant Program at Cañada College is being revised. A new brochure will be published later this year.)

Teacher Preparation

As of September, 1974, the Ryan Act, which will affect teacher credentials, will go into effect. Because this new credentials law has not been completely implemented by the state colleges, a student entering the field of education should check with his counselor or Mr. J. Marchi at Cañada College and the current catalog of the college he is planning to attend.

Travel Industry Careers

Certificate Program

The newly formed Travel Industry Careers curriculum is designed for students planning to enter an occupational field of travel agency or passenger transportation and traffic management. This one-year curriculum, leading to a Certificate in Travel Industry Careers, consists of the following tourism courses, together with at least two additional required courses, for a total of 21 units. (The 21 units do not include Tourism 47, Cooperative Education, which may be waived for those already employed in the industry.)

	Units
Tourism 4—Introduction to Tourism	3
* Tourism 10—Basic Procedures-Retail Travel	3
* Tourism 11—Advanced Procedures-Retail Travel ..	3
* Tourism 20—Basic Airline Tariff and Ticketing	3
* Tourism 21—Advanced Airline Tariff and Ticketing ..	3
* Tourism 47—Cooperative Education-Retail Travel Seminar and Internship	2-4

Additional Required Courses

Students are to choose at least two of the following four courses:

	Units
Geography 1a—Physical Geography	3
Geography 1b—Cultural Geography	3
History 4a—History of Western Civilization	3
History 8b—History of Americas	3

Recommended Electives

	Units
A Foreign Language	3-5
Geog/ Envr. 5b—Africa: Man and His Environment ..	3
History 4b—History of Western Civilization	3
History 9b—Asian Civilization-Eastern Asia	3
Philosophy 24—Introduction-Religions of the World ..	3
Soc. Sci./ R & D 10—Interaction and Communication for the Paraprofessional	3
Business 92a, b, c—Typing (or proof of equivalency) ..	3
Business 90a, b, c—Shorthand (or proof of equivalency)	4-7
Business 50 or 51—Business Math (or proof of equivalency)	3
Bus. Ad. 1a or Bus. 66—Accounting	5-3
Business 10—Introduction to Business	3
Business 65—Small Business Management	3
Business 124—Marketing	3
Spch-Com. 1a or 10—Speech Communication	3

The following are recommended for foreign students in the Travel Industry Program:

	Units
English 57a, b—English as a Second Language	5-5
Spch-Com. 57a, b—Speech for Foreign Students	3-3
Political Science 27—American Society	5

* Course being developed

Urban Studies

In the highly urbanized society in which we all live there is a need for information and an awareness of the systems that make up the society. With this general goal

in mind, an Urban Studies curriculum has been developed which will: (1) supply the need for information for all students, (2) provide in-service growth for those already employed in urban organizations and agencies, and (3) encourage students to consider a career in Urban Studies. (A Certificate Program is in the process of development.)

RECOMMENDED CORE COURSES

	Units
Sociology 12—Urban Sociology	3
Political Science 24—Urban Government	3
Environment 4—Introduction to Planning Aspects	3
Statistics 1 or 2—Statistics	3-4
Research & Development 11—Design & Development	3
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	15-16

In addition, at least 6 units from the following Recommended Electives:

	Units
Economics 1a & 1b—Principles of Economics	6
Mathematics 18—Intro. to Computer Programming or Business 12—Intro. to Data Processing	3
Psychology 6—Social Psychology	3
Geography 4—Urban Economic Geography	3
Environment 2—Intro. to Political & Social Aspects ..	3
Co-Op 47—Urban Studies (Internship)	1-4
Ethnic Studies (at least one or two of the various ethnic studies courses now available)	3-6

Pre-Veterinary Medicine

See "Medical Sciences."

Wildlife Management**Transfer Program**

	Units
Biology 1—Principles	4
Botany 1—General	5
Zoology 1—General	5
Chem. 1a, 1b—General	10
Math 19 or 20—Intermediate Algebra or (Math 23a or 30—Calculus)	5
Cons. 1—Essential	3
Stat. 2—Introductory	4



Announcement of Courses

All courses and curricula listed in this catalog will not necessarily be offered during 1974-75. Courses are offered at the discretion of the College in accord with its determinations of educational needs and available resources. Courses may be added, cancelled or combined when circumstances warrant.

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.

The following courses have been approved for all instructional departments:

"47" Courses—COOPERATIVE EDUCATION (1-4)

"48" Courses—SPECIAL TOPICS (1-3)

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

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.

Because the transfer of credits to other colleges and universities is so important to students, it is important that they carefully check the catalog of the school to which they want to transfer. For transfer to a state university or college see General Education sheet listed in the California State Universities and Colleges section of this catalog. A student planning to transfer to a campus of the University of California should refer to the University of California section of this catalog to insure that his courses have been accepted by UC.

Coordinated Instructional Systems

A Coordinated Instructional System Program, also called Individualized Self-Paced Instruction, is a learning approach emphasizing the student's maturity, initiative and responsibility for his or her own learning. It utilizes various audio, video and audio-visual devices, which may include prepared materials on slides, tapes, printed mat-

ter, TV, computer, etc., as well as individual consultations with the instructor. Some regular class meetings may be required. In Coordinated Instructional courses, students determine their own schedule of study, testing dates, level of mastery and need for teacher assistance.

Administration of Justice

1 INTRODUCTION TO THE JUSTICE SYSTEM (3).

3 lecture hours per week. Orientation to the Administration of Justice program as well as law enforcement as a profession and means of livelihood. Includes history and philosophy of law enforcement on the local, state and national levels. Employment opportunities and general requirements of various law enforcement agencies. Problems facing law enforcement and the over-all crime picture in the United States. Included are aspects of racism in the administration of justice, police and minority groups, police discretionary decision-making and the double standard of justice: why it must go.

2 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM (3).

Prerequisite: Administration of Justice 1. 3 lecture hours per week. In-depth study of the role and responsibilities of each segment within the administration of justice system: Law enforcement, judicial, corrections. Past, present and future exposure to each subsystem procedure from initial entry to final disposition and the relationship each segment maintains with its system members.

3 CONCEPTS OF CRIMINAL LAW (3).

Also Social Science 3. Prerequisite: Administration of Justice 1, Social Science 40, or consent of instructor. 3 lecture hours per week. Reason for criminal laws, their source and function in our society. 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.

4 LEGAL ASPECTS OF CRIMINAL EVIDENCE (3).

Prerequisites: Administration of Justice 1 and 3, or concurrent registration in Administration of Justice 3. 3 lecture hours per week. 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.

7a CRIMINAL INVESTIGATION (3). *Prerequisite: Administration of Justice 1, 3 or 4, or consent of instructor. 3 lecture hours per week.* 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.

7b CRIMINAL INVESTIGATION (3). *Prerequisite: Administration of Justice 1, 3 or 4, or consent of instructor. 3 lecture hours per week.* Advanced study of criminal investigation; crime scene search; collection, preservation and identification of physical evidence; scientific aids; photography; sources of information; interrogation of victims, witnesses and suspects; cooperation with related agencies; case preparation and follow-up work.

12 TRAFFIC CONTROL (3). *Prerequisite: Administration of Justice 1, or concurrent registration in same. 3 lecture hours per week.* 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.

17 POLICE ORGANIZATION AND ADMINISTRATION (3). *Prerequisites: Sophomore standing; Administration of Justice major. 3 lecture hours per week.* Evolution of theories of organization and administration of justice agencies. Policy formulation, communications, methods of control, planning and research. Chain of command, span of control, unity of command and functional supervision will be presented.

18 ALTERNATIVES TO INCARCERATION (3). *3 lecture hours per week.* Legal, philosophical, sociological and psychological aspects of probation and parole with emphasis on the practical application of this knowledge by the practitioner.

19 PATROL PROCEDURES AND REPORT WRITING (3). *Prerequisite: Administration of Justice 1 or concurrent registration in same. 3 lecture hours per week.* Methods, techniques and responsibilities of the patrol unit. Beat patrol and observation, police hazards and how to handle them. Includes methods of writing police reports, what material is important, what purpose the different reports will fill. Various types of files and their uses.

21 POLICE REPORT WRITING (2). *Prerequisite: Administration of Justice 3. 2 lecture hours per week.* 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.

30 INTRODUCTION TO INDUSTRIAL & RETAIL SECURITY (3). *3 lecture hours per week.* Historical, philosophical and legal bases of security. Role of security and the security individual in modern society; the concept of professionalism in security; a survey of the administrative, personnel and physical aspects of the security field.

32 SECURITY ADMINISTRATION (3). *3 lecture hours per week.* Organization, administration and management of security functions of mercantile establishments; special laws and procedures; policy and decision making; personnel and budgeting; programs in business, industry and government, including retailing, transportation, and public and private institutions; private guard and alarm services.

35 CURRENT SECURITY PROBLEMS (3). *3 lecture hours per week.* Analysis of special problem areas such as security education and training, community relations, white-collar crime, drug abuse, theft control, shoplifting, document control, subversion and sabotage, protection of classified information, control of proprietary information and business espionage, labor problems, civil disturbances, and natural and man-made disasters.

38 COMMUNITY RELATIONS OF PUBLIC AGENCIES (3). *Also Social Science 38. 3 lecture hours per week.* Role of public agencies in contemporary society with particular emphasis on minority group relations. Examination of the society and the agencies that perform the police and service functions.

42 HISTORY & PRACTICE OF ADOLESCENT PLACEMENT (3). *Also Social Science 42. 3 lecture hours per week.* Explores the variety of systems in the juvenile court system, ranging from maximum security to the professional foster home. Survey of placement considerations and procedures. Emphasis on growth and implications of the treatment modal.

44 DRUGS: EFFECTS ON INDIVIDUALS AND SOCIETY (3). *Also Psychology 44. Prerequisite: Psychology 1a. 3 lecture hours per week.* Introduction to the effects of various categories of drugs. Exploration of the anatomical and physiological basis of drug action. Designed to enable identification of symptoms and side

effects of drug use or abuse. Emphasis upon various modes of treatment and rehabilitation.

46 INTRODUCTION TO COUNSELING (3). *Also Psychology 46. Prerequisite: Permission of instructor. 3 lecture hours per week.* Introduction to the various theoretical views of counseling and exposure to the general principles of interviewing. Major objectives are to provide an opportunity for development of skills in establishing rapport, setting counseling goals, recognizing strengths in individuals, recognizing self-limitations and methods for making referrals and terminating counseling relationships.

47 INTERNSHIP COOPERATIVE EDUCATION (2). *Prerequisites: Sophomore standing; Administration of Justice major and consent of instructor. 6 hours per week—one hour classroom and 5 hours to be arranged.*

100 POLICE MANAGEMENT (3). *(Evening College) Prerequisite: Employment in law enforcement. 3 hours per week.* Course in management for police officers. Concepts and practices of management as well as methods for evaluating effective management. The course will cover (1) fundamentals of administration, (2) directing and coordinating human resources, and (3) communication problems and skill development among people.

Anatomy

1 ANATOMY (4). *Prerequisite: Biology 1 or high school Biology with grade B or better. 3 lecture and one 3-hour lab period per week.* Structure of the human body as demonstrated through laboratory study and dissection of the human and higher mammals. Intended for students in nursing, physiotherapy, hygiene and physical education. Elective for pre-dental, pre-medical and pre-veterinarian students.

51 BODY STRUCTURE AND FUNCTION (2). *2 lecture hours per week.* Normal body structure and function of the following systems: skeletal, muscular, circulatory, digestive, endocrine, respiratory and nervous. The special senses are also covered.

62a-62b ANATOMY FOR X-RAY TECHNOLOGISTS (4-3). *Prerequisite for 62a-Concurrent registration in the X-Ray Technology program; prerequisite for 62b-Anatomy 62a. 2 lecture and 3 lab hours per week.* Survey of the anatomy and physiology of the human organism with emphasis directed toward recognition of tissue by radiographs. Laboratory aids would include human cadaver, preserved cat and radiographs. Physiological aspects centered through the use of live material.

Anthropology

1 PHYSICAL ANTHROPOLOGY (3). *3 lecture hours per week.* Relationship of Homo sapiens to lower animals, evidence of man's evolution, genetics, human racial stocks and man's early prehistory.

2 CULTURAL ANTHROPOLOGY (3). *3 lecture hours per week.* Study of culture as the man-made environment of particular societies: pre-historic, historic and contemporary. Cross-cultural comparisons of child-training, personality, kinship and family, economy, politics, religion and relationships between these in specific societies and sub-cultures, including contemporary ethnic groups in the United States.

3 PRE-HISTORY (3). *3 lecture hours per week.* Man's evolution during the period before written records. Pre-history bridges the gap between the natural history of man and the period of the first written records.

4 ARCHAEOLOGY FIELDWORK (3). *Prerequisite: Anthropology 1 or 2 or 36 or consent of instructor. 2 lecture and 3 lab hours per week.* Techniques and methods of archaeological excavation. Archaeological theory and interpretation of data. Presentation of data in standard archaeological form. Preservation and care of artifacts.

36 INDIANS OF NORTH AMERICA (3). *3 lecture hours per week.* In-depth look at some of the life-ways of distinct North American Indian cultures found in different geographical areas of North America. Stress in area of cross-cultural comparisons of cultural and social phenomena which includes religious and world view systems, subsistence systems and political systems. Each of these cultures lived in vastly different ecological areas, which, when examined carefully, shows the adaptation processes the cultures made to the different environments.

37 PRE-COLUMBIAN PEOPLES AND CULTURES OF MEXICO AND CENTRAL AMERICA (3). *3 lecture hours per week.* Study of Middle American civilization as it has developed through many different peoples whose dramas often overlapped. They included the Olmecs, Zapotecs, Mixtecs, Mayas, Toltecs and Aztecs. Emphasis on the contributions of these peoples and cultures in the development of Middle America.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Anthropology and the consent of the instructor and the Social Science Division Chairman.* Specified individual study or directed research in specific problem areas.

Art

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

1a (x) HISTORY OF ART (3). *3 lecture hours per week.* Survey of prehistoric ancient, classic, early Christian and medieval art.

1b (x) HISTORY OF ART (3). *3 lecture hours per week.* Survey of art from the late Middle Ages through the 19th Century, with emphasis on the development of painting.

1c (x) HISTORY OF ART (3). *3 lecture hours per week.* Survey of architecture, painting and sculpture of the 20th Century. May also be taken as an interdisciplinary course.

2a (x) FORM AND COMPOSITION (SURFACES I) (3). *Prerequisite: Concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* Fundamentals of perceptual (subject matter) and conceptual (idea) composition, emphasizing line, shape, mass, value, space organization and texture. An introductory course for painting and drawing. Approximate cost of materials: \$20.

2b FORM AND COMPOSITION (SURFACES II) (3). *Prerequisite: Art 2a and concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* Advanced course in composition. Problems concerned with four major aesthetic points of departure: (1) color-field composition, (2) mono-field composition, (3) classical abstraction, (4) figurative composition. Approximate cost of materials: \$30.

3 COLOR (3). *3 lecture hours per week.* Consideration of color theory and practice. Relationship of color and form as applied to contemporary painting and design. Approximate cost of materials: \$25.

4 PERSPECTIVES (2). *2 lecture hours per week.* Development of skills in freehand perspective applied to Fine Art and Commercial Art Areas. Problems will involve one and two-point perspective, and reverse and creative perspective. Not offered as a substitute for mechanical or architectural drafting. Approximate cost of materials: \$15.

5a DESIGN (3). *Prerequisite: Concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* Study of spatial organization through color, line, shape and mass

with emphasis on the conceptual process of composing designs on two-dimensional surfaces. Course is related to practical application of design. Approximate cost of materials: \$25.

5b DESIGN (Three-Dimensional) (3). *Prerequisite: Concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* Study of forms, space and mass in three dimensions with emphasis on composition. Course is related to a practical application of sculpture, jewelry making, ceramics, commercial art and industrial design. Approximate cost of materials: \$25.

6a-6b (x) PAINTING (3-3). *Prerequisite: None; recommended Art 2a-b. Concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* Development of perceptual awareness of the optical effects of the painted surface. Acrylics, oil paint and other media are used to encourage individualized expression. Study of contemporary painting forms. (May be repeated for credit). Approximate cost of materials: \$25.

7a-7b (x) WATER COLOR (3-3). *Prerequisite: For 7a—Art 2a; prerequisite for 7b—Art 7a. 3 lecture hours per week.* Exploration and application of water color media, emphasizing the experimental and interpretative. May be repeated for credit. Approximate cost of materials: \$25.

10 (x) INTRODUCTION TO ART (3). *3 lecture hours per week.* A lecture course for the general student and Art major in the principles and fundamentals of art and art criticism. Study of terminology and criteria of value. Illustrated with examples of modern and historic drawing, painting, sculpture and design.

12a LETTERING (2). *2 lecture hours per week.* Development of proficiency in freehand lettering with pen and brush. Imaginative interpretations of lettering styles. Approximate cost of materials: \$15.

12b LAYOUT (3). *Prerequisite: Art 12a or permission of instructor; recommended: Art 3 and 5a. 3 lecture hours per week.* Development of lettering and two-dimensional design problems related to the area of ad copy and the graphic promotion of commercial events. Page layout and poster design emphasized. Diverse media used. Approximate cost of materials: \$25.

13a (x) DRAWING I (3). *3 lecture hours per week.* Fundamental course in drawing. Emphasis on perception development, through specific drawing exercises to develop an orderly approach, a disciplined perception and an increased attention span. Dry media, pencil, charcoal and Conte crayon. Approximate cost of materials: \$15.

13b (x) DRAWING II (3). *Prerequisite: Art 13a. 3 lecture hours per week.* Continued development of visual perception and technique, emphasizing direct response to visual stimuli and personal interpretation of subject matter. Mixed media. Approximate cost of materials: \$15.

15 LIFE DRAWING (2). *Prerequisites: Art 13a-b. 1 1/2 lecture and 1 1/2 drawing lab hours per week.* Study of the gesture, contour, surfaces and aspects of anatomy of the human figure. Psycho-aesthetic factors, personal interpretation and symbolic transformation of the figure. Diverse media. May be repeated for credit. Approximate cost of materials: \$15.

17a (x) PRINTMAKING I (3). *Prerequisites: Art 2a, Art 13a. Concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* Introduction to printmaking, involving processes of relief printing (woodcut, collagraphy) and silkscreen. May be repeated for credit. Approximate cost of materials: \$25.

17b (x) PRINTMAKING II (3). *Prerequisite: Art 17a. Concurrent enrollment in Art 99 (Studio Hours). 3 lecture hours per week.* The student will choose from among the following three types of printing for concentrated work: intaglio, relief and silkscreen. May be repeated for credit. Approximate cost of materials: \$25.

18 COMMERCIAL DESIGN (3). *Prerequisite: Art 5a, 12a or 12b, or consent of instructor. 3 lecture hours per week.* Development of two- and three-dimensional problems in graphic communication. Principles of design will be utilized and exploited in individual and group assignments ranging from pure decoration to practical application as related to commercial design and packaging.

22a-22b (x) SCULPTURE (3-3). *Prerequisite for 22a-Art 5a (not in Evening College); prerequisite for 22b-Art 22a. Concurrent enrollment in Art 99 (Studio Hours) for both 22a and 22b. 3 lecture hours per week.* Basic course in figurative and non-objective structural forms using plastic, fiberglass, metal and other media. May be repeated for credit. Approximate cost of materials: \$30.

44 FINE ARTS FOR CHILDREN (3). *Also Music 44. (Evening College) 3 lecture hours per week.* For parents and teacher aids. Study of methods and materials useful in teaching the pre-school and primary grade child understanding and self-expression in art and music. Involves art and folk music, finger painting, clay modeling, and elementary painting and drawing.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Sophomore standing and consent of Fine Arts Division Chairman. Hours by arrangement.* Directed individual

work in special projects in a specific field or topic, such as experimental media or tours of world art centers.

56 (x) LANDSCAPE AND PORTRAITURE (3). *(Evening College) 3 lecture hours per week.* Development skills, techniques and sensitivity in traditional forms. Acrylics, oil paint, water color and other media are used to encourage individual expression. For the recreational painter. May not be applied toward the degree by the student whose major is art. (May be repeated for credit.)

73 (x) PHOTOGRAPHY (2). *(Evening College) 2 lecture hours per week.* Introduction to the materials and equipment of photography in both black and white and color, including lenses, shutters, meters, filters, films and papers, and natural and artificial lighting.

99 STUDIO HOURS (0). Supervised studio hours in connection with Art 2a, 2b, 5a, 5b, 6a, 6b, 17a, 17b, 22a, 22b. Hours by arrangement.

Astronomy

10 INTRODUCTION TO ASTRONOMY (3). *3 lecture hours per week.* Survey of modern astronomy, including the study of the planets, stars and galaxies. Emphasis on the place of man in the universe and the possibilities of life on other worlds. Quasars, pulsars, black holes, the space program, and the beginning and end of the universe will also be discussed. Accepted for general education for most colleges and universities.

12 THEORIES OF THE UNIVERSE (3). *3 lecture hours per week.* Historical survey of man's thinking about the large-scale questions of the universe, ranging from ancient myth to modern theories of the exploding universe. Will focus particularly on three questions: the creation of the cosmos, the meaning of time and the end of the universe. The continual interaction of science with literature, philosophy, etc., will be explored through readings, slides, films. Course especially designed for those with an interest but no background in science.

17 PLANETS AND LIFE (3). *Prerequisite: Astronomy 10 or equivalent, or permission of the instructor. 3 lecture hours per week.* Study of the solar system with a view toward discovering the conditions necessary for life to form and assessing the chances that life has formed elsewhere in the universe. Various means for detecting extra-terrestrial life will be discussed. Extensive use will be made of the results from U.S. and Soviet space programs.

Bacteriology

1 GENERAL (5). *Prerequisites: One semester of college chemistry and either Biology 1, 3, Botany 1 or Zoology 1. Not open to first semester freshmen. 3 lecture hours and 6 lab hours per week.* History, morphology and physiology of micro-organisms with emphasis on eubacteria, the disease process and human interests. Laboratory exercises include media making, isolation and identification of bacteria, and some of the standard methods employed in water and milk analysis.

10 MICROBES AND MAN (3). *Not open to students with previous credit in the Biological Sciences. 3 lecture hours per week.* Characteristics of the major groups of microbes, their destruction, transmission of diseases, typical soil microbes, biology of spoliage, food preservation and sewage treatment.

Biology

1 PRINCIPLES OF BIOLOGY (4). *3 lecture and one 3-hour lab period per week.* Biological principles including cellular organization, heredity, molecular components, evolution, reproduction, differentiation, and ecology.

2 GENETICS (3). *Prerequisite: One course in the Biological Sciences or consent of instructor. 3 lecture hours per week.* Introduction to the principles of heredity in plants and animals with specific reference to human inheritance and bio-chemical genetics, evolutionary heredity and genetic engineering.

3 HUMAN BIOLOGY (4). *3 lecture and one 3-hour lab per week.* Study of biological principles utilizing the human body as a model. Emphasis on study of the major body systems of the human as well as topics of heredity, human development and human ecology.

9 NUTRITION (3). *Also Home Economics 9. 3 lecture hours 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.

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 Biological Sciences. Complementary to Physical Science 10. 3 lecture hours per week.* 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.

15 ESSENTIALS OF NUTRITION (3). *Also Home Ec. 15. Prerequisite: College course in chemistry. 2 lecture and one 3-hour lab per week.* Basic principles of nutrition. Utilization of food by the body, with emphasis on the role of nutrients in development and maintenance of body processes, including a personal nutritional evaluation.

18 NUTRITION IN HEALTH AND DISEASE (3). *Also Home Ec. 18. Prerequisite: Biology 9 or Home Economics 9. 3 lecture hours per week.* Nutritional aspects of special medical problems including mental illness, obesity, alcoholic malnutrition, pregnancy, dental caries, childhood nutrition; biochemical relationships of metabolism, chemical additives in food and production techniques; overview of eating patterns and cooking techniques worldwide, history of food fads, nutritional advertising and misrepresentation.

39 HUMAN SEXUALITY: BIOLOGICAL ASPECTS (1 1/2). *3 hours per week for 8 weeks.* Lecture-discussion of the physical aspects of sexuality. Topics include: anatomy and physiology of the male and female, "The Pill" and other methods of contraception, pregnancy and fetal development, and the biological aspects of sexual development and behavior. It is strongly recommended that this class be taken concurrently with Psych. 39.

40 NATURE STUDY (3). *2 lecture and one 3-hour lab/field trip per week.* Lecture, laboratory and field study of common plants and animals of the Bay Area. Emphasis on plant identification of common organisms and study of their natural history and distribution in this area.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Open only to students who have completed, or are currently enrolled in one of the following: Zoology 1, Biology 1, 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. Hours by arrangement.

Botany

1 GENERAL BOTANY (5). *Prerequisite: Biology 1 with a grade of C or better, or high school Biology with a grade of B or better. 3 lecture hours and 6 hours of lab per week.* Principles of Biology as illustrated by plants with emphasis on structure, physiology and reproduction in green plants.

4 NATIVE PLANTS AND WILD FLOWERS (3). *2 lecture and 3 lab hours per week.* Study of the native ferns, trees, shrubs and wild flowers of San Mateo County.

Mainly field work, designed to allow the student to acquire skills in collection and identification of the flora of any region.

10 PLANTS AND MAN (3). *2 lecture and 3 lab hours per week.* Introduction to plant science including cells, plant groups propagation, distribution, succession structure and function.

Business

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

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

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

Business 10—Introduction to Business.

10 INTRODUCTION TO BUSINESS (3). *Credit/no credit. (Required of all students majoring in two-year Business programs.) 3 hours per week.* Introductory survey of the nature, organization and structure of the American private-enterprise system. Designed to allow student examination of many activities performed in the business community. Instruction includes lectures, discussions, guest speakers and field trips. An aid to selecting a field of vocational specialization.

11 CONTEMPORARY BUSINESS ECONOMIC ISSUES (3). *3 hours per week.* Introduction to the contemporary American economy from the points of view of both the businessman and consumer. Sixteen different, often related current issues economically and politically affecting business and society will be given balanced presentations through lectures, films, readings and guest speakers.

12 INTRODUCTION TO DATA PROCESSING (3). *3 lecture hours per week.* Introduction to data processing with emphasis on use of the digital computer. Flow charting and programming using BASIC are introduced. Students are required to run several programs. File maintenance and manipulation is explored. Students retrieve and use stored programs from the files at Stanford.

15 BUSINESS COMPUTER PROGRAMMING (3). *Prerequisite: Business 12 or Business 61 or Mathematics 18. 3 lecture hours per week - some lab necessary.* Introduction to computer languages used in business

programming. Emphasis on COBOL, including a variety of programs using the language. The basic fundamentals of RPG and PL/1 will be studied.

35 PERSONAL MONEY MANAGEMENT (3). *Credit/no credit. 3 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. Provides a project for investment of your financial assets.

36 CONSUMER CREDIT MANAGEMENT (3). *Fall semester. 3 hours per week.* Economic and social concepts of credit. Management and analysis of consumer credit from viewpoint of the creditor. Investigation of retail and cash loan credit. Government regulation. Collection policy and practice. Current happenings in the industry presented through appearance of guest speakers.

37 CREDIT MANAGEMENT (3). *Alternate Spring semester. Prerequisite—Any one of the following: Business 36, Business 10, Business 11, or Economics 1a. 3 hours per week.* Familiarization with various credit instruments. Investigation into the business use of commercial credit including criteria and method of granting credit. Commercial credit collection policies and practices. Financial analysis of debtor businesses. Current happenings in the field presented by guest speakers.

38 PRINCIPLES OF BANK OPERATIONS (3). *3 hours per week.* Description of the fundamentals of bank functions. A study of bookkeeping operations involving the day-to-day banking activities; various bank services such as loans, savings, trusts, legal considerations; the Federal Reserve System and related government controls.

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit. Prerequisites: Completion of or enrollment in Business 10, or concurrent enrollment in another Business course, or approval of instructor; and employment in business. 5-20 hours per week.* Activities include supervised work experience, group discussion based on individual and group job problems, and selected field trips. 6 class sessions (including field trips). First meeting during second week of semester.

50 BUSINESS ARITHMETIC (3). *Prerequisite: For students with a percentile below 35 on the quantitative part of SCAT entrance examination. 3 hours per week. (SCAT test is given during second class session.)* Objectives are to: (1) improve arithmetic skills in basic addition, subtraction, multiplication and division, as well as teach some helpful shortcuts and aliquot parts, (2) brush up on

common and decimal fractions, and (3) apply these skills to bank statements, cash and trade discounts, income tax and other business problems.

51 BUSINESS MATHEMATICS (3). *Prerequisite: Percentile rating of 35 or over on the quantitative part of the SCAT test, or completion of Business 50 with a grade of C or better. Placement in Business 50 or 51 is on the basis of the score on inventory test given during the first or second class session. 3 hours per week.* 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 LAW FOR LAYMEN (3). *(Evening College) Fall semester. 3 hours per week.* Practical course for the layman designed to help him understand how the courts operate, important aspects of family law including marriage, divorce, probate, rights and liabilities of minors, property ownership, wills, bankruptcy, workmen's compensation, debtor-creditor relationships and other helpful information.

56 BUSINESS COMMUNICATIONS (3). *(Evening College) Spring semester. Prerequisites: Business 92a and completion of or enrollment in Business English or completion of English 50a-50b. (Students must either type or have their work typed for them.) 3 hours per week.* As the ability to create (not just type) letters is needed in order to advance in most fields, this course zeroes in on composing clear and concise letters and reports. How to achieve readability, build interest and use persuasive techniques are demonstrated and practiced. Dictating techniques (as used by executives) are presented, and several types of equipment are used by students in developing their ability to compose and dictate from notes. Recommended for all Business majors.

58 HUMAN RELATIONS IN BUSINESS (3). *3 hours per week.* Films, tapes by experts on the subjects and lectures are used to present the basic psychological principles operating in family, social and business relationships. Conference method class discussions, and oral and written reports prepared in acceptable business format offer an opportunity for individual self-improvement. Topics covered include: perception, self-image, self-management, success, prejudice, creativity, attitudes, change, motivation and maturity, productivity, leadership and many others. Recommended for all Business majors.

61 BASIC COMPUTER OPERATIONS (3). *3 lecture and 3 lab hours per week.* Designed to explore the mechanics of the hardware in a system 360/370 environment. Field trips plus a long-term field experience

give the students actual operating experience. (Minimum homework assignments.)

64 BUSINESS LAW (3). *Spring semester. 3 hours per week.* Broad study of the legal aspects of business transactions: the legal system, contracts, sales, security, negotiable instruments and personal property. Provides a background for personal as well as business transactions. Lecture and case problems used extensively. Recommended as general education elective.

65 SMALL BUSINESS MANAGEMENT (3). *(Evening College) Spring semester. Prerequisite: Business 10 or permission of the instructor. 3 hours per week.* Examination of the opportunities and hazards of small business operation; designed for Business students who plan to establish or supervise a small business. Significant areas of vital interest to the prospective independent businessman are explored, including type of operation, legal form, site location, financing, handling of personnel and over-all management procedures.

66 GENERAL ACCOUNTING (3). *Recommended: Completion of or concurrent enrollment in Business 50 or 51. 4 hours per week.* Non-professional accounting course introducing the principles of double-entry bookkeeping. These principles are applied to recording financial transactions and the preparation of statements and reports. A practice set is required.

67 FEDERAL INCOME TAX PROCEDURES (0). *(Evening College) Spring semester-6 weeks. 3 hours per week.* Study of the federal income tax structure as related to individuals, including problems intended to provide a thorough understanding of the law and regulations.

68 BUSINESS TAXES (1). *(Evening College) Prerequisite: Business 66 or Business Administration 1a. 3 lecture hours per week.* State and federal laws and regulations governing payroll accounting and reporting; California sales tax regulations and reporting; real and personal property declarations as a basis for county assessor's valuation for city and county property taxes.

81 SECURITY INVESTMENTS (3). *(Evening College) Prerequisite: Consent of instructor. 3 hours per week.* Designed to assist individual in starting investment program with survey of stocks, bonds, mutual funds to include fundamental and technical analysis. Topics include how to read Wall Street Journal, annual reports and use of computer in stock selection and timing. Guest lecturers on estate planning, role of financial counselor and portfolio management.

83a REAL ESTATE PRINCIPLES (BASIC) (3). *3 hours per week.* Legal basis of real estate trans-

actions—contracts, agency and property; real estate transactions—listing and purchase contracts, real estate financing, deeds, liens and encumbrances, escrows and title insurance; land descriptions; real estate mathematics; business opportunities. Assists toward basic license preparation.

84 REAL ESTATE VALUATION, INVESTMENT AND MANAGEMENT (3). *3 hours per week.* Investments in general; investments in real estate; forms and nature of ownership; income tax shelter; and investment property analysis. A practical course designed to teach students how to successfully invest their savings.

85 REAL ESTATE PRACTICE (3). *(Evening College) Prerequisite: Salesman's or broker's license, or completion of Business 83a and 84. 3 hours per week.* Comprehensive presentation of the techniques of operating a real estate business in the State of California with emphasis on the daily activities of salesmen and brokers. (Meets the state requirements for the broker's examination.)

87 LEGAL ASPECTS OF REAL ESTATE (3). *(Evening College) Prerequisite: Salesman's or broker's license, or completion of Business 83a and 84; or completion of Business 85. 3 hours per week.* The practice of real estate brokerage, real estate sales, property management, real estate ownership, the management or the building of an estate and related topics, along with a study of the facts and principles of California Real Estate Law. (Meets the state requirements for the broker's examination.)

90a BEGINNING SHORTHAND (5). *Prerequisites: Completion of Business 92a or equivalent and completion of or enrollment in Business English, English 50b or 1a. 5 class and 2 scheduled audio library lab hours by arrangement per week.* Foundation course in Gregg Shorthand principles with practice in simple dictation and transcription.

90b INTERMEDIATE SHORTHAND (7). *Fall semester. Prerequisites: Business 90a or its equivalent and completion of or enrollment in Business 92b or equivalent; completion of or enrollment in Business English, English 50b or 1a. 10 class and one scheduled audio library lab hour by arrangement per week.* Thorough review of beginning shorthand theory principles. Training in vocational application of shorthand through intensive dictation and transcription with emphasis on the integration of specific secretarial skills; transcription, punctuation and related English review, vocabulary development, and efficient shorthand methods. Field trips, speakers, tapes, and records used.

90bx INTERMEDIATE SHORTHAND (3). *Spring semester. Prerequisites: Business 90a or its equivalent and completion of or enrollment in Business 92b or equivalent; completion of or enrollment in Business English, English 50b or 1a. 5 hours per week.* 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). *Spring semester. Prerequisites: Business 90b or its equivalent and completion of or enrollment in Business English or English 1a. 6 class and one scheduled audio library lab hour by arrangement per week.* Intensive training in the vocational application of shorthand and other secretarial skills with emphasis on practical experience. Vocabulary development in medical, legal and specialized areas. Field trips, speakers, tapes and records used. One extra unit of credit may be earned for volunteer campus office work by arrangement.

90p ALPHABETIC SHORTHAND (2). *(Evening College) Prerequisite: Completion of or enrollment in one typing course. 4 hours per week.* Foundation course in alphabetic shorthand — principles, dictation, transcription. Vocational or personal use.

90r REFRESHER SHORTHAND (3). *Prerequisite: Enrollment in or completion of Business 92a or equivalent, and completion of or enrollment in Business English, English 50b or 1a. 3 class and 2 scheduled audio library lab hours by arrangement per week.* For students with insufficient training in shorthand to qualify for Business 90b. Review of Gregg shorthand principles and practice dictation and transcription.

90Sa BEGINNING MACHINE SHORTHAND (4). *Fall semester. Prerequisite: Completion of or enrollment in Business 92b and Business English or English 1a. 3 lecture and 3 lab hours per week.* Theory and practice on shorthand machines. Stresses phonetics, English skills, etc. Intended for training office workers as well as a prelude to training potential court reporters or as a stepping stone to other career opportunities. Speed development to 80 words per minute. This course may be substituted for Beginning Shorthand in the Secretarial Programs.

90Sb INTERMEDIATE MACHINE SHORTHAND (4). *Prerequisite: Business 90Sa. 3 lecture and 3 lab hours per week.* Emphasizes machine shorthand theory review, English principles, development of machine writing vocabulary; continues with concentrated new matter dictation, and entails further transcription development. Also stresses transcription of notes at the typewriter. May be substituted for Intermediate Shorthand in the Secretarial Programs.

90X INDIVIDUALIZED SKILL IMPROVEMENT

(1). *Prerequisite: Completion of Business 90a, or equivalent. 1 class hour with two additional hours of A-V lab per week.* Opportunity for students to rebuild, maintain or increase skills previously attained.

91 BUSINESS ENGLISH (3). *Fall semester. Fundamental English preparation for all students—particularly helpful to Secretarial and Clerical majors. 3 hours per week.* Grammar, punctuation, spelling, word usage, vocabulary building and use of the dictionary. Emphasis on English of business through use of business-oriented materials. Recommended for students in any major who feel the need for improvement in fundamentals of English and vocabulary.

92a BEGINNING TYPING (3). *Prerequisite: No previous typing instruction. 5 hours per week.* Designed to develop correct typing techniques, keyboard mastery, proper care and operation of the typewriter, and basic skills in typing straight copy, business letters, simple tables, outlines and manuscripts.

92b INTERMEDIATE TYPING (3). *Prerequisite: Business 92a with a grade of C or better or an equivalent proficiency in typewriting. 5 hours per week.* Emphasis on increasing speed and accuracy of typing. Development of judgement and skill in the arrangement and typing of a wide variety of business office problems including letters, tabulations, purchase orders and invoices, manuscripts, rough draft copy, etc. Emphasis on improving production rate of typing business office problems.

92c ADVANCED TYPING (3). *Spring semester. Prerequisite: Business 92b with a grade of C or better, or satisfactory completion of two years of typing in high school. 3 hours per week.* Production typing with emphasis on speed and accuracy in the preparation of business letters, business and legal forms, manuscripts, financial and statistical reports in project form. Helps develop judgment and initiative and ability to work with a minimum of direction. Recommended for all secretarial and clerical students.

92r REFRESHER TYPING (3). *Prerequisite: For students with insufficient training in typing to qualify for Business 92b. 5 hours per week.* Emphasis on improving keyboard control, correct typing techniques, and developing skill in typing straight copy, business letters, simple tables, outlines and manuscripts.

92Sa SPANISH TYPEWRITING (3). *Prerequisite: None; no previous typewriting instruction. 2 lecture and 3 lab hours per week.* Beginning typewriting course for Spanish-speaking students, designed to develop correct

typing techniques, keyboard mastery, proper care and operation of the typewriter, and basic skills in typing straight copy, business letters, simple tables, outlines and manuscripts. Taught bilingually.

93 MACHINE CALCULATION (2). *Spring semester. Prerequisite: Business 50 or permission of instructor. 3 hours per week. Lab work-as needed-to be assigned by instructor.* Performance of arithmetic calculations on machines emphasizing actual business situations and problems, starting with fundamentals, continuing to more complex practical business applications. In-depth instruction (not acquaintanceship) on the operation of rotary-type calculators and touch system of operating printing calculators, including electronic machines; also ten-key adding machines; orientation only on key-driven calculators. Strives to develop ability to follow instructions, speed, accuracy and neatness of work. Recommended for all certificate and AA degree majors.

100 OFFICE PROCEDURES AND OFFICE ADMINISTRATION (4). *Prerequisites: Business 92b or an equivalent proficiency in typing; and completion of or enrollment in Business English. English 50b or 1a. Not recommended for first semester students except by permission of instructor. 6 class and 3 scheduled lab hours per week.* Development of skill in use of transcribing and duplicating machines; use of electric typewriters and duplicating equipment in performing office work; filing, payroll, switchboard, telephone and general office work; study and application of effective procedures for improving performance of office employees.

100a OFFICE PROCEDURES (2). *4 hours per week.* Develops skill in use of transcribing and duplicating machines, electric typewriter and duplicating equipment in performing office work; reviews the basic filing rules and their application; develops the ability to maintain accurate payroll records; improves on-the-job telephone techniques; develops skill in the use of effective English; includes study and discussion of job application, the job interview and growing on the job.

100b OFFICE PROCEDURES (2). *4 hours per week.* Emphasizes increasing speed and accuracy in the use of machines and equipment used in Business 100a; further develops judgment and skill in the arrangement and typing of business office problems on the duplicating machines; continues the study of alphabetic, geographic and numeric filing; introduces the electronic printing calculator and the offset duplicating machines; focuses attention on English grammar and sentence structure; teaches appreciation of the elements of poise and personality as related to business.

102 OFFICE ADMINISTRATION (3). *Spring semester.*

Prerequisites: Completion of or enrollment in Business 92b, Business English or English 1a; completion of or enrollment in Business 100 is recommended. 3 hours per week. Considers mainly the final stages of development of preparation for administrative assistant, office managers, and other executive-level positions. Case method, seminars, and practicum used to provide useful background knowledge, conditions and attitudes necessary for understanding the responsibilities of an administrative assistant, office manager and/or executive-level positions. Considers human relations, personal factors, work organization in the office, and supervision of office personnel. Dealing with executives and colleagues. Preparation of reports, articles, press releases, and making arrangements for seminars and conferences.

110 FUNDAMENTALS OF SALESMANSHIP (2). *Fall semester. 2 hours per week.*

Covers the role and impact of personal selling in the marketing process of our business community. Considers principles and techniques employed effectively in the direct sales process. Includes practical sales presentations by students. TV tape used for self-evaluation and improvement of sales presentations.

116 PRINCIPLES OF RETAIL MERCHANDISING (2). *Alternate Fall semester. 2 hours per week.*

Retail processes of chain and department stores emphasizing merchandise planning and control, buying and receiving, pricing, personnel evaluation, and customer services. Lecture, class discussion and case problem techniques used.

117 MODERN RETAIL OPERATION (2). *Alternate Fall semesters. 2 hours per week.*

Small retail store operation starting with the decision to be an independent businessman. Topics include location analysis, franchising, merchandise, promotion and pricing. Management tools such as inventory control, accounting, and credit practices are also considered. Lecture, class discussion and case problems are used. No credit for students having had Business 65.

120 ADVERTISING (3). *Spring semester. 3 hours per week.*

The role of advertising in our economic life with emphasis on advertising objectives and methods. Creation of print advertising. Evaluation of various media. Discussion of advertising ethics and campaign strategy. Includes student development of an advertising campaign.

124 MARKETING (3). *Spring semester. 3 hours per week.*

Broad study of marketing principles and methods applicable to the development, manufacture, and selling of consumer goods. Major topics include customer

research, product planning, marketing policies and practices, retailing, wholesaling and price determination. Lecture, case problems and class discussions utilized in class sessions.

146a ADVANCED ESTATE PLANNING I (3).

(Evening College) Prerequisite: CPA's, attorneys, trust officers, and chartered life underwriters employed in estate planning. 3 lecture hours per week. Detailed study of the law and instrumentalities of estate planning designed primarily for attorneys, CPA's, trust officers and chartered life underwriters. The course will examine the theory and practice of the federal estate and gift tax, state death taxes, wills, trusts and estate planning for the individual.

146b ADVANCED ESTATE PLANNING II (3).

(Evening College) Prerequisite: Advanced Estate Planning I. 3 lecture hours per week. Instruction in fact finding, analysis and presentation of estate planning proposals. Ten estate planning case studies to be completed.

150 TORTS AND CONTRACTS (3). *Prerequisite: 6 months legal office work, or one year college training in legal subjects, or permission of instructor. 3 hours per week.*

Recommended for Para-Legal Students only. Study of the various torts that make up the body of the substantive law of torts, including the basis of tort liability, the elements of actionable torts, and remedies and procedure; study of the basic law of contracts, including the elements of a contract, factors affecting their validity, construction and interpretation, and termination of rescission.

151 LEGAL RESEARCH AND BIBLIOGRAPHY (3).

(Evening College) Fall semester. Prerequisite: 6 months legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week. By examination of the basic elements of criminal law, the student is introduced to reading and briefing legal cases and principles of legal writing; the differences between primary and secondary sources of law; indexes and citators; using outside sources such as title and court records, county and state law libraries, and specialized libraries and outside specialists; organization and management of a law office library and preparation of bibliographies; cite checking, etc.

152 TRIAL PREPARATION AND PRACTICE (3).

(Evening College) Fall semester. Prerequisite: 6 months legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week. Introduction to the basics of trial practice and litigation; substantive law with emphasis on tort law; procedural law, including jurisdiction, venue, statutes of limitation

and service of process; commencement of the lawsuit, preparation of pleadings and motions; discovery and fact investigation; pretrial considerations, preserving facts and preparation for trial; mock trial; post-trial motions and appeal.

153 PROBATE ADMINISTRATION (3). (*Evening College*) *Prerequisite: 6 months legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week.* Fundamental principles involved in the legal process of probating an estate, including the basic law of wills, preparation of all pleadings and documents customarily used in the probate of an estate, preparation of state and federal inheritance tax and estate tax returns, methods and procedures and preparation of documents in conservatorships and guardianships.

154 FAMILY LAW (3). (*Evening College*) *Prerequisite: 6 months legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week.* Legal principles applicable to the formation of the marriage contract, together with principles of law applicable to problems arising from the marital relationship, including: property rights; support obligations between husband and wife, custody and support of children, adoption.

155 CORPORATIONS AND BUSINESS ENTITIES (3). (*Evening College*) *Fall semester. Prerequisite: 6 months legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week.* Basic orientation in business organizations involving sole proprietorships and partnerships with particular emphasis on corporations, including a study of the substantive law of each organization; the business and tax factors in the choice of form; licensing and registration requirements; preparation of forms; business aspects in buying and selling a business entity with preparation of agreements for sale; procedures for dissolving and liquidating a partnership or corporation, and procedures for qualifying a foreign corporation in California.

156 REAL ESTATE AND LANDLORD-TENANT (3). (*Evening College*) *Spring semester. Prerequisite: Six months legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week.* Relationships between buyer and seller of real estate and between landlord and tenant, with particular emphasis on the role of the legal assistant in the analysis and solution of legal problems and in the preparation of documents in relation thereto.

157 BANKRUPTCY AND DEBT COLLECTION (3). (*Evening College*) *Spring semester. Prerequisite: Six mon-*

ths legal office work or one year college training in legal subjects, or permission of instructor. 3 hours per week. General outline of bankruptcy jurisdiction and procedures, including powers of bankruptcy court, administration of bankrupt estates by receivers and trustees; preparation of schedules in voluntary cases, taking into consideration available exemptions; a general review of arrangement proceedings under Chapters XI, XII and XIII of the Bankruptcy Act. Debt collection procedures, including determination of the nature of the action, venue, jurisdiction, prejudgment remedies, examination of judgment debtors, execution and other means of enforcing judgments.

160a MACHINE SHORTHAND I (5). *Prerequisites: Business English and Intermediate Typing or equivalent or concurrent enrollment. 15 lab hours per week.* Presentation of the keyboard and basic theory of machine shorthand and phonetic writing; intensive practice dictation with emphasis on rapid and accurate reading of notes in preparation for more advanced courses in Machine Shorthand Reporting. Daily transcription of notes; stress on brief forms, phrases and other abbreviations. Minimum speed attainment: 60 words per minute on dictation of new material.

160b MACHINE SHORTHAND II (5). *Prerequisite: Machine Shorthand I or its equivalent. 15 lab hours per week.* Continuation of development of skill in recording dictation and reading notes in preparation for more advanced courses in the Machine Shorthand Reporting Program. Thorough review of theory and principles through drills. Practice on familiar and new matter dictation. Minimum speed of 100 words per minute on dictation material with 97.5 percent accuracy should be attained. Completes basic theory.

160c MACHINE SHORTHAND III (3). *Prerequisite: Machine Shorthand II or its equivalent. 20 lab hours per week for eight weeks.* Advanced skill development on the keyboard and advanced skill development in transcribing. Designed to establish, develop and strengthen the link between theory dictation, transcription and reporting skill. Students should attain a minimum speed of 120 words per minute on familiar material and new matter material; 97.5 percent accuracy on transcription.

163 VOCABULARY AND SPELLING (2). *2 lecture hours per week.* Designed to prepare and encourage the student to develop curiosity about unfamiliar words, in addition to an understanding and knowledge of general business terms, including various professional disciplines. Good English background helpful.

170 PROFESSIONAL OFFICE CAREERS PROGRAM (1-10).

Prerequisites: 35 words per minute typing speed; 60 words per minute shorthand speed for shorthand option. 5 lecture and 10 lab hours per week. Open entry/open exit program, geared to raising the skills level of students in various areas to a point where they can be reasonably assured of employment. Individualized instruction and a flexible schedule will assure that a student who masters a skill or concept quickly is able to proceed to the next area at own pace. Subject matter areas: business English and correspondence; basic mathematics; calculating and adding machines, and secretarial bookkeeping; advanced typing; office procedures; duplicating and transcription; and (optionally) shorthand transcription.

Business Administration

Business 50 or 51 is recommended for Business Administration majors who feel the need of improving basic math skills.

1a FINANCIAL ACCOUNTING (5). *Prerequisite: None; Business 50 recommended preparation for students who need improvement in basic math skills. 5 hours per week.* Techniques of communicating financial information to parties outside the organization. Accounting principles, transaction analysis and information processing for reporting financial position, income measurement, and use and interpretation of financial statements.

1b MANAGERIAL ACCOUNTING (5). *Prerequisite: Business Administration 1a or equivalent with a grade of C or better. 5 hours per week.* Uses of accounting within an organization for planning and controlling purposes. Analysis of information for management functions of budgeting, manufacturing and cost accounting, responsibility accounting, and for evaluating alternative choices.

2 INTERMEDIATE ACCOUNTING (3). *(Evening College) Spring semester. Prerequisites: Business Administration 1a and 1b. 3 hours per week.* Accounting for labor, materials and overhead costs. Procedures for finding unit costs. Job order and process cost accounting. Standard cost accounting. Managerial cost applications. Does not satisfy requirement for upper division intermediate accounting at state universities.

3 COST ACCOUNTING (3). *(Evening College) Fall semester. Prerequisites: Business Administration 1a and 1b. 3 hours per week.* Theory of accounts and periodic procedures including the reporting process. Intensive study of assets with emphasis on related problems of income measurement and presentation. Does not satisfy

requirement for upper division cost accounting course at state universities.

18a COMMERCIAL LAW (3). *3 hours per week.* Introduction to law applicable to business; the history and philosophy of the law, agencies for enforcement and court procedures; and the substantive law of contracts, agency and sales, under the Uniform Commercial Code.

Chemistry

1a-1b GENERAL CHEMISTRY (5-5). *Prerequisites: 1a—Chemistry 51 with a grade of C or better, or high school chemistry with grade B or better, and two years of algebra or one year of algebra and one year of geometry. High school physics and trigonometry are recommended. 1b—Chemistry 1a with a grade of C or better. A qualification exam will be given at the first class meeting; students not qualifying will be counseled to take Chemistry 51 before continuing with Chemistry 1a. 3 lecture and two 3-hour lab periods per week. 1a—Principles of inorganic chemistry for students majoring in Engineering, Physical Science, Pre-Med, Pre-Dental, and other science fields. 1b—Continues the study of principles of chemistry and includes some descriptive chemistry of the elements, ionic equilibria, oxidation-reduction, qualitative analysis, introduction to nuclear chemistry, and introduction to organic chemistry.*

5 QUANTITATIVE ANALYSIS (4). *Prerequisite: Chemistry 1b (grade of C or better). 2 one-hour lectures; two 3-hour lab periods per week.* 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, medical sciences, and some areas of life science.

8 ELEMENTARY ORGANIC CHEMISTRY (3). *Prerequisite: Chemistry 1a (grade C or better). Chemistry 1b is strongly recommended. 3 one-hour lectures per week.* 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 (2). *Prerequisite: Concurrent enrollment in or completion of Chemistry 8. Two 3-hour lecture-lab periods per week.* Syntheses of typical organic compounds. Techniques of preparation, purification and identification including unknowns.

10 ENVIRONMENTAL CHEMISTRY (3). *3 lecture hours per week.* Introduction to the language of chemistry, followed by investigations into the role chemistry plays in various aspects of our environment. Topics such as pollution, food additives, drugs, etc., examined from a chemistry point of view. This course meets the general education requirements for physical science including the lab science requirement at many colleges and universities if Chemistry 10L is also taken.

10L EXPERIMENTAL ENVIRONMENTAL CHEMISTRY (1). *Prerequisite: Concurrent enrollment in or completion of Chemistry 10. 3 hours lab and recitation per week.* Experimental examination of some materials in our environment; such as the making of soaps, examining of fuels, flammability of materials, etc.

12a ORGANIC CHEMISTRY (5). *Prerequisite: Chemistry 1b with a grade of C or better. 3 lecture and two 3-hour lab periods per week.* Same as Chemistry 8 and 9. Recommended for students intending to take a second semester of organic chemistry.

30a INTRODUCTORY CHEMISTRY (4). *Prerequisite: One year high school algebra. 3 lecture and one 3-hour lab period per week.* Elementary course covering fundamental principles of general chemistry with emphasis on applied chemistry rather than theoretical principles. Not accepted toward physical or life science major, or engineering, but will meet the requirements for many programs in home economics, nursing, environmental tech., etc.

30b INTRODUCTORY CHEMISTRY (4). *Prerequisite: Chemistry 30a or Chemistry 1a. 3 lecture and one 3-hour lab period per week.* Continuation of fundamental general chemistry with an emphasis on organic and biochemistry.

48 SPECIAL TOPICS (1-3). *1 to 3 lecture hours per week.* A class dealing with topics of special interest. Specific subject matter will vary from semester to semester and will be announced in advance.

51 ELEMENTARY CHEMISTRY (3). *Prerequisite: Mathematics 11 or one year of high school algebra. Concurrent enrollment in Geometry or Intermediate Algebra strongly recommended. 3 one-hour lecture and one 3-hour lab periods per week.* Introduction to some of the theories, laws, concepts and language of Chemistry. This course should not be elected by students who need a general survey course. It is specifically planned to prepare students for Chemistry 1a. While the relatively few topics studied are developed slowly, the last part of the material covered in each topic is equal in difficulty to material studied in Chemistry 1a.

55 CHEMISTRY FOR WATER QUALITY CONTROL (2). *(Evening College) 3 hours per week.* Basic study of the elements, compounds, formula and chemical equations, concentrations of solutions, etc. Examination of specific tests in water quality control and the discussion of problems in these tests.

Chinese

1-2 ELEMENTARY CHINESE (3-3). *(Evening College) 3 lecture hours per week.* Introduction to reading, speaking and writing modern Mandarin Chinese. Emphasis on the spoken language. Chinese culture background pertinent to the learning of the language will be supplemented.

Conservation

1 ESSENTIALS OF CONSERVATION (3). *3 lecture hours per week.* Consideration of the national resources of the U.S., including forests, grasslands, wildlife, water, marine, soils, minerals and recreational problems and practices in resource management.

Cooperative Education

47 COOPERATIVE EDUCATION (1-4). *See also Administration of Justice 47, Business 47, Education 47, Environment 47, Food Technology and Management 47, Home Economics 47, Management 47, Mental Health 47, Nursery School 47, Recreation 47, Social Science 47, Special Education 47, Urban Studies 47. Credit/no credit.* One unit of credit for each five hours of work per week with a maximum of four units per semester can be earned by students who have jobs which are related to their occupational goals, with a maximum of 16 units in the College. Students who hold jobs not related to their occupational goals can earn a maximum of 3 units of Cooperative Education per semester with a maximum of 6 units in the College. Enrollment in at least 8 units including Cooperative Education is required of all students in the Parallel Plan. The Parallel Plan is for students holding part-time, afternoon and evening or swing-shift jobs. Students in the Alternate Semester Plan can earn a maximum of 4 units of Cooperative Education in one semester. The Alternate Semester plan is set up so two students hold one full-time work station. While one student is in school, the other is learning on the job. Through a combined program of work and study, the relationship between theory and practical application is clearly established for students. Students seeking employment should see the Placement Secretary in the Administration Building, Room 206. Further information about the Co-op Education program is available from your counselor or the Cooperative Education Office.

Data Processing

(See Business 12, Business 61 and Mathematics 18.)

Drafting

55 BASIC ARCHITECTURAL DRAFTING (2). (*Evening College*) 3 hours per week. Beginning program of planning and design for the family dwelling. Emphasis on architectural blueprint reading, floor plan design, home orientation, construction, local building codes, sketching and drafting.

Drama

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

1a (x) MASTERPIECES OF DRAMA CLASSICAL AND RENAISSANCE (3). 3 class hours per week. Study of the greatest plays and playwrights from classical Greece through the Elizabethan era in England. Principles underlying dramatic literature in each period will be related to dominant social, intellectual and artistic forces. Use of motion pictures, filmstrips, recordings and play attendance, as well as lectures and discussions.

1b (x) MASTERPIECES OF DRAMA MODERN ERA (3). *The second semester of this course. Students may take the course without having taken Drama 1a.* 3 class hours per week. Study of the greatest plays and playwrights from the 17th Century to the present. See description of Drama 1a.

10 (x) INTRODUCTION TO THE THEATRE (3). 3 lecture hours per week. 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. Viewing video-tape recordings, motion pictures, and stage plays; listening to recordings of plays. Subject matter will include such things as nomenclature, duties and responsibilities of the various theatre artists, traditions, script analysis, approach to a script from the director's viewpoint, the designer's viewpoint, the actor's viewpoint and the audience's viewpoint. Special lecturers may discuss publicity, performance, music and dance, motion pictures and T.V.

13a-13b (x) STAGE PRODUCTION (3-3). 2 lecture and 3 lab hours per week. Lectures and discussions on the theory and craftsmanship of building, rigging, painting, lighting, and otherwise preparing theatrical settings. Prac-

tical experience executing the technical work of the College's dramatic presentations.

13c-13d ADVANCED STAGE PRODUCTION (3-3). *Prerequisites: Drama 13a and 13b or their equivalent.* 2 lecture and 3 lab hours per week. Lectures and special projects in stage managing, technical work, sound and lighting.

14a THEORY AND PRACTICE OF ACTING (3). 4 class hours per week. Theories and techniques of acting and dramatic production, presentation of scenes and oral reading, video-tape recordings, pantomimes and improvisations.

14b-14c-14d ADVANCED ACTING (3-3-3). *Prerequisite: Drama 14a or equivalent.* 4 class hours per week. Review of basic principles and skills of acting, advanced theories and techniques. Basic introduction to script analysis and directing.

14aL-14bL-14cL-14dL ACTING LABORATORY (1-2). Supervised rehearsals of improvisations, pantomimes, oral readings and short scenes. Forms and styles of acting. Exercises in the use of mind, emotions, voice and body in acting. Acting scenes for drama classes and others.

15 PLAY PRODUCTION (1/2 to 2 units per play). *Prerequisite: Tryouts.* Problems of actual play production, acting. May be repeated for credit. Play rehearsal of seven weeks for each of three major productions per semester, the first four weeks of which are from 3-6 p.m. daily and the last three weeks from 7-11 p.m. daily.

16 PRODUCTION SHOP (1/2 to 2 units per play). *Hours by arrangement.* Problems of actual play production. Scene building, lighting, properties, rigging and stage crew operations. May be repeated for credit. Students may work on one to three plays per semester.

17 (x) COSTUME-FASHION DESIGN AND PREPARATION, MAKE UP (1/2 to 2). Problems of actual play preparation of costumes and makeup. This course will provide drama and fashion students the opportunity for practical experience in execution of costumes for dramatic productions, with possibilities for designing. May be repeated for credit.

20L (x) INTRODUCTION TO DIRECTING (LAB) (1/2 to 2 units per play). *One to three 2-hour labs per week.* 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. Study of composition, movement, tempo, climax and the use of sound and music. Preparation of play-production

plans and prompt-books. Directing of scenes for classes in drama and other fields and discussion of ideas dramatized in the scenes. Emphasis on learning by actual directing under teacher supervision. May be repeated for credit.

24 (x) MODERN DRAMA (3). *Also English 24. 3 hours per week.* Study, from a theatrical as well as a literary viewpoint, of the outstanding dramas written between 1880 and the present. Emphasis upon contemporary dramatic trends such as realism, naturalism, symbolism, expressionism, epic theatre, eclecticism. Appreciation and understanding. Reading, thinking, arguing and sharing. Relating drama to man's nature and problems and those to drama.

25 (x) INTRODUCTION TO SHAKESPEARE (3). *Also English 25. 3 hours per week.* Exploring and appreciating Shakespeare's best plays. A careful study of tragedy, history and comedy from Shakespeare's three major periods. The plays as superb fusions of poetry and drama, as mirrors of Renaissance and universal ideas and attitudes, and as summations of human nature and the human predicament. Emphasis upon Shakespeare as playwright, poet, psychologist and philosopher.

49 INDIVIDUAL PROJECTS (1-2). Special projects in such fields as directing, technical directing, costuming, dramatic literature and the integration of the theatre arts. May be repeated for credit.

Ecology

10 INTRODUCTION TO ECOLOGY OF THE WEST (3). *Prerequisite: None, but a course in Biology, Botany or Zoology is recommended. 3 lecture hours per week.* 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). *3 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). *Prerequisite: None. Economics 1a recommended. 3 hours per week for lectures and discussion.* Supply, demand and price determination in a market economy; the business firm's cost, revenues and price policies under conditions of competition and monopoly; the determination of wages, rent, interest and profits; international trade and finance; taxes, debts and public finance; comparative economic systems of other nations.

7 SURVEY OF ECONOMIC PROBLEMS (3). *3 lecture hours per week.* Non-theoretical consideration of the major economic problems which confront the citizen today. Students who have completed Economics 1a or 1b or Business 11 will not receive credit for this course.

11 ECONOMIC HISTORY OF THE UNITED STATES (3). *3 hours per week.* Origin and development of the American economy from colonial times to the present. Themes will include the basis for industrial growth, land and resource use, the transportation revolution, the development of money and banking machinery, changing trade patterns, the rise of organized labor, the role of government in aiding economic development and stabilization.

14a LABOR ECONOMICS (3). *3 hours per week for lecture and discussion.* The first half of the course is concerned with the composition of the labor force, the history, structure, philosophy and objectives of the trade union movement and the development of public control of labor relations. The second half is devoted to the economics of the labor market, including problems of labor supply, labor mobility, labor market organization, employment and unemployment, wage determination and economic security.

19 ECONOMICS OF POVERTY (3). *3 lecture hours per week.* Study of the current distribution of income in the United States. Analysis of the causes of poverty in America; the relationship of age, sex, color, location, education and health of the poor to the persistence of poverty will be considered. Past and current attempted solutions will be evaluated and possible new approaches to the problem will be discussed.

27 PROBLEMS OF UNDERDEVELOPED AREAS (3). *3 lecture hours per week.* Broad survey of contemporary problems of underdeveloped areas, concentrating on economic problems. The course will investigate the following topics: (1) an introduction to contemporary conditions in Asia, Africa and Latin America; (2) social and economic problems at the local or village level, with case studies; (3) economic and political problems at the national level, with special reference to

economic development policy; (4) problems of poverty and underdevelopment in America today.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in economics and the consent of the instructor and the Social Science Division Chairman.* Specified individual study or directed research in specific problem areas.

For Economic Statistics, see Statistics.

Education

1 INTRODUCTION (3). *3 lecture hours per week.* Exploring the total spectrum of education including pre-school, elementary school, junior high school, senior high school and junior college. Will explore the strength in the educational system, the areas of concern, current innovations, the challenges facing education, such as testing, bussing, middle-class and sub-culture values.

2 THE TEACHER ASSISTANT (2). *Prerequisite: Education 1 or consent of instructor. 2 lecture hours per week.* The basic course for the teacher assistant. The role, responsibilities and ethical considerations of the teacher assistant, his relationship to the professional teacher, the principal and the student; the clerical, supervisory and teaching aspect of the position. Field experience (Education 47—Cooperative Education) must be taken in conjunction with this course.

3 READING IN THE PUBLIC SCHOOLS (3). *3 lecture hours per week.* Brief history of reading, physiological and psychological basis of reading, philosophy of reading instruction, individual reading instruction, group reading instruction, acceleration problems in reading, multi-media approach in reading, teacher and teaching assistant variables in reading, facts and fallacies about reading readiness, review of research findings on reading instruction. Purpose: Training course in reading instruction for teaching assistants.

4 CHILDREN'S LITERATURE, STORYTELLING (3). *Also English 4. (Evening College) 3 hours per week.* Designed to give laboratory experience in presenting stories and poetry to children in the kindergarten-primary grades and to acquaint the teacher assistant, teacher, library aide and librarian with the history of literature for children and the outstanding authors and illustrators of children's books.

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit.* Supervised field experience. Hours by arrangement.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Education, and the consent of the instructor and the Social Science Division Chairman.* Specified individual study or directed research in specific problem areas.

Electronics

10 INTRODUCTION TO ELECTRONICS (3). *(Evening College) Open to all students except those currently enrolled in or who have completed a college course in electronics. 3 hours per week.* Study of basic electronics with a descriptive presentation and a non-mathematical approach. The influence of electronics in all phases of business, science and daily life is stressed.

Engineering

10 ENGINEERING AND THE ENVIRONMENT (2). *Prerequisite: None, but required of Engineering majors. 2 lecture hours per week.* Technological assessment of current and future problems facing mankind, including the ecological, legal, social and political aspects and their interconnections. Exploration of the engineering systems' approach to finding and providing optimum solutions of environmental needs. Various present-day problems will be analyzed. This course is open to both technical and non-technical majors.

20 DESCRIPTIVE GEOMETRY (2). *Prerequisite: Mathematics 21. 6 lab hours per week.* Lectures and drafting-room work orthographically solving engineering problems in three-dimensional space. Introduction to graphic statics, vector properties, Maxwell's diagrams, space-force polygons.

22 ENGINEERING GRAPHICS (2). *Prerequisite: Mathematics 30 or 23a or consent of the instructor. 6 lab hours per week.* Numerical and graphical calculus. Nomography. Introduction to creative design. Design project.

35 VECTOR STATICS (3). *Prerequisite: Mathematics 30 or 23a or consent of instructor. 3 lecture hours per week.* Plane and space force systems; equilibrium problems covering structures, machines, distributed force systems, friction, moments of inertia and virtual work.

36 VECTOR DYNAMICS (3). *Prerequisites: Engineering 35, Mathematics 31 or 23b; Physics 4b (or 2b with a grade of B). 3 lecture hours per week.* Relations of motion, work, energy, impulse, momentum, impact. Simple harmonic motion, damped vibratory systems, Curvilinear motion, rigid body rotation, gyrostatics of rigid bodies. D'Alembert's principle, generalized coordinates,

Hamilton's principle, Lagranges' equations, introduction to celestial mechanics, elementary fluid mechanics.

37 STRENGTH OF MATERIALS (3). *Prerequisites: Engineering 35 and Mathematics 31 or 23b. 3 lecture hours per week.* Elastic behavior of crystalline materials, and rudiments of plastic behavior of common engineering materials. Stress and strain relationships. Analysis of effects of internal and external forces on flexible bodies and structural assemblies. Failure modes. Analytical structural design techniques.

38 CIRCUITS AND DEVICES (3). *Prerequisites: Mathematics 31, 23b, Physics 4b recommended or consent of instructor. 3 lecture hours per week.* Introduction to electrical and electronic circuits and devices. Network theory. Amplifier theory. Instruments.

48 SPECIAL TOPICS (1-3). Selected topics in Engineering. Course content and units to be determined by the Mathematic/Engineering Division in relation to need and available staff.

49 INDIVIDUAL PROJECTS (1-2). Directed individual study of a suitable topic.

50 INTRODUCTION TO MATERIALS EVALUATION (Nondestructive testing) (3). *(Evening College) 3 hours per week.* Introduction to the nondestructive testing with emphasis on developing the basic and theoretical background needed to understand the nature of the various tests, their uses and interpretation of indications.

English

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

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

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

1a READING AND COMPOSITION (3). *3 hours per week.* Intensive reading and writing based on a study of primarily non-fiction materials.

1b INTRODUCTION TO LITERATURE (3). *Prerequisite: English 1a. 3 hours per week.* Study of literary types: short story, drama, poetry and the novel. Themes based on reading and class analysis. English 1a-1b may also be taken in conjunction with History 17a-26; see "Interdisciplinary Studies".

2 ADVANCED COMPOSITION (3). *Prerequisite: English 1a, 1b. 3 hours per week.* Practice in writing, based upon the extensive and intensive reading of literature. Students will be asked to write in many different forms, and some emphasis will be placed on the longer essay.

4 CHILDREN'S LITERATURE, STORYTELLING (3). *Also Education 4 (Evening College) 3 hours per week.* Designed to give laboratory experience in presenting stories and poetry to children in the kindergarten-primary grades and to acquaint the teacher assistant, the teacher, the library aide and the librarian with the history of literature for children and the outstanding authors and illustrators of children's books.

9 CREATIVE WRITING (3). *3 hours per week.* The craft of writing fiction and poetry. Fall sections will concentrate exclusively upon fiction, spring sections entirely upon poetry.

21 THE SHORT STORY (3). *(Evening College) 3 hours per week.* Study of an anthology of short stories. Class discussion, oral readings and literature.

23 INTRODUCTION TO POETRY (3). *Prerequisite: English 1b or permission of the instructor. 3 hours per week.* Discovery and study of the experience of a poem. Intensive and extensive reading, discussion, papers.

24 MODERN DRAMA (3). *Also Drama 24. 3 hours per week.* Study from a theatrical as well as a literary viewpoint, of the outstanding dramas written between 1880 and the present. Emphasis upon contemporary dramatic trends such as realism, naturalism, symbolism, expressionism, epic theatre and eclecticism.

25 INTRODUCTION TO SHAKESPEARE (3). *Also Drama 25. 3 hours per week.* Exploring and appreciating Shakespeare's best plays. Careful study of tragedy, history and comedy from Shakespeare's three major periods.

27 MODERN LITERATURE (3). *Prerequisite: English 1a or permission of the instructor. 3 hours per week.* Study of selected fiction, poetry and drama of the 20th Century. Lectures, discussions, related reading, writing of critical papers.

28a FILM STUDY AND APPRECIATION (3). *2 lecture and 2 lab hours per week.* Study of significant motion pictures as an art form with emphasis on structure of film and the technique of film making. Screening of films followed by discussion and/ or written analysis relating to appreciation and understanding of film as a communicative medium. Production of films by students optional.

28b MOTION PICTURE PRODUCTION (3). *2 lecture and 2 lab hours per week.* Theoretical and practical course on the art and technique of film making. Working from the conceptual stage, students will prepare scenarios, scripts, and story boards. Using super 8mm. equipment, they will shoot film, edit their footage into a meaningful visual form and ultimately produce short films.

30 MAJOR FIGURES IN AMERICAN LITERATURE (3). *Prerequisite: English 1a or permission of the instructor. 3 hours per week.* Study of the writings of some of the major figures in American literature. Intensive reading, lectures, discussion, papers.

36 SCIENCE FICTION AND FANTASY (3). *Prerequisite: English 1a or permission of instructor. 3 hours per week.* Study of science fiction and fantasy emphasizing 20th Century works. Both popular writers and established literary figures covered in wide range of forms, types and themes of SF. Extensive and intensive readings, lectures, discussion, critical papers in areas of individual interest.

37 ENGLISH ELECTIVES (1-2). *3 hours per week for 6 or 12 weeks.* Study of important literature, language or media, offered on a variable basis from semester to semester depending upon student interest and faculty expertise in a particular area. See the semester schedule for specific offerings.

38 LITERATURE BY AND ABOUT WOMEN (3). *3 lecture hours per week.* Comparison of the images of women in literature written by both female and male writers. Beginning with background material drawn from classical literature, students will then read a variety of short stories, poetry and novels by writers such as Doris Lessing, Kate Choplin, Adrienne Rich, Mary McCarthy, Dorothy Parker, Ernest Hemingway, Norman Mailer, John Steinbeck, Gregory Corso and Ezra Pound. Men are encouraged to attend.

42a MASTERPIECES OF CLASSICAL AND EUROPEAN LITERATURE (3). *Prerequisite: Enrollment in English 1a or permission of the instructor. 3 hours per week.* Selections from the literature of ancient

Greece through Renaissance Europe will be read, analyzed, discussed and, hopefully, enjoyed. Group work, oral reports, papers.

42b MASTERPIECES OF CLASSICAL AND EUROPEAN LITERATURE (3). *Prerequisite: Enrollment in English 1a or permission of the instructor. 3 hours per week.* Study of selected European novels, short stories and plays from the 17th Century to the present. Reading, analysis and discussions; written reports, oral readings and lectures.

43 BLACK LITERATURE (3). *3 hours per week.* Historical and literary survey of Afro-American literature emphasizing principal authors and their works from the 19th Century to the present. Lectures and discussions based on readings of poetry, short stories, novels and drama; written reports.

44 MEXICAN-AMERICAN LITERATURE (IN ENGLISH) (3). *3 hours per week.* Study of literature written by Mexican-Americans. Emphasis will be placed upon contemporary stories, poems and essays.

46a SURVEY OF ENGLISH LITERATURE (3). *Prerequisite: English 1b or permission of the instructor. 3 hours per week.* Study of the typical works of major English writers from Chaucer to the end of the 18th Century. Discussions, lectures, recordings.

46b SURVEY OF ENGLISH LITERATURE (3). *Prerequisite: English 1b or permission of the instructor. 3 hours per week.* Study of the typical works of major 18th, 19th and 20th Century English writers. Discussions, lectures, recordings.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in college English; approval of instructor and the Chairman of the English Division. Hours by arrangement.* Students will present a paper or papers dealing with a specific topic in literature or language, a topic beyond the scope of offered courses. In-depth reading is usually required.

50a READING AND WRITING (4). *4 hours per week.* Reading of fiction and nonfiction materials; vocabulary study; short papers, some work on study skills, critical thinking and basic writing skills. Course is designed to increase reading and writing skills and to develop an interest in reading for pleasure and information. English 50a and 50b are recommended for students who have found previous English courses difficult.

50b READING AND INTERPRETATION (4). *4 hours per week.* Reading and study of plays, novels, poetry,

stories. Vocabulary study. Quizzes and short compositions based upon the reading.

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

Prerequisites: Assignment by faculty personnel and by in-class test. 5 hours per week. Study of English grammar and composition, drill in oral and written vocabulary, sentence structure and English idiom. Two semesters of English 57 satisfies the English requirement for the AA degree. May be repeated once for credit.

67 READING LABORATORY (1). *Credit/no credit.*

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

68 WRITING LABORATORY (1/2-3). *Credit/no credit. 3 hours per week.*

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

69 LEARNING WORKSHOP (1). *(Evening College) Credit/no credit. 3 hours per week for 8 weeks.*

Course designed to help students solve ordinary study problems with specific emphasis on understanding and getting through reading assignments; writing themes, term papers and essay examinations; taking notes, and setting up realistic study and personal schedules. May be repeated for credit as often as necessary.

Environment

1 INTRODUCTION TO THE BIOLOGICAL ASPECTS (3). *3 lecture hours per week.*

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

2 INTRODUCTION TO THE POLITICAL AND SOCIAL ASPECTS (3). *3 lecture hours per week.*

Study of political institutions and historical backgrounds related to today's environmental concerns, plus development of

an environmental vocabulary necessary to participate in the environmental debates on a fairly sophisticated level. "Eco-tactics" are emphasized as members of the class choose, plan and carry out a group project dealing with some aspect of environmental concern. Course content focuses on issues in California and San Mateo County such as land use plans, different types of pollution and their correction, various methods of changing people's attitudes, etc. This course is designed as a companion to Environment 1, 3 and 4, as a General Education course and as an introduction to careers in the environmental field.

3 INTRODUCTION TO THE PHYSICAL ASPECTS (3). *3 lecture hours per week.*

Introduction to the physical aspects of the atmosphere, hydrosphere, lithosphere and the role energy plays in these spheres. Also an examination of some special problems of technology such as food additives, insecticides, noise, fertilizers, etc.

4 INTRODUCTION TO THE PLANNING ASPECTS (3). *3 hours per week for lecture, discussion and demonstration.*

Course emphasizes going out into the community and looking at selected environmental problems firsthand. The role of urban planning and the actions of governmental agencies is studied. Use of U.S. Census data and field report studies, both public and private, analyzed. Environmental policies, environmental impact statements, regional and county land use plans and policies also analyzed.

5a LATIN AMERICA: MAN AND HIS ENVIRONMENT (3). *Also Geography 5a. 3 lecture hours per week.*

Regional study of man and his culture in its relationship to his physical environment.

5b AFRICA: MAN AND HIS ENVIRONMENT (3). *Also Geography 5b. 3 lecture hours per week.*

Regional study of man and his culture in its relationship to his physical environment.

5c ASIA: MAN AND HIS ENVIRONMENT (3). *Also Geography 5c. 3 lecture hours per week.*

Regional study of man and his culture in its relationship to his physical environment.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Environment and the consent of the instructor and the Division Chairman. Hours by arrangement.*

Specified individual study or directed research in specific problem areas.

51 BASIC MATHEMATICS FOR TREATMENT PLANT OPERATORS (1). *(Evening College) 3 hours per week for 8 weeks.*

Fundamental mathematic

operations pertinent to treatment plant personnel, general field operations, personnel and persons interested in the expanding field of environmental control technology.

Food Technology and Management

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

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit. Prerequisite: Completion of Food Technology 50a or 51a, or approval of instructor.* Credit for supervised, on-the-job, work experience in the food services, hospitality or allied industries. A unit of credit, up to a total of four units, is given for each five hours of work, weekly, in a job or position related to the Food Technology and Management major. Course consists of lecture meetings, visitation by Cooperative Education supervisor to student's place of employment, reports by the employer and reports by the student.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisite: Permission of instructor, 3 or 6 hours per week by arrangement.* Special research into current problems and their relationship to the future of the food service—hospitality industry. The problems to be investigated and reported are varied and changing; the specific areas of research will be determined by the needs of the industry and their relationship to food technology and management education.

L50a-50b QUANTITY FOOD PREPARATION (4-3). *(See 51a-51b.)*

51a-51b QUANTITY FOOD PREPARATION (2-2). *Prerequisite: None. Beginning students must enroll in 50a-51a or 50b-51b and alternate the next semester, unless excused by Department Chairman because of prior training or experience. Concurrent registration in Food Tech. 56 and 68 are required for all beginning students in 50a or 50b. 50a—12 lab (kitchen) hours per week. L50b—9 lab (kitchen) hours per week. 51a-b—2 lecture hours per week.* Training and experience in basic quantity food preparation and service. Students work by teams and are rotated through all kitchen and service stations. Students are under supervision of student chef and student manager, with overall supervision by the instructor. Students prepare food for cafeteria and Faculty Dining Room and serve in Faculty Dining Room.

52 FOOD PREPARATION SUPERVISION (3). *Prerequisite: Food Technology 50a and 50b or permission of instructor. One lecture hour and 6 lab hours per week.*

Experience in middle-management. The principles of supervising while being supervised. Advanced students are scheduled as student chef or student manager for six hours, one day a week. Student chef is in charge of kitchen and preparation stations. Student manager is in charge of service and faculty dining room. May be repeated once for credit.

54a-54b ADVANCED FOOD PREPARATION (4-4). *Prerequisite: Food Technology 50a-50b or permission of instructor. One lecture and 9 lab hours per week.* Advanced cooking techniques, analysis of meat cutting, introduction to buffet and preparation of canapes, hors d'oeuvres, advanced soups and sauces.

55a-55b MODERN BAKING (2-2). *One lecture and 3 lab hours per week.* Practical lab experience in the methods of baking breads, cakes and confectionary. Introduction to decorating for modern food service requirements.

55c ADVANCED BAKING (2). *Spring semester. Prerequisites: Food Technology 55a, 55b. One lecture hour, 3 laboratory and 2 home preparation hours per week.* Advanced baking class with emphasis on confectionary, decorating, molding, sculpturing and ice carving for students who have had Food Technology 55a/b or for craftsmen in the trade wishing an opportunity for advancement. Students will work with gum pastes, royal icings, chocolate, flower molding and wedding cake design.

56 DINING ROOM SERVICE TRAINING (1). *Concurrent registration in Food Technology 56 is required for all beginning students in 50a or 50b. One lecture hour per week.* Waiter/Waitress training: An introduction to dining room service by lecture, demonstration and practice. Lab experience in the faculty dining room. Students will learn the procedures for correct and proper table service to customers.

56b DINING ROOM SERVICE TRAINING (4). *Fall semester. Prerequisite: Food Technology 56a, industry experience or permission of instructor. One lecture, 10 laboratory and 2 home preparation hours per week.* Supervision and lab practice for advanced students seeking careers as host, hostess, maitre d', head-waiter/waitress and/or cashier. Lecture and lab experience in Faculty Dining Room.

57 NATURAL BREAD BAKING (1). *(Evening College) Spring semester, 3 hours per week.* Designed to teach the student how to prepare and bake various types of bread with emphasis on the use of natural ingredients, different grains and leavening agents. Preparation of salt-free and dietetic breads will be included.

60a QUANTITY FOOD PURCHASING (2). *2 lecture hours per week.* 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.

60b FOOD AND BEVERAGE-COST CONTROLS (2). *(Evening College) Prerequisite: Food Technology 60a. 2 lecture hours per week.* Breakdown of food and beverage cost controls—relating to the food industry. Today's new methods of maintaining controls on the costs of foods, beverages, and allied products in order to make a profit.

65 MENU PLANNING (2). *2 lecture hours per week.* Essentials of proper menu planning, menu technology, pricing, layout and design.

67 KITCHEN AIDE TRAINING (2). *Prerequisite: Admittance by counselor referral. One lecture and 3 lab hours daily.* To enable students to acquire the skills needed for entry-level employment as kitchen aides and warewashers. Training will lead to expertise in ware-washing, dining room bussing, pantry work, salad preparation, and assisting in the kitchen.

68a SANITATION AND SAFETY FOR THE HOSPITALITY INDUSTRY (1). *Required enrollment for students enrolled in their first semester of Food Tech program. One lecture hour per week.* Basic knowledge needed to protect the public, the consumer, the customer and the food service worker.

68b SANITATION AND SAFETY FOR THE HOSPITALITY INDUSTRY (2). *(Evening College) 2 lecture hours per week for 9 weeks.* Basic knowledge needed to protect the public, the consumer, the customer and the food service worker.

70 FOOD MANAGEMENT PROBLEMS (2). *Prerequisite: Sophomore standing in Food Technology program. 2 lecture hours per week.* General survey course including personnel supervision, financial, public relations and other management problems. Guest lecturers and field trips.

71 FOOD PRODUCTION MANAGEMENT (2). *(Evening College) Prerequisites: Basic knowledge of quantity food production methods and a knowledge of food preparation principles. 2 lecture hours per week.* Meets new regulations requirement for Certified Food Service Supervisor (H.E.W. requirements). Covers master menu planning, requisitioning, receiving and storing foods and supplies, direction of food preparation production and principles, personnel scheduling, O.S.H.A. regulations and records maintenance. Special emphasis on dietary supervision.

80 INTRODUCTION TO HEALTH CARE DIETARY (3). *(Evening College) Prerequisites: Basic knowledge of quantity food production; food service employee in a health care institution. 3 lecture and 6 home preparation hours per week.* Scope and responsibility of the health care industry and identification of dietary services as a component. Relationship of food service and nutrition care to the operation of the total facility. Consideration of supervisory and management responsibilities within dietary services and co-relationships of the health care team. Analysis of types of food service systems, menu patterns, diet orders. Basic concepts of legislation pertaining to food service; role of food service in public relations; future trends.

81 INTRODUCTION TO HEALTH CARE DIETARY SERVICE (3). *(Evening College) Prerequisites: Basic knowledge of quantity food production; food service supervisor in a health care institution. Concurrent enrollment in supervised field experience required, see brochure. 3 hours per week.* Scope and responsibility of the health care industry and identification of dietary services as a component. Relationship of food service and nutrition care to the operation of the total facility. Consideration of supervisory and management responsibilities within dietary services and co-relationships of the health care team. Analysis of types of food service systems, menu patterns, diet orders. Basic concepts of legislation pertaining to food service; role of food service in public relations; future trends.

90 INTRODUCTION TO FOOD SERVICE—HOSPITALITY INDUSTRY (2). *Fall semester. Prerequisite: Second semester student or permission of instructor. 2 lecture hours per week.* To acquaint students with the broad spectrum of the food service/hospitality industry, its publications, opportunities and needs. To provide all Food Technology students an opportunity to explore all the fields of employment available to them and to stimulate student interest in training for employment in the food industry. To provide students with the widest possible overview of the industry. To acquaint students with the specifics of food and lodging training in a wide variety of areas in which there are maximum job opportunities.

Forestry

1 INTRODUCTION TO FORESTRY (3). *3 lecture hours per week.* Study of the forest as a biotic system, with emphasis on trees, plants, animals, the forest environment and their ecological relationships.

French

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

1 ELEMENTARY FRENCH (5). *5 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). *Prerequisite: Completion on the college level of the first semester with a passing grade or assignment by the English-Foreign Language Division. 5 class hours per week.* Conversation, dictation, further study of grammar and sentence structure; study of cognates, derivatives and idioms, reading of short stories. The student is urged to make extensive use of the listening facilities in the language laboratory.

3 INTERMEDIATE FRENCH (5). *Prerequisite: Completion on the college level of the first two semesters with a passing grade or assignment by the English-Foreign Language Division. 5 class hours per week.* Reading of short stories, plays or novels, review of grammar, conversation, composition, dictation. The student is urged to make extensive use of the listening facilities in the language laboratory.

4 ADVANCED INTERMEDIATE FRENCH (3). *Prerequisite: Completion on the college level of the third semester with a passing grade or assignment by the English-Foreign Language Division. 3 class hours per week.* 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.

25a-25b ADVANCED FRENCH (3-3). *Prerequisites: 25a—Completion of the fourth semester with a passing grade or assignment by the English-Foreign Language Division; 25b—25a. 3 class hours per week.* Reading and discussion of works of French literature. Continued review of principles of grammar.

27 FRENCH PRONUNCIATION (2). *(Evening College) Prerequisite: No absolute prerequisite, but background in French recommended. 1 1/2 lecture and 1 1/2 lab hours per week.* Comprehensive study of the theory and practice of pronunciation of the French language. Practical approach, with an emphasis on much oral work in class and in the language laboratory, to improve the pronunciation

skills of those persons who have been, or who will be, exposed to French at some level.

46 FOREIGN LANGUAGE LABORATORY (1/2-1). *Credit/no credit. 3 lab hours per week.* A program consisting of 25-50 hours of work to be done in the language laboratory emphasizing speaking and understanding French.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: French 4 and permission of instructor.* Reading of French classics, contemporary literature or recent periodicals. Conference periods for oral reports. Time to be arranged. A minimum of 3 hours of reading per each unit of credit is required weekly.

100a-100b INTRODUCTION TO ORAL FRENCH (2-2). *Credit/no credit. 3 hours per week.* Practical course in the French language approached by way of conversation. Intensive drill in the formulas and idioms of daily speech is supported with sufficient grammar to give flexibility in the spoken language.

Geography

1a PHYSICAL GEOGRAPHY (3). *Prerequisite: High school geometry is highly recommended. 4 hours per week for lecture, discussion and demonstration.* Basic characteristics of maps, the earth's grid, seasons, time, weather and climate, soils and vegetation, ocean currents, landforms. The interrelationship of these basic factors will be analyzed in the regional framework of the entire earth's surface. Strong emphasis will be placed on the regional concept and the use of maps as a primary tool for this study.

1b CULTURAL GEOGRAPHY (3). *3 lecture hours per week.* Within the framework of world regions and cultural realms, this course will analyze the areal distribution of the most important parts of man's cultural occupation of the earth. Emphasis on the way man makes a living. Consideration of culture within the framework of race, language, religion, political boundaries, population distribution and settlement patterns will be the basic outline.

3 GEOGRAPHY OF CALIFORNIA (3). *3 lecture hours per week.* This course will attempt to give the student a better understanding of the state. The physical regions, climate and weather, major landforms will be analyzed. Population distribution, changing trends in the fields of environment and governmental policies will be emphasized.

4 URBAN ECONOMIC GEOGRAPHY (3). *3 lecture hours per week.* Investigation and description of the basic resources in 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. Emphasis will be on the industrialized areas such as the United States and the interrelationship of urban growth and economic development.

5a LATIN AMERICA: MAN AND HIS ENVIRONMENT (3). *Also Environment 5a. 3 lecture hours per week.* Regional study of man and his culture in its relationship to his physical environment.

5b AFRICA: MAN AND HIS ENVIRONMENT (3). *Also Environment 5b. 3 lecture hours per week.* Regional study of man and his culture in its relationship to his physical environment.

5c ASIA: MAN AND HIS ENVIRONMENT (3). *Also Environment 5c. 3 lecture hours per week.* Regional study of man and his culture in its relationship to his physical environment.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in geography, and the consent of the instructor and the Social Science Division Chairman. Hours by arrangement.* Specified individual study or directed research in specific problem areas.

Geology

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

1a GENERAL GEOLOGY: DYNAMICAL AND STRUCTURAL (4). *Not open to students who are taking Geology 10. Prerequisite: Elementary chemistry and elementary geometry are highly recommended. 3 lecture and one 3-hour lab period per week.* 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). *Prerequisite: Geology 1a or Geology 10. 3 lecture and one 3-hour lab period per week.* 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. 2 lecture, one recitation and 2 lab hours per week.* 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 including the lab science requirement at many colleges and universities.

15 URBAN ENVIRONMENTAL GEOLOGY (3). *Prerequisite: Geology 1a or 10 recommended. 2 lecture hours and 3 all day field trips by arrangement.* Slide-illustrated lectures and field trips are used in a study of Geologic hazards in California and especially in the San Francisco Bay Area. The course stresses earthquake and landslide hazards with less emphasis placed on volcanic hazards, sea wave hazards, dam failure hazards, bay pollution and oil spills.

49 INDIVIDUAL PROJECTS (1-2). *Admission only by consent of the instructor. Prerequisites: Geology 1a and Geology 1b. Hours to be arranged on an individual basis.* 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). *5 class hours per week.* Study of and practice in the basic forms and patterns of German; development of a satisfactory pronunciation; learning and using vocabulary of high frequency; reading of simple German texts. Students are urged to make use of the listening facilities in the language laboratory.

2 ADVANCED ELEMENTARY GERMAN (5). *Prerequisite: German 1 with a passing grade or assignment by the English-Foreign Language Division. 5 class hours per week.* 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). *Prerequisites: German 2 with a passing grade or assignment by the English-Foreign Language Division. 5 class hours per week.* 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). *Prerequisite: German 3 with a passing grade or assignment by the English-Foreign Language Division. 3 class hours*

per week. 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.

49 INDIVIDUAL PROJECTS (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.

100a-100b INTRODUCTION TO ORAL GERMAN (2-2). *(Evening College)* Practical course in the German language approached by way of conversation. Intensive drill in the patterns and idioms of daily speech is supported with sufficient grammar to give flexibility in the spoken language. This course will not fulfill language requirement at California State Colleges or at the University of California.

Guidance

1 INTRODUCTION TO COLLEGE (1). *2 hours per week (8 weeks or 16 hours per semester).* The new student is helped to know and understand Canada College so that he might make best use of its resources and activities. A variety of techniques are used for self-appraisal so that the student can make satisfying, intelligent, and realistic decisions in terms of his abilities, interests, needs, values, and future educational and vocational plans. Individual conferences with the instructor are an integral part of this class.

2 EFFECTIVE LEARNING (1). *2 hours per week (8 weeks or 16 hours per semester).* This course will help a student solve ordinary college study problems. Discussions will be held on topics such as taking notes, remembering what has been read, taking and preparing for examinations, exploring of student-faculty relationships. Study difficulties may be discussed with the instructor on an individual basis.

3 OCCUPATIONAL PLANNING (1). *2 hours per week (8 weeks or 16 hours per semester).* Designed for the student who is undecided about an occupation. Vocational interest tests, various self-appraisal techniques and discussions give the student insights into his abilities, interests, and personality. Occupational trends and ways of learning more about specific occupations will be explored. Individual conferences are available to students for interpretation of class materials and counseling.

4 SPECIAL INTEREST DISCUSSION GROUPS (1). *2 hours per week (8 weeks or 16 hours per semester).* The

student is offered an opportunity to explore and evaluate his personal values, goals, and expectations as they relate to this social and cultural environment. Any group of students with a common concern may meet under the leadership of a counselor to discuss and explore these interests. Another aspect of Guidance 4 includes small group experiences designed to promote intra- and interpersonal growth. These groups are conducted by the office of Psychological Services. They meet 10 weeks for 2 hours each, and usually begin shortly after the regular semester has begun. Contact your counselor to specify which Guidance 4 you wish to enroll in.

5 SELF-AWARENESS (1). *Credit/no credit.* Small groups of students (about 10 members) engage in self-exploration through sharing and interaction with each other. The process will be facilitated by exercises and modeling by responsible and ethical leaders. This is not group psychotherapy. It is designed to promote personal growth through self-awareness. The groups are led by experienced faculty and/or counseling interns in graduate school. All groups are supervised by the college psychologist. Each group meets for 10 weeks, 2 hours weekly, beginning in the third week of each semester. Evaluation will be based on attendance and level of participation. Course is appropriate for students in the behavioral sciences.

10 COLLEGE AWARENESS (2). *2 hours per week.* Intended primarily for students in special programs and emphasizes their special needs. All students are welcome to participate. An effort is made to assist the student in evaluating his interests and aptitudes and relate these to his educational plans, to develop good study habits, acquaint him with the College, and to encourage his participation in the College activities. Sections are set up for the Student Development Program and SPEED.

46 EDUCATIONAL AND VOCATIONAL EXPLORATION FOR WOMEN (2). *(Evening College) Credit/no credit. 3 hours per week.* Women will be urged to choose one of the four possibilities: career or job, volunteer work, homemaking, returning to school. They will be asked to participate in structuring the course to fit their needs. The following resources will be used. Canada College staff, personnel of the County Volunteer Bureau and the Human Resources Development office. Participants will be given a Strong vocational interest test and aid in interpretation of results. The course will conclude with individual counseling sessions.

Health Education

1 HUMAN HEREDITY AND BIRTH DEFECTS (1). *2 hours per week for 8 weeks.* Survey of the principles and

mechanisms of human heredity, sex determination, embryonic development, fetal malformations both genetic and environmental origin.

2 REPRODUCTION AND SEXUALITY. See Biology 39.

3 DRUGS AND ALCOHOL (1). *2 hours per week for 8 weeks.* Survey of the societal and personal health problems involved in the use of alcohol and drugs. Included are physiological and psychological aspects of use and abuse.

4 NUTRITION AND PHYSICAL FITNESS (1). *2 hours per week for 8 weeks.* Study of the various aspects of good nutrition as they relate to physical fitness. Overweight, underweight, food fads, exercise are topics included.

5 DISEASES (1). *2 hours per week for 8 weeks.* Discussion of the common infectious and non-infectious diseases which plague man. Topics include: Diabetes, pneumonia, cancer, T.B., emphysema, body defenses against disease, causative agents of disease and methods of treatment.

6 MENTAL HEALTH (1). *2 hours per week for 8 weeks.* Study of personality development and emotional health including behavioral aspects, adjustment, stress and problem-solving techniques.

7 CONSUMER HEALTH (1). *2 hours per week for 8 weeks.* A common-sense guide to the health services of today. Topics will include: selection of appropriate medical services and medical insurance plans, avoidance of "quackery" and frauds in medicine, sensible selection of health care products.

8 HEALTH OCCUPATIONS (1). *2 hours per week for 8 weeks.* Study of the allied health professions and paramedical technologies. Areas include prerequisites, schooling, job descriptions, licensing and salaries.

9 BODY STRUCTURE AND FUNCTION (1). *2 hours per week for 8 weeks.* Survey of normal and pathological structure and function of human body systems including the special senses.

10 FIRST AID (1). *2 hours per week for 8 weeks.* First Aid is the immediate, temporary treatment given in the case of accident or sudden illness before the services of a physician can be secured. This course is required for all students not presenting standard Red Cross certificates. Not required of those who have graduated from a California public high school since 1952.

History

4a HISTORY OF WESTERN CIVILIZATION (3). *3 hours per week.* The rise and decline of the civilization of the ancient world, the rise of Christianity, the growth and decline of Medieval society, the Renaissance, the Reformation and the opening of the modern world.

4b HISTORY OF WESTERN CIVILIZATION (3). *Prerequisite: None. History 4a is recommended. 3 hours per week.* The rise of modern Europe: the Enlightenment, the French Revolution and the growth of Liberalism. The emergence of modern society: economic problems of industrialization, development of modern ideologies, and the World Wars and international experiments of the 20th Century.

4c HISTORY OF AMERICAN CIVILIZATION (4). *Prerequisite: None. History 4a is recommended. 3 lecture and 1 discussion hour per week.* The colonial settlement of North America, the Enlightenment, the Age of Revolution and the growth of democracy, the problems of industrialization, the emergence of modern society, the effects of the expansion of the 19th and 20th Centuries upon the culture of America and the role of the United States in the modern world. History 4c may be used in fulfilling the American Institutions requirement.

5 HISTORY OF ENGLAND (3). *3 lecture hours per week.* The more important political, constitutional, economic, social and cultural phases of the history of the English people. This course, though especially designed for pre-legal and English majors, is also of great value to the general student interested in international relations or the background of American culture.

6 MODERN AFRICA (3). *3 lecture hours per week.* African culture, African kingdoms, the slave trade, imperialism and the European conquest, the colonial period and independent Africa.

8a HISTORY OF AMERICAS (3). *3 lecture hours per week.* The history of North and South America, from the times of the pre-Columbian Indian civilizations, through the European conquest, to the ages of the revolutions against the European colonizing powers. History 8a may be used in fulfilling the American Institutions requirement.

8b HISTORY OF AMERICAS (3). *Prerequisite: None. History 8a is recommended. 3 lecture hours per week.* The history of Latin America from the time of the emergence of the new American nations with their revolutions for independence to the present. Emphasis will be on the efforts to cope with capitalism, democracy, socialism, ex-

pansionism and other forces in the story of Latin America through to modern times, and on the problems facing both Latin America and the United States today in their unique, Western Hemispheric relationships.

9a ASIAN CIVILIZATION-INDIA AND SOUTHEASTERN ASIA (3). *3 lecture hours per week.* The historical and cultural development of India, Pakistan, and the southeastern Asian countries—Thailand, Vietnam, Burma, Indonesia and Ceylon. Special emphasis will be on their religious, political and artistic development from ancient to modern times. An attempt will be made to show the common cultural theme among them and how they respond to the impact of the Western and Chinese civilizations.

9b ASIAN CIVILIZATION-EASTERN ASIA (3). *3 lecture hours per week.* The historical and cultural development of the Eastern Asian countries—China, Korea and Japan. Special emphasis will be on their philosophical, religious, political and artistic development from ancient to modern times. An attempt will be made to show the common cultural theme among these countries and how they respond to the impact of the Western World.

13 THE BIBLE AS HISTORY (3). *3 lecture hours per week.* Writings of the Old and New Testaments in their historical settings.

14 RELIGION IN AMERICA (3). *3 lecture hours per week.* Historical survey of religious thought and activity in this country and its influence upon the development of American civilization.

17a UNITED STATES HISTORY TO 1865 (3). *3 lecture hours per week.* The discovery of the New World and the building there of a new nation. Places special emphasis, first, on the cultural heritage from England and its modification to meet the needs of dissenting religions, a diversity of national and racial origins, and the impact of the frontier. Stresses the problems involved in the making of a new nation and the spread of political and social democracy during the early 19th Century. Traces the beginnings of a distinctive American culture, the westward thrust of the young republic and the impact of the early industrial revolution. Examines the diverging interests and cultures of the north and south culminating in the Civil War. Relationship of past events and forces to present-day situations will be stressed.

History 17a-26 may be used in fulfilling the American Institutions requirement and may also be taken in conjunction with English 1a-1b. See "Interdisciplinary Studies."

17b UNITED STATES HISTORY SINCE 1865 (3). *Prerequisite: None. History 17a is recommended. 3 lecture hours per week.* A century of progress and problems. The short-term and long-range reconstruction of the Union after the Civil War, with special reference to the impact of reconstruction on interracial relations. The stepped-up tempo of industrialization, with its consequences in the areas of bigness in business, labor-management relations, the status of farmers and the problems of the city. The changing role of the United States in foreign affairs with its emergence as a world power—conflicting interests and ideologies among large and small powers in the nuclear age, and the elusive search for world peace. Other urgent problems of our times - the "revolution in manners and morals" since the Second World War, racial relations, the preservation of the environment and the search for a balance between traditional individual freedoms and more broadly shared opportunities.

22 CALIFORNIA HISTORY (3). *3 lecture hours per week.* The values and qualities of life in California today with inquiry into how and why such social, economic and political qualities have developed out of the past. This course includes an examination of (a) the Indian, Spanish, Mexican, and American periods; (b) the environment; and (c) the institutions and functions of state and local politics. Considerable emphasis is given to current newspaper and magazine articles on topics and issues which relate California's past and present. Individual research projects which involve students in the historical process and study beyond the classroom are encouraged. Course satisfies the requirement in State and Local Government.

26 20th CENTURY AMERICAN HISTORY (3). *3 lecture hours per week.* Major economic, political, social, and intellectual developments since the United States emerged as a major power at the turn of the century. Current events and situations will be examined as continuations of happenings and forces from the earlier years of the 20th Century. U.S. foreign policy, minority relations, social and political reform intellectual attitudes and values are examples of some of the topics covered in this course. Course satisfies the State and Local Government requirement.

History 17a-26 may be used in fulfilling the American Institutions requirement and may also be taken in conjunction with English 1a-1b. See "Interdisciplinary Studies."

History 26 may also be taken as an interdisciplinary course with Art 1c, which emphasizes contemporary art and 20th Century culture.

29 HISTORY FOR HISTORY MAJORS (3).

Prerequisites: Satisfactory completion of at least one course in history. Permission of instructor, 3 lecture hours per week. An honors seminar designed particularly for history majors and transfer students going on in history to acquaint them with research methods and skills and with the nature and philosophy of history.

30 HISTORICAL GENEALOGY (3).

3 lecture hours per week. Designed for those interested in studying their family history in relationship to the movements that have shaped American history. Research methods will be studied and an individual research project required.

31 HISTORY AND GOVERNMENT OF SAN MATEO COUNTY (3).

3 lecture hours per week. Designed to provide the student with (1) an understanding of the social, economic, and political development of San Mateo County, (2) an opportunity to study first-hand the functions and institutions of county and city government, and (3) historical research techniques, using local primary sources of information whenever possible. An original individual historical research project on some aspect of San Mateo County's past or present is the focal point of this course.

32 SPANISH SPEAKING PEOPLES IN THE UNITED STATES (3).

3 lecture hours per week. The entrance, growth and development of the Spanish speaking peoples in the United States. Their specific contributions in the political, economic and historical growth of America will be explored with emphasis on their achievements.

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

Prerequisite: None. History 17a or sophomore standing is strongly recommended. 3 hours per week. 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.

36 HISTORICAL RESEARCH IN THE MINORITY COMMUNITIES (3).

Prerequisite: An ethnic history or culture course. 3 lecture hours per week. How to do research and deal with such questions as "What is history?" Most of the students will be involved in what is termed "oral" research; that is, interviewing people in the community and organizing and transcribing the materials for use in historical research.

40 HISTORY OF PROTEST IN THE U.S. SINCE THE CIVIL WAR (3).

3 lecture hours per week. Issues that have tended to divide and alienate many people in the United States since the end of the Civil War, including both conservative protest movements (American

Protective Association, Ku Klux Klan, etc.) and liberal to radical protest movements, (farm-based Populists, Middle-class Progressivism, etc.) and especially protests from the "under-side" (workers, racial minorities, anti-war, etc.) Lectures and group discussions; students will be strongly encouraged to present oral reports on "live items."

49 INDIVIDUAL PROJECTS (1-2).

Prerequisite: Previous or concurrent work in history and the consent of the instructor and the Social Science Division Chairman. Specified individual study or directed research in specific problem areas.

Home Economics

4 CREATIVE FOOD PREPARATION (3).

One 3-hour lecture-demonstration per week. Menu planning, selection, purchasing and preparation of foods for meals for optimum health and aesthetic enjoyment. Demonstrations, group preparation, tasting, home practice and laboratory testing. Introductory course designed especially for men and women seeking basic understandings and skills. Supplies fee.

5 CAREERS IN HOME ECONOMICS (1).

One lecture hour per week. Exploration of areas of employment opportunities in business, government, public service and education. Field trips and discussions with home economists in the field. Review of transfer-school strengths. Professionalism and its responsibilities. May be taken as an Individual Project (Home Economics 49) with consent of instructor.

6 CONSUMER IN THE MARKET PLACE (3).

Also Social Science 6. 3 lecture hours per week. Designed to help the consumer operate in today's complicated market place. Guidelines for intelligent buymanship and money management. Review of consumerism, and the rights and responsibilities of the consumer, including legislation.

7 HOME MANAGEMENT — PERSONAL AND FAMILY (2).

2 lecture hours per week. Management of time, energy, money, equipment and supplies. Emphasis on decision-making in relation to the goals and development of the family and its individual members. Use of case studies, small group discussions and projects to test principles. For both men and women.

9 NUTRITION (3).

Also Biology 9. 3 lecture hours per week. Basic knowledge and fundamental concepts as a basis to evaluate current nutritional trends and fads; two methods to critically evaluate a diet; nutritional aspects of health throughout the life cycle; protein, carbohydrate and fat metabolism relationships, hunger and malnutrition; vitamins and minerals; obesity and popular

weight reduction diets; food processing and getting the most nutrition for your food dollar.

15 ESSENTIALS OF NUTRITION (3). *Also Biology 15. Prerequisite: College course in chemistry. 2 lecture and one 3-hour lab per week.* Basic principles of nutrition. Utilization of food by the body, with emphasis on the role of nutrients in development and maintenance of body processes, including a personal nutritional evaluation.

18 NUTRITION IN HEALTH AND DISEASE (3). *Also Biology 18. Prerequisite: Home Economics 9 or Biology 9. 3 lecture hours per week.* Nutritional aspect and metabolic biochemical relationships of special medical problems including mental illness, alcoholic malnutrition, dental disease, diabetes, heart disease; overview of worldwide eating patterns and cooking techniques and discussions of all current theories and popular topics in nutrition.

20 BEGINNING SEWING (2). *One 3-hour lecture-lab period per week.* Emphasis on selection of fabrics and patterns, alterations and fitting. Basic custom sewing techniques as well as quick methods will be demonstrated. For students with little or no experience in clothing construction.

21a FASHION SEWING (3). *Three 2-hour lecture-lab periods per week.* Experiences with all types of fabrics including knits, fake fur, leather and lingerie. Emphasis on pattern selection, alteration, custom dressmaking techniques, principles of color and design, individuality and creativity.

21b CREATIVE FASHIONS (3). *Fall semester. Prerequisite: Home Economics 20 or 21a or consent of instructor. For advanced clothing students. One 3-hour lecture-lab per week.* Custom dressmaking and pre-tailoring. Pattern alterations and fit will be emphasized. Course will cover understanding fibres and stretch, methods of combining different fabrics creatively and application of principles of line and design. Can be repeated for credit.

22 TEXTILES (1-3). *3 lecture hours per week.* From fiber to fabric, from loom to material, from knits to apparel, with emphasis on newer finishes and color application, each step in the textile process will be reviewed and evaluated with regard to the selection, use and care of textiles. Course will be divided into three parts with a unit of credit for each part.

24 FASHION ANALYSIS AND APPAREL SELECTION (2). *2 lecture hours per week.* Psychological, sociological and economic aspects of apparel selection and fashion coordination. Principles of creative art and

design, guides for purchasing, and motivational research to be examined. Recommended for those interested in personal buying and dress, as well as merchandising, fashion retailing, professional and business students.

35 CHILD IN THE HOME (3). *Also Social Science 35. Prerequisite: Completion of or concurrent enrollment in Psychology 1a. 3 lecture hours per week.* Emotional, social, intellectual, and physical development of children to six. Understanding the young child, the point of view of a child, individual differences, implications for later behavior and personality growth; emerging resources for coping with the world; and concrete analysis of contemporary parents' concerns.

36 LIFE CYCLE: FAMILIES IN CRISIS (3). *Also Social Science 36. 3 lecture hours per week.* Understanding of self and social development which affect readiness for adulthood and family interactions. Developmental concerns from birth to death and changes in the family structure, as well as crisis situations, such as marriage, divorce, suicide, alcoholism, drugs, aging and death.

37 SOCIOLOGY OF WOMEN (3). *Also Social Science 37. 3 lecture hours per week.* Examination of the historical, socio-economic, psychological, social, biological, political, emotional and intellectual factors influencing women and their roles in society. Aim: to increase personal awareness of role change and flexibility.

39 COMMUNICATING WITH TELEVISION (3). *(Evening College) Fall semester. 3 hours per week.* Students will produce a show on cable TV each week, rotating all work stations: audio, lights, mikes, camera, floor; as well as production, direction and "on camera." Course designed to give teachers, business employees, government service personnel background for using TV to communicate with more individuals. Also, communications theory, application and interaction of media, and future uses of TV.

39a-39b COMMUNICATIONS/ TV (3-3). *2 lecture hours per week and one 3-hour lab in TV studio.* Student will be given practice communicating with television (closed and open circuit), radio photography, graphics for television. Application to business, home economics, social service and government work. Individual projects will be selected by student preference. May be repeated for credit.

40 YOUR HOME AND YOUR ENVIRONMENT (3). *Also Interior Design 1. 3 lecture hours per week.* Study of environment of today's house, with experiences in use of line, form, color and design. Evaluating, purchasing, and creating furnishings with both dollars and aesthetics in

mind. Analysis of today's house and its contribution to human growth and satisfaction. Each student selects a personal project in home planning and furnishing.

41 INTERIOR SPACE-PLANNING (3). *Also Interior Design 2.* 3 lecture hours per week. A lecture-laboratory course taking up the manipulation of interior space through the planning, drafting and building to 3-dimensional scale room models. Application of basic design and color principles to the analysis of space usage. Techniques of organizing design ideas for professional presentation. Both residential and contract projects may be considered.

42 COLORS IN INTERIORS (3). *Also Interior Design 3. (Evening College)* 3 hours per week. Series of lecture-laboratories covering the application of basic color systems to the visual control of interior space. Practice of design principles which govern the use of color in 3-dimensional composition of objects in space. Relation of color-as-light to color-as-pigment. Illustrated with structural materials, paints and finishes, furniture, fabrics, lighting, decorative accessories. Projects in assembling samples of such materials into schemes for residential and commercial units.

43 PRACTICUM IN INTERIOR DESIGN (3). *Also Interior Design 4. (Evening College)* Prerequisites: *Interior Design 1 and 2 (also Home Economics 40 and 41).* 3 lecture hours per week. In-depth study of home furnishings sources with cost and quality comparisons. Design project specifying sources and costs. Exploration of the career opportunities in interior design and home furnishings. Field trips to sources, manufacturing, wholesaling and retailing.

44 HISTORY OF INTERIORS (3). *Also Interior Design 6.* 3 lecture hours per week. Tracing the history of interiors: western man's dwellings and how they were furnished. A resume of design motifs from neolithic times up to the 20th Century. Following characteristic uses of space, and how cultural attitudes found expression in the furniture and buildings which have shaped our present aesthetic values. Social and economic factors contributing to these design trends and art forms will be illustrated. Special emphasis will be placed on the history of the house itself.

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit.* Students working in television; cable; fashion merchandising; home furnishings merchandising; fashion, home furnishings, or clothing manufacturing; home management, food and child care employed in individual homes, may enroll for credit and instructional help through supervision.

49 INDIVIDUAL PROJECTS (1-2). By special arrangement with instructor, projects may be developed in: (1) television, radio, public relations, journalism, as related to home economics in business today; (2) public service projects with schools, public agencies, or individuals, or (3) individual projects related to home economics.

61 STITCHERY AND QUILT MAKING (1-2). 6 weeks 1 unit, full semester 2 units. History of quilt making - vocabulary and materials of traditional and contemporary designs. Techniques include pieced, tied, quilting applique, embroidery and machine stitched.

62 WORLD OF STITCHERY (1). *(Evening College T.V. course)* Sixteen television lessons give the techniques of needlepoint and embroidery for the beginner. Televised closeups enlarge the action for close viewing and easy following. Individuality and originality encouraged, permitting exploration of the new and the old in this ancient yet contemporary art form.

65 CREATIVE SEWING (2). *(Evening College)* 2 lecture and one lab hour per week. Creative and experimental sewing experiences with many types of fabrics including polyester, acrylics, nylons, rayons, fake furs, as well as the standard natural fibers. Course is designed for the non-major and for part-time students who wish to develop their skills and apply creative ideas. Two garments will be constructed. May be repeated once for credit.

66a SEWING WITH KNITS (1). *(Evening College)* 2 lecture and one lab hour per week for eight weeks. (For course description, see Home Economics 66b, below)

66b ALTERATIONS, FITTING, PANTS CONSTRUCTION (1). *(Evening College)* 2 lecture and one lab hour per week for eight weeks. First eight weeks will give all techniques needed for sewing on the many new types of knits. Second eight weeks will give alteration and fitting techniques for self and others. Pants will be altered and constructed. Students may enroll in both courses or in either singly. Pattern and fabric selection will be given.

67 DRESSMAKING AND EASY TAILORING (2). *(Evening College)* Prerequisites: *Home Economics 20, 65 or consent of instructor.* 2 lecture and one lab hour per week. Simple suit, pant suit, coat dress, or coat and dress will be constructed using combination of rapid tailoring and professional methods. Custom finishing details will be emphasized. May be repeated for credit.

82 YOUR CHILD'S WORLD (1). *(Evening College TV course)* This series emphasizes practicality and application of theory in connection with infant and toddler.

Includes feeding, art, music, language, discipline and parent needs. Ideas are presented by teachers and parents through discussion and demonstration.

83 YOUR CHILD'S WORLD EXPANDED (1). (*Evening College TV course*) Explores in depth the developmental characteristics of children from infancy to nine years. Family life situations are related to communication, neighborhood problems, recreation, the child in the hospital and other subjects. Through panel discussions, parents and professionals share insights in the needs of young children and their families.

84 YOUR CHILD'S GROWING WORLD (1). (*Evening College TV course*) The sociology of early childhood education, exploring how the family, the school and community respond and work as a team to meet special needs. The programs examine child rearing and family patterns of various ethnic groups, learning problems, physical handicaps, emotional and behavioral problems. Presented through panel discussions, role playing and films.

96 BUYING GAME IV (1-2). (*Evening College TV course*) Save money, know your rights, become a skilled shopper. This series brings to the home TV 80 experts - five vital topics on each show - giving consumer information and discussion of consumer problems. Areas of consumer information covered will be guides for purchasing, ways to beat inflation, money management, consumer alerts to frauds, consumer rights and response and consumer legislation existing and needed. Students mail assignments to the instructor, no trips to campus required.

97 BUYING GAME V (1-2). (*Evening College TV course*) For description, see Home Economics 96.

Horticulture

97a-97b ARBORICULTURE, SHRUBS AND FRUIT (2-2). (*Evening College*) 3 hours per week. Principles and practices of selecting and training trees and shrubs.

100a-100b HOME GARDENING AND LANDSCAPING (0). (*Evening College*) 3 hours per week. Principles of home planting and maintenance, soil preparation, fertilizers, organic matter, mulches, pruning, irrigation, lawn and turf management, plant materials, potting, propagation and pest control. Study visits to home grounds and nurseries. Home flower growing, roses, annuals, fuchsias, camelias, rhododendrons, azaleas. Container growing, dwarf citrus, hanging baskets.

Interdisciplinary Studies

AMERICAN STUDIES — English 1a-b/History 17a-26 (6-6). 5 hours per week plus 1 additional hour by arrangement. In the context of the American experience, certain ideas continue to manifest themselves. Social, religious and intellectual histories provide the connections between ourselves and the people of our past. The course concentrates on the "human," not just political, military and economic history of the nation. How have Americans reacted to the concepts of "power to the people," individualism, religious separatism and "the promised land"? The main literary expressions of the time will be examined and discussed towards exploring the problems unique to this country. Students must enroll in both courses; the course is team-taught. Satisfies the general education requirements in English and American Institutions.

CONTEMPORARY ART AND 20th CENTURY CULTURE — Art 1c/History 26. (3-3). The combination of these courses is being offered as a new approach to American contemporary art and culture.

Interior Design

1 YOUR HOME AND YOUR ENVIRONMENT (3). *Also Home Economics 40.* 3 lecture hours per week. Study of your environment and its relationship to today's living; how to create your own environment through the proper use of space, color, texture and light. An introductory study of the balance between the aesthetics and mechanics of interior design. Projects in coordinating the house, its architecture and furnishings, with you and your individual requirements. Cost and quality analysis of materials currently available.

2 INTERIOR SPACE-PLANNING (3). *Also Home Economics 41.* 3 lecture hours per week. A lecture-laboratory course taking up the manipulation of interior space through the planning, drafting and building to three-dimensional scale room models. Application of basic design and color principles to the analysis of space usage. Techniques of organizing design ideas for professional presentation. Both residential and contract projects may be considered.

3 COLORS IN INTERIORS (3). *Also Home Economics 42.* (*Evening College*) 3 hours per week. Series of lecture-laboratories covering the application of basic color systems to the visual control of interior space. Practice of design principles which govern the use of color in three-dimensional composition of objects in space. Relation of color-as-light to color-as-pigment. Illustrated with structural materials, paints and finishes, furniture, fabrics,

lighting, decorative accessories. Projects in assembling samples of such materials into schemes for residential and commercial units.

4 PRACTICUM IN INTERIOR DESIGN (3). *Also Home Economics 43. (Evening College) Prerequisites: Interior Design 1 and 2 (also Home Economics 40 and 41). 3 lecture hours per week.* Study of home furnishings sources with cost and quality comparisons. Design project specifying sources and costs. Exploration of the career opportunities in interior design and home furnishings. Field trips to sources, manufacturing, wholesaling and retailing.

5a DISPLAY DESIGN (3). *3 lecture hours per week.* Space-planning and color arrangement for display of all varieties of objects and merchandise. This lecture-laboratory course will cover application of basic design principles and color-control factors to settings, backgrounds and graphics as well as related storage and traffic problems of the commercial interior. Emphasis will be placed on the dramatic potentials of objects. The course will conclude with individual projects worked out in three-dimensional model form.

6 HISTORY OF INTERIORS (3). *Also Home Economics 44. 3 lecture hours per week.* Tracing the history of interiors: western man's dwellings and how they were furnished. A resume of design motifs from neolithic times up to the 20th Century. Following characteristic uses of space, and how cultural attitudes found expression in the furniture and buildings which have shaped our present aesthetic values. Social and economic factors contributing to these design trends and art forms will be illustrated. Special emphasis will be placed on the history of the house itself.

Journalism

1 INTRODUCTION TO JOURNALISM (3). *3 lecture hours per week.* 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). *Prerequisites: Journalism 1 and enrollment in English 1a. 2 lecture and 2 lab hours per week.* A study of the techniques of news gathering, judging news values, and of writing the news story. For practical experience, the students write for the College paper, thus preparing them for future newspaper work. Since awareness of himself and his environment is essential to the development of any professional journalist,

some in-class and out-of-class awareness exercises will be included in this basic newswriting course.

15 NEWSPAPER PRODUCTION (2). *Prerequisites: Journalism 2 (may be taken simultaneously) and permission of instructor. 4 hours per week.* 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.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Journalism and college English; approval of instructor and the Chairman of the English Division. Hours by arrangement.* Students will present a paper or papers dealing with a specific topic in journalism, a topic beyond the scope of offered courses.

Library Science

4 AUDIO-VISUAL MATERIALS AND EQUIPMENT (2). *(Evening College) 3 hours per week.* Survey and evaluation of equipment and materials available. Preparation of instructional materials and practice in operation of the equipment. Course designed primarily for teachers and teacher aides.

Management

47 COOPERATIVE EDUCATION (1-4). *(Evening College) Credit/no credit. Prerequisite: Enrollment in no less than 8 units, including Cooperative Education, and consent of the instructor.* Cooperative Education is a course designed to develop a close working relationship between the student, the employer and the College. This is accomplished by having the student work with his employer in establishing objectives related to job performance. The College representative works with both the student and employer in setting up job objectives for the semester. Cooperative Education relates classroom experience with job-oriented practical experience. The net result is better performance on the job and improved academic achievement. Students enrolling in Cooperative Education will be required to attend four three-hour seminars during the semester. Students must attend one of the following sections the first week of registration. Dates for additional seminars will be arranged. For further information, call 364-1212 and ask for the Cooperative Education secretary.

50 FINANCIAL MANAGEMENT (3). *(Evening College) 3 hours per week.* Management of assets with emphasis on capital structure, budgeting and control, cost analysis, source and use of funds, and interpretation of financial statements. Accounting 1b may be substituted.

52 REPORT WRITING (3). (*Evening College*) 3 hours per week. Principles of effective communication in written, verbal, statistical materials, clarity, accuracy, logic.

54 MANAGEMENT COMMUNICATIONS (3). (*Evening College*) 3 hours per week. Problems in communications in business and industry. Lectures, discussion and oral presentation will cover such matters as motivational bases of communications, listening skills, conference leading, and other written and verbal communication problems.

55 DYNAMICS OF GROUP COMMUNICATION (3). (*Evening College*) 3 hours per week. Analysis of communication and group process, practical applications of communications techniques.

61 INDUSTRIAL RELATIONS (3). (*Evening College*) 3 hours per week. General course giving employer and union policies affecting the labor market. The following will be emphasized: wage systems, living conditions, productivity of the workers, unemployment, development of union organizations and collective bargaining, adjustment of industrial conflicts will be dealt with from the point of view of wage earner, employer and the government.

63 MANAGEMENT PLANNING, BUDGETING AND CONTROL (3). (*Evening College*) 3 hours per week. Planning, budgeting and control for first- and second-line supervisors and managers. Project planning techniques including project definition, work breakdown structure, project goals, scheduling systems (such as Gantt charts, PERT, CPM, and Milestone charts), cost estimating and cost curve displays; initiating action; performance reporting; department budgeting; corrective action techniques.

65 BUSINESS AND INDUSTRIAL ECONOMICS (3). (*Evening College*) 3 hours per week. Survey of the economic aspects of the American economy. Development of a market society, role of money, public policy and economic matters, income and employment. Econ 1a and 1b may be substituted.

71 MATERIALS MANAGEMENT (3). (*Evening College*) 3 hours per week. For the student desiring to apply fundamental economic and management principles to the flow of materials in a business enterprise. Emphasis on the integrated nature of purchasing, inventory control, production scheduling, quality control and traffic.

77 INDUSTRIAL ENGINEERING METHODS (3). (*Evening College*) 3 hours per week. Overall view of manufacturing management. Fundamentals of

organization, capital costs and budgets, motion and time study, industrial statistics, operations, research.

80 MANAGEMENT OF HUMAN RESOURCES (3). (*Evening College*) 3 hours per week. Introductory course for line-supervision to develop understanding of the personnel function; selection and placement, wage and salary procedures, training and evaluation.

81 MANAGEMENT STYLES AND EMPLOYEE INVOLVEMENT (3). (*Evening College*) 3 lecture hours per week. Insights into skills and techniques needed by the manager to tap into the positive and negative forces that exist within groups in order to help the whole achieve its work goals.

82 EMPLOYEE, INFORMATION AND ORGANIZATIONAL SUCCESS (3). (*Evening College*) 3 lecture hours per week. Managerial techniques and skills necessary for effective communication which are a crucial element of success or failure.

85 ORGANIZATIONAL BEHAVIOR (3). (*Evening College*) 3 hours per week. Examines group behavior in relation to organization effectiveness. Focuses on factors that improve work group functioning.

90 OFFICE MANAGEMENT AND PROCEDURES (3). (*Evening College*) 3 hours per week. Functions, responsibilities, problems and specific techniques of the office manager.

91 SALES MANAGEMENT (3). (*Evening College*) 3 hours per week. Sales organizations, sales, merchandising and distributive policy layout of sales territories, selection and training of the sales force, pricing, use of advertising and sales promotion materials. The intergration of the points of view of sales and merchandising managers in approaching and solving problems will be considered.

92 TECHNIQUES OF SUPERVISION (3). (*Evening College*) 3 hours per week. Designed to improve the student's skill in working with people. Analysis of the objectives and characteristics of good management. Leadership and creativity in supervision. Effective communications.

93 LEADERSHIP IN ORGANIZATION (3). (*Evening College*) 3 hours per week. To introduce managers to the motivational aspects to leadership. To examine how individuals react to different styles of leadership. Students will also examine their own management practices and beliefs and gain insights as to how these might be improved.

94 CREATIVE PROBLEM SOLVING (3). (*Evening College*) 3 hours per week. Processes involved in problem-solving and decision-making, with emphasis on the application of these concepts to real job situations.

95 MANAGEMENT THEORY AND PRACTICE (3). (*Evening College*) Recommended for students who already have a management Certificate. 3 lecture hours per week. Geared to those currently in management positions, will stress the latest theories, responsibilities and practices of business management. Particular emphasis on student-teacher and student-guest interaction and discussion. Specific content covers such topics as management performance and challenges, managing a business and developing and implementing management strategies.

96 ORGANIZATION FOR MANAGEMENT (3). (*Evening College*) 3 hours per week. Basic course describing the development of scientific management in modern business. Current trends in management, staffing, planning and controlling.

99 INTRODUCTION TO BUSINESS MANAGEMENT (3). (*Evening College*) 3 hours per week. Business principles and practices, problems and procedures. (Should be taken first for Business Management Certificate.)

104 INTRODUCTION TO SUPERMARKETING (3). (*Evening College*) 3 hours per week. Introduction to supermarket organization and management: history, future and present trends.

105 SUPERMARKET OPERATIONS (3). (*Evening College*) 3 hours per week. Basic economic organizational and operating principles of the food industry. Historical development, role of trade groups, departmental operations, food industry issues, scheduling, security, sanitation, cash control, supply control, customer service.

106 SUPERMARKET MERCHANDISING (3). (*Evening College*) 3 hours per week. Merchandising principles related to the development of marketing and merchandising plans in supermarket operations. Emphasis on: manager's merchandising responsibilities; analysis of profit centers; customer motivation; product information; buying and ordering; space management in store sales; promotion and increasing departmental as well as store sales and profits.

107 SUPERMARKET MANAGEMENT: SPECIAL PROBLEMS (3). (*Evening College*) Prerequisite: Supermarket work experience especially as store or department manager. 3 hours per week. Designed to aid management personnel in applying problem-solving techniques to supermarket situations they are currently facing.

110 PUBLIC SERVICES (3). (*Evening College*) 3 hours per week. Designed to give the student a basic understanding of the many public agencies and the services they offer for the general welfare of society. The philosophy of the many types of public services needed in today's society and the employment opportunities for the future will be explored.

111 PUBLIC ADMINISTRATION MANAGEMENT (3). (*Evening College*) 3 hours per week. Designed to give the student a basic understanding of principles and concepts underlying the generic field of public administration in federal, state and local governments—line-staff, span of control, responsibility, accountability.

120 BUILDING CONTRACTING (3). (*Evening College*) 3 hours per week. Broad study of the contracting field with emphasis in areas such as Contractors License Law, Mechanic's Lien Law, Workman's Compensation and Employment Regulations, Uniform Building Code, State Housing Act, and contracts and estimating principles.

130 INTRODUCTION TO OCCUPATIONAL SAFETY AND HEALTH (3). (*Evening College*) 3 hours per week. Introduction to principles of occupational safety and health with emphasis on requirements of federal and state Occupational Safety and Health Acts (OSHA and Cal-OSHA). Includes a survey of general techniques of safety management.

131 SAFETY AND HEALTH STANDARDS, CODES AND REGULATIONS (3). (*Evening College*) 3 lecture hours per week. Review of the important federal and state occupational safety and health standards and codes with particular emphasis on application of state codes to typical work situations.

132 PHYSICAL HAZARDS CONTROL I (3). (*Evening College*) Prerequisite: Satisfactory completion of Management 75 or consent of instructor. 3 lecture hours per week. Examination of physical hazards in the work environment and methods of control.

133 PHYSICAL HAZARDS CONTROL II (3). (*Evening College*) Prerequisite: Management 132. 3 lecture hours per week. Examination of the control of physical hazards in the work environment.

134 SAFETY PROGRAM MANAGEMENT (3). (*Evening College*) Prerequisite: Management 130, 132, 133 or consent of instructor. 3 lecture hours per week. Designed to acquaint the student with the common element of a modern safety program.

Mathematics

The normal sequence of mathematics courses at Cañada College is 11, 19 or 20, 12, 21, 28, 29, 30, 31, 32, 33. 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 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.

5 PRE-ALGEBRA (2). *2 class hours per week.* Review of the fundamental processes in arithmetic; reading mathematical notation; translating words into symbols; properties of the real number system.

10 INTRODUCTION TO MATHEMATICAL CONCEPTS (3). *3 class hours per week.* The basic ideas of mathematics and their historical development; number, function, logic, sets; the relationship of traditional and contemporary mathematical thought. Material presented is non-computational in nature. Satisfies General Education requirements in part.

11 ELEMENTARY ALGEBRA (5). *5 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). *Prerequisite: 11a-None; 11b-Mathematics 11a.* *3 class hours per week.* The two courses, Mathematics 11a-11b, are equivalent to Mathematics 11. Recommended for those who have not previously had elementary algebra.

12 GEOMETRY (5). *Prerequisite: Mathematics 11 with a grade of C or better, or two semesters of high school Algebra with grades of C or better.* *5 class hours per week.*

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). *Prerequisite: Mathematics 19 or 20 or equivalent.* *3 lecture hours per week.* Introduction to finite mathematics with attention to set theory. Boolean Algebra, switching circuits, probability, systems of linear equations, vector and matrix notations and operations. Required of all Data Processing majors.

16 BASIC CONCEPTS OF MATHEMATICS (3). *3 class hours per week.* General education course designed for the liberal arts student who desires an appreciation and understanding of the basic structure of mathematics. Subject matter will include the development of the real number system by intuitive and semi-rigorous methods; discussion of sets, logic, axiomatics, systems of numeration, history and development of arithmetic, arithmetic processes, inductive and deductive reasoning. Meets requirements of California Administrative Code for the elementary school credential.

17 INTRODUCTION TO SYMBOLIC LOGIC (3). *Also Philosophy 12. Prerequisite: English 1a or consent of instructor.* *3 hours lecture/self-study per week.* The course divides into three parts: (1) survey of the traditional Aristotelian logic of the categorical statement and syllogism; (2) fairly complete treatment of modern symbolic propositional logic; (3) brief introduction to (first-order) symbolic predicate logic. If time permits, some discussion of Russell's paradox, Gödel's incompleteness theorem, and the impact of each on the development of 20th Century logic, will be introduced.

18 INTRODUCTION TO COMPUTER PROGRAMMING (3). *Prerequisite: Mathematics 11 with grade of C or better; or two semesters of high school algebra with grades of C or better. (Some typing skill is recommended but not required.)* *3 class hours per week.* Basic principles of computer programming including elementary flow-charting techniques; elements of programming coding in BASIC. Students will write and test computer programs coded in BASIC using "hands-on" time-share terminals.

19 INTERMEDIATE ALGEBRA (5). *Prerequisite: Mathematics 11 with grade of C or better, or 2 semesters of high school mathematics with grades of C or better.* *5 class hours per week.* Extension of fundamental algebraic concepts and operations, binomial expansion, solution of linear and quadratic equations individually and in

systems, determinants, radical equations, complex numbers, introduction to theory of equations. Mathematics 19 is designed primarily for those students whose elementary algebra is weak. It allows time for review of elementary algebra and a slower development of new ideas.

20 INTERMEDIATE ALGEBRA (3). *Prerequisite:* Mathematics 11 with grade of B or better, or 2 semesters of high school mathematics with grades of B or better. 3 class hours per week. 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). *Prerequisites:* Mathematics 12 and 19 or 20 (or equivalent) with a grade of C or better; or six semesters of high school mathematics with grades of C or better. 3 class hours per week. Trigonometric functions of real numbers and angles, their graphs and periodicity; reduction formulas; functions of multiple angles; identities and equations, radian measure; inverse functions, logarithms; solution of triangles; complex numbers and De Moivre's theorem.

23a-23b CALCULUS FOR NATURAL, SOCIAL SCIENCES AND BUSINESS (5-5). *Prerequisite for 23a—High School preparation including two years of algebra, and one year of geometry with grades of B or better or Mathematics 20 or Mathematics 19. Prerequisite for 23b—Mathematics 23a with a grade of C or better. 5 class hours per week.* A two semester sequence that will provide the students of business, social sciences, technology and life sciences with a working knowledge of basic techniques of both differential and integral calculus. Concepts essential to that aim will be chosen in analytic geometry, limits, differentiation, integration, extrema, partial derivatives and in other selected topics. This sequence of courses may not be substituted for the Mathematics 30 sequence for mathematics, physics or engineering majors. However, it is suitable for students majoring in technical engineering.

25 FORTRAN PROGRAMMING WITH INTRODUCTION TO NUMERICAL AND STATISTICAL METHODS (3). *Prerequisites:* Mathematics 28 or 29 with grade of C or better, or Mathematics 23b with grade of C or better, or high school preparation including two years of algebra, one year of geometry and one semester of trigonometry with grades of C or better. 2 lecture and 3 lab hours per week. FORTRAN programming; numerical methods applicable to modern electronic computers including approximation of roots, solution of systems of equations, Newton's method, descriptive statistics, matrix manipulations and

simulation through the use of random numbers. Students write and test a variety of computer programs chosen from the above topics.

28 COLLEGE ALGEBRA (3). *Prerequisites:* Mathematics 21 or equivalent with grade C or better; or high school preparation including two years of algebra, one year of geometry and one semester of trigonometry with grade of C or better. 3 class hours per week. Study of more advanced algebra including such topics as theory of equations, complex numbers, logarithmic and exponential functions, matrices, vectors, binomial theorem, sequences.

29 MATHEMATICAL ANALYSIS (5). *Prerequisite:* Mathematics 21 or equivalent with a grade of C or better, or seven semesters of high school level mathematics with grades of C or better. 5 class hours per week. 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). *Prerequisite:* Mathematics 28 or 29 with a grade of C or better; or Mathematics 19 or Mathematics 20 and Mathematics 21 with a grade of B or better; or seven semesters of high school level mathematics, each with a grade of B or better. 5 class hours per week. Basic concepts of calculus. Includes plane analytic geometry, differentiation, integration, differentials and anti-derivative; formulas; application.

31-32 CALCULUS (5-5). *Prerequisites:* To enroll in Mathematics 31, completion of Mathematics 30 (or equivalent) with a grade of C or better. The student may then progress through this series of two courses if he continues to earn grades of C or better. 5 class hours per week for Mathematics 31 and 4 class hours per week for Mathematics 32. 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.

33 LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS (5). *Prerequisite:* Mathematics 32 (or equivalent) with a grade of C or better. When approved by instructor may be taken concurrently with Mathematics 32. 5 class hours per week. Introduction to linear algebra, covering matrix operations, linear systems of equations, determinants and vector spaces, followed by the classical analysis of ordinary linear differential equations and their

linear systems. Linear algebra is then applied to the solution of such systems by means of eigenvalues and eigenvectors. Also studied are Laplace Transform and power series solutions of linear differential equations.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Mathematics 30 or equivalent; permission of the instructor. Hours by arrangement.* Directed individual study of a suitable topic in mathematics, or construction of a model useful in the study or teaching of mathematics.

51 SLIDE RULE AND METRIC SYSTEM (1/2-1 1/2). *Credit/no credit. Each portion is a four-week session of 2 lecture hours per week.* Study of the development and the theory of the slide rule. The slide rule portion is divided into two parts: (a) scientific notation, exponents, estimation, ratio and proportions and calculations using the C,D,CI,K,A,B, scales. (b) the S,T,ST, and LL scales with applications. The third portion of the course is the metric system, comparison of the metric and the English systems and applications.

Meteorology

1 ELEMENTARY METEOROLOGY (3). *3 lecture hours per week.* Basic course including physical phenomena associated with weather analysis and prediction. This course meets the general education requirements for physical science at many colleges and universities.

Military Science

(Reserve Officers Training Corps)

1a DEFENSE ESTABLISHMENT IN NATIONAL SECURITY (2). *1 lecture hour and 1 leadership lab every other week.* Study of the history, mission and organization of ROTC, techniques of marksmanship, causes of war, evolution of weapons, and factors of national power, progressive training in leadership and command.

1b DEFENSE ESTABLISHMENT IN NATIONAL SECURITY (2). *1 lecture hour and 1 leadership lab every other week.* Study of the principles of war; history, mission and organization of the Department of Defense; and introduction to leadership.

2a BASIC TACTICS (2). *Prerequisite: Military Science 1b. 1 lecture hour and 1 leadership lab every other week.* Map and aerial photograph reading. Instruction in military operations and basic tactics. Progressive training in leadership and command.

2b BASIC TACTICS (2). *Prerequisite: Military Science 2a. 1 lecture hour and 1 leadership lab every other week.* Continuation of Military Science 2a.

Music

The courses of the Music Department are designed to fill the needs of the music major or professional musician as well as the desires of students for general education, avocation and recreation. Professional musicians, private teachers and others qualified are welcome to such theory classes as are desirable. The department will maintain a flexibility which will allow the addition of other courses upon demand of a sufficient number of students. Recitals by students and professional musicians are available. Attendance forms part of the requirement for music students. Courses marked with an (x) are especially recommended for any member of the community interested in adult education and effective use of leisure time.

Auditions: Students majoring in music will audition before the music faculty to prove necessary competence in the chosen solo performing area. Auditions may be repeated at the end of each semester to display progress.

1 (x) MUSICIANSHIP (2). *Prerequisite: Some pianistic ability desirable. 2 hours per week.* Music notation, keys, key signatures, intervals, sight reading and ear training.

2a-2b ADVANCED MUSICIANSHIP (2-2). *Prerequisites: 2a—Music 1 or its equivalent; 2b—2a. 2 hours per week.* 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). *Prerequisites: Music concentration, usually taken concurrently with Music 1, 2a. Some piano ability is essential. Music 4a is a prerequisite for Music 4b. 3 hours per week.* 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). *Prerequisite: Music 4a-4b. 3 class hours per week.* Deals with chords of seventh and ninth, altered chords and modulations, and arranging for various vocal and instrumental groups, and original composition.

6 (x) MUSIC APPRECIATION AND SURVEY (3). *3 lecture and 1 lab hour per week.* Music literature and history with emphasis on the understanding and appreciation of the art. A text, illustrated lectures and

directed listening constitute the procedure of the course. One hour per week directed listening in the library is required. Material covered includes instrumental and vocal music from the 14th to the 20th Century. This course is for non-music majors as well as music majors.

8 (x) FUNDAMENTALS OF MUSIC (3). *3 lecture hours per week.* Basic musical skills-singing, ear training, reading music notation, and harmonization of simple melodies. May not be applied toward the degree by the student whose major is music. Suggested for music majors who do not read music easily as a preliminary course to Music 1 and 4. Suggested for the elementary classroom teacher and the amateur musician.

9 PHYSICS OF SOUND AND MUSIC. (*See Physics 9.*)

11a-11b-11c-11d (x) PIANO (1-1-1-1). *Prerequisite: Consent of instructor. 3 hours per week.* A course in applied music with stress on technical and interpretive skills. Individual attention and advancement. Grades will be determined by jury audition.

12a-12b-12c-12d ADVANCED PIANO (1-1-1-1). *Prerequisite to each semester will be successful completion of jury examination. 3 class plus 5 studio hours per week.* Advanced problems of performance. Literature covered and specific requirements may be obtained from the Fine Arts Division office. This course is a parallel course to the applied music major study at California state colleges.

16 ACCOMPANYING (1). *Prerequisite: Advanced ability. 3 class hours per week.* Skills and techniques of playing accompaniments for singers, instrumental soloists and choral groups. Performance is an essential of this course. May be repeated for credit.

19a-19b-19c-19d STUDY OF PERCUSSION INSTRUMENTS (1-1-1-1). (*Evening College.*) *Prerequisite: Concurrent enrollment in Music 22 or Music 23, or consent of instructor. 3 lab hours per week.* Techniques of playing the various percussion instruments, including mallet instruments, with class instruction, individual instruction and ensemble participation.

22a-22b-22c-22d (x) ORCHESTRA (2-2-2-2). *Prerequisite: Consent of instructor; open to all students of the College. 5 hours per week.* Standard chamber and symphonic literature.

23a-23b-23c-23d (x) SYMPHONIC BAND (2-2-2-2). *Prerequisite: Consent of instructor; open to all students of the College. 5 hours per week.* Study and performance of music for concert band. Performance is required.

24a-24b-24c-24d (x) STUDY OF BRASS INSTRUMENTS (1-1-1-1). *Prerequisites: Concurrent enrollment in Music 22 or Music 23, or consent of instructor; concurrent enrollment in Music 99 (Studio Hours) is required. 3 class hours per week.* 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 (x) STUDY OF WOODWIND INSTRUMENTS (1-1-1-1). *Prerequisites: Concurrent enrollment in Music 22 or Music 23, or consent of instructor; concurrent enrollment in Music 99 (Studio Hours) is required. 3 class hours per week.* Techniques of playing the instrument of the student's choice, with individual instruction. Grades will be determined by jury audition.

26a-26b-26c-26d (x) STUDY OF STRING INSTRUMENTS (1-1-1-1). *Prerequisites: Concurrent enrollment in Music 22 or consent of instructor; concurrent enrollment in Music 99 (Studio Hours) is required. 3 class hours per week.* 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 (x) (B-S-W) INSTRUMENTAL ENSEMBLE (1-1-1-1). *Prerequisite: Adequate performing ability to secure consent of the instructor. 3 hours per week.* The letters B, S, and W indicate Brass, String and Woodwind. Performance is required.

28a-28b-28c-28d ADVANCED STUDY OF BRASS INSTRUMENTS (1-1-1-1). *Prerequisites: Prerequisite to each semester will be successful completion of jury examination; concurrent enrollment in Music 22 or 23 or consent of instructor; concurrent enrollment in Music 99 (Studio Hours) is required. 3 class plus 5 studio hours per week.* Advanced problems of performance. Literature covered and specific requirements may be obtained from the Fine Arts Division office. This course is a parallel course to the applied music major study at California state colleges.

29a-29b-29c-29d ADVANCED STUDY OF WOODWIND INSTRUMENTS (1-1-1-1). *Prerequisites: Prerequisite to each semester will be successful completion of jury examination; concurrent enrollment in Music 22 or 23 or consent of instructor; concurrent enrollment in Music 99 (Studio Hours) is required. 3 class plus 5 studio hours per week.* Advanced problems of performance. Literature covered and specific requirements may be obtained from the Fine Arts Division office. This course is a parallel course to the applied music major study at California state colleges.

30a-30b-30c-30d ADVANCED STUDY OF STRING INSTRUMENTS (1-1-1-1). *Prerequisites: Prerequisite to each semester will be successful completion of jury examination; concurrent enrollment in Music 22 or consent of instructor; concurrent enrollment in Music 99 (Studio Hours) is required. 3 class plus 5 studio hours per week.* Advanced problems of performance. Literature covered and specific requirements may be obtained from the Fine Arts Division office. This course is a parallel course to the applied music major study at California state colleges.

31a-31b-31c-31d STAGE BAND LAB (1/2-1/2-1/2-1/2). *Prerequisite: Consent of instructor. 1 1/2 lab hours per week.* Rehearsal and study of standard literature for stage band and dance band. Stresses ensemble and improvisation as well as styles. May be repeated for credit.

33a-33b-33c-33d (x) A CAPPELLA CHOIR (2-2-2-2). *Prerequisite: Consent of the instructor. 5 hours per week.* Study and performance of choral literature for accompanied and unaccompanied choir. Performance is required.

34a-34b-34c-34d (x) COLLEGE CHORALE (1-1-1-1). *Prerequisites: Consent of instructor after audition, concurrent registration in Music 33. 3 hours per week.* An advanced ensemble which specializes in the performance of fine choral literature for small choir. Members are selected by audition from the enrollment of the A Cappella Choir. Performance is a part of the course.

35a-35b-35c-35d (x) CAÑADA COLLEGE ORATORIO CHORUS (1-1-1-1). *(Evening College) Prerequisite: Consent of the director. Open especially to adult singers with choral experience. 3 hours per week.* 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 (x) SOLO VOICE (1-1-1-1). *Prerequisite: Concurrent enrollment in Music 33 or 34 or consent of instructor. 3 class hours per week plus 5 studio hours per week.* Vocal problems analyzed and corrected through exercises and songs. Class sessions with private help by jury audition.

37a-37b-37c-37d ADVANCED SOLO VOICE (1-1-1-1). *Prerequisites: Prerequisite to each semester will be successful completion of jury examination; concurrent enrollment in Music 33 or 34 or consent of instructor. 3 class plus 5 studio hours per week.* Advanced problems of performance. Literature covered and specific requirements may be obtained from the Fine Arts Division office. This course is a parallel course to the applied music major study at California state colleges.

40 MUSICAL THEATRE (1-3). *Spring semester. Prerequisite: Consent of instructor after audition. One class hour per week per unit.* Training in chorus, instrumental and solo parts of staged musical shows or opera. Units depend on the hours the part demands. May be repeated for credit.

41 MUSIC RECITALS (1/2). *One hour per week.* Open to all students. A listening course to acquaint students with musical literature as performed by professional musicians and advanced students in the area. Music majors are required to complete four semesters.

42 CONDUCTING—CHORAL CONDUCTOR'S WORKSHOP (1). *(Evening College) Prerequisite: Conducting experience or consent of the instructor. 3 lecture hours per week for 6 weeks.* 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.

43a-43b (x) STUDY OF CLASSICAL GUITAR: ELEMENTARY AND ADVANCED (1-1) *(Evening College) Prerequisites: Concurrent enrollment in Music 99 and possession of a guitar. 3 class hours per week plus lab.* Techniques of playing the guitar. Group and individual attention. May be repeated for credit.

44 (x) FINE ARTS FOR CHILDREN (3). *Also Art 44. (Evening College) 3 lecture hours per week.* For parents and teacher aides. Study of methods and materials useful in teaching the pre-school and primary grade child understanding and self-expression in art and music. Involves art and folk music, finger painting, clay modeling, and elementary painting and drawing.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Sophomore standing and permission of Chairman of the Fine Arts Division. Hours by arrangement.* Special projects in such fields as experimental media or tours of world music centers.

99 STUDIO HOURS (0). *Hours by arrangement.* Supervised studio hours in connection with Music 24, 25, 26, 28, 29, 30.

Nursery School

11a EARLY CHILDHOOD EDUCATION: NURSERY SCHOOL PRINCIPLES AND PRACTICES (3). *Also Psychology 11a. 3 lecture hours per week.* Nature and goals of early childhood education. Evolution and exploration of various models of pre-schools and follow-through project. Exploration of the philosophic position.

personalities and forces guiding the development of these early childhood programs.

11b EARLY CHILDHOOD EDUCATION CURRICULUM (3). *Also Psychology 11b. 3 lecture hours per week.* Selecting, developing, and managing activities for young children. Developing skills in providing adequate and effective education. Learning and values inherent in children's play. Exploration of creative activities and growth experiences through art, music, language development, dance, science, and math.

14 CREATIVE ACTIVITIES FOR THE YOUNG CHILD. (3). *(Evening College) 3 hours per week.* Designed to give practical skills in presenting activities to young children. The student will understand the role of creativity; how to stimulate creative expression through art media, music, dramatic activities, science and games both indoors and outdoors; and how to offer a variety of experiences to children through development of the student's own creative abilities and awareness of different approaches to curriculum development.

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit.* Supervised field experience by arrangement.

115 INTRODUCTION TO NURSERY SCHOOL ADMINISTRATION (3). *(Evening College) 3 lecture hours per week.* Provides students with in-depth knowledge of city, county and state licensing requirements. Also to acquaint the student with nursery school business characteristics, staff management procedures, parent-teacher relationships, staff qualifications, teacher-child relationships and the psychology of dealing with pre-school children.

Nursing

62 X-RAY (3). *Prerequisite: Anatomy 62a with a grade of "C" or better. 3 hours of lecture and discussion per week.* Knowledge, skills and terminology of nursing procedures for the X-ray technologist. Patient care, ethics, and radiological techniques are stressed.

Oceanography

10 OCEANOGRAPHY (3). *3 class hours per week.* Chemical and biological history of the oceans. Currents, waves, tides and coastal processes. Origin and evolution of the oceans and ocean basins with emphasis on recent discoveries in continental drift and sea floor spreading.

Philosophy

6 INTRODUCTION TO PHILOSOPHY (3). *3 lecture hours per week.* The student has the choice of completing Philosophy 6 in either of the following options: **6a**—Emphasis will be on assisting the student to begin the task of formulating his own individual "philosophy of life" by means of the concentrated study of two philosophies, one religious and one not. Attention will be given to formulating and examining values, and to ethical and sociopolitical considerations. **6b**—Emphasis will be on the process of self-discovery and self-criticism: philosophy as an analytical tool for conceptual clarification, a "psychoanalysis" of the student's belief system as it is made explicit in response to selected reading especially in the area of ethical and political philosophy.

7 CONTEMPORARY PHILOSOPHY (3). *3 lecture hours per week.* Emphasis is on acquaintance with contemporary trends in philosophy and their impact on social, political, economic and religious movements. Various schools that might be chosen for presentation include: Idealism, Existentialism, Marxism, Maoism, Christian Philosophy, Logical Positivism, Pragmatism, Utilitarianism, Contemporary Analysis.

12 INTRODUCTION TO SYMBOLIC LOGIC (3). *Also Math. 17 Prerequisite: English 1a or consent of instructor. 3 hours lecture/self-study per week.* The course divides into three parts: (1) survey of the traditional Aristotelian logic of the categorical statement and syllogism; (2) fairly complete treatment of modern symbolic propositional logic; (3) brief introduction to (first-order) symbolic predicate logic. If time permits, some discussion of Russell's paradox, Godel's incompleteness theorem, and the impact of each on the development of 20th Century logic, will be introduced.

20 HISTORY OF PHILOSOPHY—ANCIENT AND MEDIEVAL PHILOSOPHY (3). *3 lecture hours per week.* The history of Western philosophy from ancient to early modern. Selections from representatives of philosophers and/or schools of philosophy during this period will be examined. Pre-Socratics; philosophy of the Roman world; Christian and early rationalist thought are some to be studied. The concern will be with an analysis of various philosophers' attempt during this period to resolve certain fundamental metaphysical, epistemological and ethical questions.

21 HISTORY OF PHILOSOPHY—MODERN AND EARLY CONTEMPORARY PHILOSOPHY (3). *3 lecture hours per week.* Western philosophy from late 17th Century to Early 20th Century. Selections from various philosophers and/or schools of philosophy will be chosen

for examination and analysis. The concern will be their epistemological, metaphysical and ethical systems that developed and advanced during this period. Philosophies of Spinoza, Leibniz, the British Empiricists, Kant, Hegel and other idealists will be studied. Other schools of philosophy, early Existentialism, Marxism and Logical Positivism will also be considered.

23 INTRODUCTION TO ETHICS (3). *Prerequisite: Philosophy 6, or English 1a, or consent of instructor. 3 lecture hours per week.* The traditional theories of the good life and moral obligation and their application to typical problems of individual and social behavior. Theories discussed include: Epicureanism, Stoicism and Hedonism; the "Nicomachean Ethics" of Aristotle; Augustinianism; theistic approbativism; Kantianism; the consequentialism of John Stuart Mill and other Utilitarians; the intrinsicism of G. E. Moore; Plato's views on the ideal society; the communistic and libertarian views of the ideal society.

24 INTRODUCTION TO RELIGION: RELIGION OF THE WORLD (3). *3 lecture hours per week.* 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. The course gives equal emphasis to the history and anthropology of religion, the western religions, and the eastern religions.

25 WESTERN RELIGIOUS PHILOSOPHY (3). *3 lecture hours per week.* Investigation of the questions arising in the western Judaeo-Christian tradition: 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. A substantial amount of time will be spent on Hebraic and Christian theology including the teachings of Moses, Isaiah, Paul, and John the Evangelist.

27 INTRODUCTION TO AESTHETICS (3). *Prerequisite: None, but exposure to any of the arts (fine art, music, literature, dance, etc.) would be most helpful, as would a course in philosophy. 3 lecture hours per week.* This course will investigate philosophical questions related to an understanding of the arts: the creation of a work of art, criteria for judgment and evaluation, historical-cultural context, the nature of "art" and "beauty," the relationship of artist, work and audience, the question of meaning, etc. Attempts will be made to correlate the course to offerings current in the Fine Arts and Literature Divisions.

28 INTRODUCTION TO THE PHILOSOPHY OF SCIENCE (3). *Prerequisite: One course in philosophy and/or science or mathematics, or permission of instructor. 3 lecture hours per week.* Elementary treatment of the structure and orientation of the positive sciences; the role of observation and laws, inductive and deductive evidence, hypothesis and theory, in the logical structure and historical development of the sciences; the mathematicization of science. Typically the sciences considered would include mathematics, physics and either biology or psychology. Possible topics include the Copernican Revolution, from Kepler to Newton, Einstein's Relativity Theory, and Quantum Mechanics, from Freud to Existential Psychology, logical structure of the social sciences, etc.

35 ASIAN PHILOSOPHY (3). *Prerequisite: Philosophy 6, 24, or History 9a or 9b strongly recommended. 3 lecture hours per week.* Introductory course in the philosophical development in the major Asian countries-China, India and Japan. The general concern will be given on the philosophical development of these countries rather than religious evolution. The course is not merely to provide a survey of the philosophical systems of the past. Special attention will be given to the 20th Century Asian thinkers and how their ideas shape the Asian minds inside and outside of Asia.

38 ADVANCED SEMINAR IN PHILOSOPHY (3). *Prerequisite: Two other courses in philosophy. 3 lecture hours per week.* Designed to provide an opportunity for philosophy majors and others who meet requirements to pursue some more advanced problems in philosophy (especially in Epistemology).

48 SPECIAL TOPICS (1-3). *1 to 3 lecture hours per week.* A course on topics of contemporary interest designed to provide a means for discussing changing knowledge and important issues in philosophy. Specific subject matter will vary from semester to semester and is announced in advance.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in philosophy and the consent of the instructor and the Social Science Division Chairman.* Specific individual study of directed research in specific problem areas.

Physical Education

(Men, Women, Coed)

A student may elect more than one Physical Education general service class or repeat a class.

Enrollment in varsity athletics satisfies the Physical Education requirement for the semester.

The Physical Education courses listed below are for men or women or are coeducational as shown in parentheses following the unit value of the course (M, W, C).

VARSITY SPORTS

These courses are designed for those students who desire to compete in intercollegiate athletics and may be limited to those who present the necessary qualifications. The passing of medical and physical examinations and the consent of the coach are necessary before actual participation is started. Varsity awards are granted for all sports.

3a VARSITY BASEBALL (2) (M). *Prerequisite: Permission of the coach.* Intercollegiate competition in the Camino Norte Conference and participation in regional tournaments, Northern California playoffs and the State J.C. Championships when qualified. Daily practices February to May.

3b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 3a.*

4a VARSITY BASKETBALL (2) (M). *Prerequisite: Permission of the coach.* Intercollegiate varsity basketball competition in the Camino Norte Conference and participation in regional tournaments. Daily practices October 15 to March 15.

4b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 4a.*

5a VARSITY CROSS COUNTRY (2). *Prerequisite: Permission of the coach.* Intercollegiate competition in the Camino Norte Conference and participation in dual meets, triangulars, invitationals, league meet, and Northern California and State Championships as qualified. Daily practice, September to December.

5b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 5a.*

6a VARSITY GOLF (2) (M). *Prerequisite: Permission of the coach.* Intercollegiate competition in the Camino Norte Conference and participation in dual matches, invitationals and the conference championships. Team members will also participate in the Northern California and State Championships as qualified. Daily practices February to May.

6b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 6a.*

7a VARSITY SOCCER (2) (M). *Prerequisite: Permission of the coach.* Intercollegiate competition with four-year institutions and junior colleges in Northern California. League competition in the Western Junior College Soccer Conference. Daily practices from September to December.

7b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 7a.*

8a VARSITY TENNIS (2) (M). *Prerequisite: Permission of the instructor.* Intercollegiate competition in the Camino Norte Conference and participation in dual matches, invitationals, league meet, Northern California and State Championships as qualified. Daily practices February to May.

8b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 8a.*

9a VARSITY WRESTLING (2) (M). *Prerequisite: Permission of the coach.* Intercollegiate competition in dual matches in the Camino Norte Conference; competition in several regional wrestling tournaments each year including the Camino Norte Conference Meet, the Northern California Meet and the State J.C. Championships. Daily practices October 15 to March 15.

9b VARSITY CONDITIONING (1) (M). *Must be taken concurrently with 9a.*

INTRAMURALS

Supervised intramural sports are scheduled throughout the semester, beginning with the third week. Primary hours are from 11 a.m. to 12 noon on Tuesday and Thursdays. Additional intramural hours may be established as needed for play-offs and make-up contests. Students should consult the Intramural Bulletin Board in the Physical Education building for detailed information concerning activities, days and hours, sign-up instructions, rules and procedures.

As students interest determines the need, intramural programs will be conducted in three and five man basketball, table tennis, badminton, bicycling, soccer, weight lifting, softball, bowling, volleyball, tennis, and flag football. One-half unit of credit is available.

THEORY COURSES

20 THE NATURE AND SCOPE OF PHYSICAL EDUCATION (2) (C). *For major and minor students in Physical Education and Recreation Education. Not an ac-*

activity class. 2 lecture hours per week with assigned lab meetings. 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.

22 ISSUES IN SPORT (2) (C). 2 lecture hours per week. Introduction to selected diverse contemporary issues in American sport. Sample topics would include: amateurism and/or professionalism in sport, racism in sport, women in sport, sport and education, and the economics of sports. This course is recommended for all Physical Education and Recreation Education majors and minors.

COMPETENCIES COURSES

25a-25b-25c-25d PHYSICAL EDUCATION COMPETENCIES (2-2-2-2) (W). See description under 27a-27d.

26a-26b-26c-26d PHYSICAL EDUCATION COMPETENCIES (2-2-2-2) (M). See description under 27a-27d.

27a-27b-27c-27d PHYSICAL EDUCATION COMPETENCIES (2-2-2-2) (C). 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. 6 hours per week. 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 competence requirements of the four-year colleges and universities. Emphasis is placed on the development and improvement of the individual's own skill 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.

GENERAL SERVICE COURSES

30 ADULT FITNESS (2) (C). (Evening College) 4 hours per week. For the adult who desires a course in vigorous

activity of a "conditioning" nature. Tests given regularly relating to motor fitness, speed, balance, strength, endurance, flexibility and power. Considerable running activity. Emphasis on development of cardio-respiratory improvement. Several college fitness batteries utilized. Team games and weight conditioning to develop stamina.

31 AQUATIC FITNESS (1) (C). Students must not be beginning swimmers. 2 hours per week. Highly vigorous activities in conditioning in swimming. Some stroke and development work. Class goal is to swim one mile in a half-hour.

32 ELEMENTARY ARCHERY (1) (C). 2 hours per week. For beginning archers. Deals primarily with the fundamentals of target archery. Individual and team competition is used in the Junior Columbia Round. Also included is the basic understanding of rules, scoring, terminology, and care and selection of arching equipment.

33 BACKPACKING (2) (C). Designed primarily for the student who is a beginning or intermediate backpacker. The advanced backpacker may enroll. 4 hours per week. Instruction will be given in the science of backpacking and living in the wild. Instruction will also be given in the purchase and care of backpacking equipment. Students will be expected to furnish most of their own equipment. Students will also have to demonstrate that they are physically fit in order to participate. The course will include lectures, labs, and overnight trips.

34a ELEMENTARY BADMINTON (1) (M) (C). 2 hours per week. Rules and strategies of badminton as well as the fundamentals of grip strokes, footwork and court coverage through drills and competition; testing program in the various skills and techniques are taught; tournaments in singles and doubles are held.

34b INTERMEDIATE/ADVANCED BADMINTON (1) (C). Prerequisite: Elementary Badminton or permission of the instructor. 2 hours per week. Designed to improve the intermediate and advanced player's skill, knowledge and enjoyment of the game. Emphasis on strategy, tactics, footwork, doubles teamwork and the singles game.

35 ELEMENTARY BASEBALL (1) (M). Not open to Canada College baseball letterman. 3 hours per week. Fundamentals of baseball skills combined with game situations. Emphasis will be placed on individual skills and the associated game rules. A testing program will include material on all skills taught and the playing rules.

35b ADVANCED BASEBALL (2) (M). Prerequisite: Elementary baseball or varsity letter in baseball. One lecture and 2 lab hours per week. Fundamentals of baseball

with emphasis on strategy, officiating, interpretation of the rules, and team play. Designed for the advanced player.

36a ELEMENTARY BASKETBALL (1) (M).

Prerequisite: Enrollees must be beginners in basketball activity. Students who have participated on high school interscholastic teams will not be admitted. 2 hours per week. 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.

36b ADVANCED BASKETBALL (1) (M).

Prerequisites: Successful completion of Elementary Basketball with approval of the instructor; participation on high school basketball teams of J.V. or varsity level. 2 hours per week. Advanced aspects of team offense and defense. Emphasis will be placed on team play through the medium of round robin schedules and tournaments. Evaluation will be conducted through written and practical examinations on rules and skills taught.

37 BICYCLING (2) (M) (W).

4 lab hours per week. Instruction in the operation of bicycles, safety concepts, rules of the road and participation in cycling programs that involve controlled conditions over diversified terrain. Activities will be geared to the ability of the individual. The testing program will include speed cycling, time trials, endurance tests and maintenance of the bicycle.

38 BODY MECHANICS (1) (W).

2 hours per week. 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 on body functions, knowledge, fitness, and exercise.

39a ELEMENTARY BOWLING (1) (C).

For beginning students in bowling. 2 hours per week. Learning opportunities will be provided in the stance, approach, release and roll. A working knowledge of bowling rules, scoring and etiquette. Approximate cost: \$15.00 per semester.

39b INTERMEDIATE/ADVANCED BOWLING (1) (C).

Prerequisite: Women must have at least 110 average; men, at least 125 average. 2 hours per week. Participation in advanced league bowling competition; individual scoring statistics are maintained. Approximate cost: \$20.00 per semester.

40 EXERCISE APPRECIATION (1) (M).

3 hours per week. 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.

41 FIELD SPORTS (1) (W).

2 hours per week. Class may elect to cover two 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.

42a ELEMENTARY FOLK DANCE (1) (C).

2 hours per week. Dance fundamentals and basic skills associated with beginning folk dance activity. Representative dances of many countries are offered. Emphasis on the basic steps and appropriate rhythmical responses.

42b INTERMEDIATE FOLK DANCE (1) (C).

Prerequisite: Elementary Folk Dance or permission of instructor. 2 hours per week. Review of folk dance fundamentals and basic skills; introduction of approximately 30 intermediate dances. Representative dances of many countries are presented.

43a ELEMENTARY GOLF (1) (C).

Prerequisite: Only beginning golfers will be enrolled. 2 hours per week. 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.

43b INTERMEDIATE/ADVANCED GOLF (1) (C).

Prerequisite: Permission of the instructor. 2 hours per week. Extension of the fundamentals learned in Elementary Golf; considerable emphasis is placed on the competitive aspects of golf; tournament play is a major part of the course; most sessions are conducted at the Emerald Hills golf course, putting greens, driving ranges, pitch-and-putt areas also utilized.

44 GYMNASTICS (1) (C).

For beginning students in gymnastic activity. 2 hours per week. Elementary concepts of gymnastic activities for beginning students; includes trampolining, side horse, long horse, horizontal bar, parallel bars, pyramid building and tumbling.

45 ELEMENTARY ICE SKATING (1) (C).

Prerequisite: Enrollees must be beginners. 2 hours per week. 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. Approximate cost: \$15 per semester.

46a ELEMENTARY JUDO (1) (M) (W).

Prerequisite: Enrollees must be beginners in Judo activity. 2 hours per week. Rules, procedures, techniques of falling, unbalancing, throwing, and combinations of techniques as related to physical development. Emphasis on judo as a sport.

46b INTERMEDIATE/ADVANCED JUDO (1) (C).

Prerequisite: Successful completion of Elementary Judo at Canada College or permission of the instructor. 2 hours per week. Intermediate and advanced exposure to sport judo and self-defense; special emphasis on advanced conditioning, falling to both sides, refinement of throws, countering and selected new throws and drops.

47 LIFE SAVING (1) (C).

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. 2 hours per week. Progressive skill development in take-offs, approaches, carries, defensive mechanism, shallow water carries, water safety knowledge and artificial respiration. Red Cross certificate available upon satisfactory completion of the course.

50a ELEMENTARY MODERN DANCE (1) (C).

2 hours per week. Basic dance techniques; ballet movement for proper body alignment, balance, flexibility and rhythmic coordination.

50b INTERMEDIATE AND ADVANCED MODERN DANCE (1) (C).

Prerequisite: Successful completion of Elementary Modern Dance, or permission of instructor. 2 lab hours per week. Continuing study of dance experiences with emphasis on movement technique and improvisation.

51 ADVANCED MODERN DANCE (2) (C).

Prerequisite: Successful completion of Intermediate and Advanced Modern Dance, or permission of instructor, 4 lab hours per week. Synthesis of previous dance experience. Advanced modern technique, group improvisations and repertory experience.

52 MODERN DANCE PRODUCTION (2) (C).

Prerequisite: One or two semesters of Modern or Jazz and permission of instructor. 4 hours per week. Includes both technique and composition. Students have the opportunity to choreograph their own compositions (dances) for performance. The elements of production — music, make-up, costumes, lighting and staging — are included in this semester's work. A final concert, demonstration or studio rehearsal will culminate the semester's work performed by the students.

53 MODERN JAZZ (1) (C).

Prerequisite: Elementary Modern Dance or permission of instructor. 2 hours per week. 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.

54 ROPE ACTIVITIES (1) (M).

2 hours per week. This class is designed to offer techniques related to vertical rope climbing, rope skipping, and peg board work. The major emphasis of this class is placed on the development of shoulder girdle structure and the improvement of cardio-respiratory endurance. Students skip rope for speed and techniques. Seventeen vertical rope climbing skills are taught in progressive order. Nine peg boards are utilized for the development of strength as related to hands, wrists, forearms, and legs. Detailed evaluation procedures are followed. Emphasis is placed on the explanation and development of safety procedures.

56 BASIC METHODS AND TECHNIQUES OF SKIN AND SCUBA DIVING (2) (C).

Prerequisite: Student must pass instructor's water skills test the first activity class meeting, or hold a current Senior Red Cross Life Saving card or a Water Instructor's card. 2 activity hours per week plus out-of-class assignments. Demonstration and practice of skills necessary to become proficient in skin and scuba diving activities and in the proper utilization of scuba gear and its various periphery equipment. Thorough familiarization with those aspects of physics, physiology and mechanics directly related to a basic competency in skin and scuba diving. A basic study of the ocean environment and marine life from the safety, aesthetic and scientific viewpoints.

57 BEGINNING SNOW SKIING (1) (C).

2 hours per week. Instruction will be given on "shorty" skis, with skis advancing in length as skier advances in skills. Downhill skiing skills such as turns, stopping, traversing and control. No equipment necessary beyond personal clothing. Approximate cost to student: \$130, plus transportation. 3 full weekends on the slopes are a part of the course.

58a ELEMENTARY SOCCER (1) (M). *Prerequisite:* For beginning students in soccer only. 3 hours per week. 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.

58b ADVANCED SOCCER (1) (M). *Prerequisite:* Successful completion of Elementary Soccer or permission of the instructor. 2 hours per week. Advanced aspects of team play in soccer; extension of elementary skills of play in dribbling, trapping, heading, offensive and defensive tactics; considerable team play is offered.

59 ELEMENTARY SOCIAL DANCE (Ballroom) (1) (C). 2 hours per week. Social dance fundamentals and basic steps: waltz, tango, cha cha, samba, rumba, 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.

60 ELEMENTARY SOFTBALL (1) (M). *Prerequisite:* Enrollees must be beginners in softball play. 2 hours per week. Fundamentals and play situations of softball. 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.

61 STRIDING (1) (C). 2 hours per week. A course related to the values of walking and striding. Programs of activity will be developed to provide students of all ability levels with progressive walking and striding activity. Proper techniques in the various styles of walking and striding will be presented on a variety of terrains. Continual rhythmic activities involving progression will be provided. The course would be appropriate for all students ranging from the modified/limited level to high-gear programs.

62 TABLE TENNIS (1) (C). *Prerequisite:* Enrollees must be beginners. 2 lab hours per week. 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.

63a ELEMENTARY TENNIS (1) (C). *No previous tennis experience necessary.* 2 hours per week. Basic fundamentals of tennis. Instruction on forehand and backhand ground strokes, serve and volley. Rules, scoring system, tennis etiquette and basic tactics of singles and doubles. Some competition included toward the end of the semester. Major emphasis on individual improvement.

63b INTERMEDIATE/ADVANCED TENNIS (1) (C). 2 hours per week. Designed for the student with prior tennis experience. All strokes and shots presented, including forehand and backhand groundstrokes, serve, volley, lob and smash. Advanced instruction in singles and doubles play. Individual improvement will be the major emphasis.

64 TRAMPOLINE (1) (C). 2 hours per week. Trampoline activity for elementary, intermediate and advanced students. Safety skills and fundamental processes of trampolining are taught in the following phases: Phase I—Fundamental bounces, checks, drops, simple combinations, turns, twists and somersaults. Phase II—Continuance of the activities of Phase I plus combinations of front and back somersaults and other intermediate movements. Phase III—The development of techniques in twisting somersaults, advanced routines, trick skills and team bouncing.

65 TUMBLING (1) (C). 2 hours per week. 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.

66a ELEMENTARY VOLLEYBALL (1) (C). 2 hours per week. Skills involving the serve, volley, dig, smash and hit taught and practiced. Proper rotation, rules and team play stressed. National Volleyball rules of play strictly enforced. An evaluation program in all skills conducted. Tournament play on a round-robin basis.

66b INTERMEDIATE/ADVANCED VOLLEYBALL (1) (C). *Prerequisite:* One semester of college volleyball or instructor's permission. 2 hours per week. Designed for students wishing more advanced play and skills of volleyball. Includes a quick review of the dig or bump, volley with footwork, overhand serve. The spike, block and tumble dig are introduced. All of these skills incorporated into offensive and defensive court play.

67 WATER POLO (1) (M). *Prerequisite:* The ability to swim 50 yards using a "head high" crawl stroke, to swim 50 yards using the breast stroke, to tread water for 3 minutes and to tread water for one minute with the hands out of the water. 2 hours per week. Progressive skill development in picking up a ball in the water, passing, receiving, shooting, dribbling and playing the game of water polo. Knowledge of water polo rules and facets of water safety.

68 WATER SAFETY INSTRUCTION (1) (C). *Prerequisite:* Current American Red Cross Senior Life Saving Certificate. 2 hours per week. Phase I: Development

of effective performance in the nine basic swimming strokes and the various life saving and water safety skills. Phase II: Teaching techniques, methods and knowledge necessary to teach American Red Cross swimming and life saving courses.

69a ELEMENTARY WEIGHT CONDITIONING (1) (M) (C). *Prerequisite: Enrollees must be beginners in weight conditioning work. 2 hours per week.* Elementary lifts and procedures of weight training. Emphasis on proper form and techniques, safety procedures, and strength values of beginning work in weight lifting. Barbells, dumb-bells, and associated equipment are combined with regular running activity.

69b INTERMEDIATE/ADVANCED WEIGHT CONDITIONING (1) (M). *Prerequisite: Successful completion of Elementary Weight Conditioning or permission of the instructor. 3 hours per week.* Progressive skills and weight development in various weight conditioning exercises. Opportunities granted to specialize in different areas of the body. Development of individual programs encouraged.

70 WESTERN RIDING (1) (C). *2 hours per week.* Care, feeding, structure of a horse; care of equipment; basics of western riding — hands, seat, control of animal in ring and trail riding. Approximate cost per semester: \$60.

71 ELEMENTARY WRESTLING (1) (M). *Prerequisite: Enrollees must be beginners in wrestling activity. 2 hours per week.* 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 applies them in short periods of wrestling.

72 YOGA (1) (C). *Designed for beginning student in yoga. 2 hours per week.* Course deals with yoga postures and breathing techniques, with emphasis on body control through position awareness.

Physical Science

10 INTRODUCTION TO THE PHYSICAL SCIENCES (3). *3 hours per week.* 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. Stress on conceptual understanding rather than mathematical detail. This course meets the general education requirements for physical science at many colleges and universities.

Physics

2a-2b GENERAL PHYSICS LECTURE AND LABORATORY (4-4). *Prerequisites: Elementary algebra and plane geometry, trigonometry is strongly recommended. Physics 2a is a prerequisite for Physics 2b. 3 lecture, 1 recitation and one 2-hour lab per week.* Lectures with experimental demonstrations and laboratory experiments covering mechanics, heat and sound in the first semester, and magnetism, electricity, light and modern developments in the second semester. Designed for students majoring in some field of letters and science; required for those planning to enter medicine, dentistry, pharmacy, optometry, agriculture or forestry.

4a-4b-4c GENERAL PHYSICS (4-4-4). *Prerequisite for 4a: Mathematics 30; prerequisite for 4b or 4c: Physics 4a and Mathematics 31. 3 lecture, 1 recitation and one 2-hour lab period per week.* **4a-Mechanics**, wave motion and special relativity. **4b-Electricity and magnetism.** **4c-Heat**, light and modern physics. These courses constitute a three-semester program designed to give the student majoring in engineering, physics, chemistry and certain other majors a thorough foundation in the fundamentals of physics.

9 PHYSICS OF SOUND AND MUSIC (3). *Also Music 9. Prerequisite: None; high school algebra suggested. 2 lecture and 3 lab hours per week.* Lectures with experimental demonstrations, emphasizing the nature of sound, music and related wave phenomena. A weekly laboratory period studying musical instruments, overtones, resonance and pitch. This course is planned for, but not restricted to, Music majors.

10 INTRODUCTION TO DESCRIPTIVE PHYSICS (3). *3 lecture hours per week.* Description with experimental demonstrations of the more important phenomena of physics. Designed to show the beauty, simplicity and unity of our conception of the physical world, rather than concentrating on mathematical detail. Open to all students except those who have had, or are taking physics 2a or 4a. This course meets the general education requirements for physical science at most colleges and universities.

62 PHYSICS FOR X-RAY TECHNOLOGISTS (4). *Prerequisite: High school algebra and geometry; high school science. 4 lecture hours per week.* This specialized course considers ideas of energy, electricity and electromagnetic waves as related to X-Ray phenomena, including interaction with matter. X-Ray circuits and equipment also are studied. Intended for students pursuing careers as X-Ray technologists.

Physiology

1 INTRODUCTORY PHYSIOLOGY (5). *Prerequisites:* One course selected from *Biology 1, Anatomy 1, Zoology 1, knowledge of elementary chemistry and physics is recommended.* 3 lecture hours and two 3-hour lab periods per week. 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.

Political Science

1 INTRODUCTION TO POLITICAL SCIENCE (3). 3 lecture-discussion hours per week. Examination and comparison of major contemporary political ideologies (varieties of democratic capitalism, democratic socialism, classical conservatism, minority liberation, communism and fascism) in their cultural and economic contexts. Exploration of a major problem of political behavior (for example, citizen participation) and of a major area of public policy-making (for example, United States foreign policy).

2 CONTEMPORARY FOREIGN GOVERNMENTS (3). 3 lecture-discussion hours per week. The historical development and contemporary politics of significant foreign governments. Analysis and comparison of major forces and trends in Great Britain, France, Germany, the Soviet Union, Japan and several new non-Western states.

3 INTERNATIONAL RELATIONS (3). 3 lecture hours per week. The nature of relations among states; 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 is included among a variety of current events topics which will be studied in depth. When studying current world events, these events will be presented in broad historical context to help the student gain an awareness of the complexity and evolution of international relations.

5 INTRODUCTION TO POLITICAL THEORY (3). 3 lecture hours per week. The development and uses of classical and modern political ideas with emphasis on developing skill in dealing with political ideas and proposed solutions to problems.

7 SURVEY OF CONSTITUTIONAL PRINCIPLES (3). *Prerequisite:* History 5 is strongly recommended. 3 lecture hours per week. Survey of American Constitutional development and analysis of the issues and problems considered by the U.S. Supreme Court particularly in the area of civil liberties and civil rights; the rights of racial, political and religious minorities and of criminal defen-

dants; the concepts of due process and equal protection of the laws; the interaction of the Supreme Court with the President, Congress, political parties and interest group.

13 MINORITY GROUP POLITICS IN THE UNITED STATES (3). 3 lecture-discussion hours per week. Study of the political experiences and contributions, both intellectual and organizational, of selected racial and cultural minorities in the United States. Principal focus on Blacks, Mexican-Americans, Orientals and Native Americans. Brief attention given to European immigrants for comparative purposes. (This course fulfills the American Institutions and ethnic studies requirements.)

21 AMERICAN GOVERNMENT (3). 3 lecture-discussion hours per week. Survey of American politics and government, including public opinion, voting patterns and elections, pressure group and political party activity, the functions of the President, the Congress and the Supreme Court, and constitutional guarantees of the citizen's rights and liberties.

23 CALIFORNIA STATE AND LOCAL GOVERNMENT (2). 2 lecture-discussion hours per week. Survey of California state and local government with a stress on current problems and processes. Students are encouraged to explore and formulate positions on current political and social issues.

24 URBAN GOVERNMENT (3). 3 lecture hours per week. 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). 5 lecture-discussion hours per week. Introduction to the principles and problems of American government at the national, state and local levels. Intergovernmental relationships are examined from a functional point of view. Major areas of emphasis are American federalism, judicial review, the political process in nation and state, civil liberties, foreign policy and the role of the citizen at all levels of government. This one-semester course satisfies both the American institutions and the California institutions requirements. Not open to students who have had Political Science 21, 23 or 24.

27 AMERICAN SOCIETY (5). *Prerequisite:* Strictly limited to foreign students or recent immigrants. 5 lecture-discussion hours per week. Orientation course in American society and culture. Includes such topics as: (1)

Main values and characteristics of the American people. How and why these traits have developed in American society—Puritan ethic, dream and reality of equality and democracy in America. (2) Political problems, principles and institutions in America—constitution, federalism, civil liberties. (3) American social institutions—the family, religion, arts, entertainment, sports. (4) Current issues and problems in American society. Comparison is frequently made between American traditions, institutions and practices and those of other countries in order to enhance the perspective with which the foreign student views the difference between his country and the United States. This course meets the American institutions and California institutions requirements.

28 INTRODUCTION TO THE SYSTEMS OF CALIFORNIA HIGHER EDUCATION (2). *2 seminar hours per week.* Surveys and analyzes intergovernmental relationships as they affect governance system relative to the authority and responsibilities of the legislature, boards of education and internal populations of California's higher education system. Particular emphasis is placed on the community college system, examining its historical background and development, its place in the Master Plan, current issues, future trends, varieties of students as related to curriculum and governance roles and the political processes affecting community colleges. Fulfills California Institutions requirement of the College.

40 POLITICAL SIMULATION GAMES (1). *1 1/2 hour class meetings twice weekly for 6 weeks.* Drawing on the game-like quality of many real-life political situations, the course enables students to enlarge their understanding of politics by participating and making decisions in a miniature society, and then analyzing how well the concepts and assumptions in the simulation represent reality. May be taken in conjunction with another political science course or independently.

41 FIELD WORK IN A POLITICAL CAMPAIGN (1-2). *9 lecture hours and 30 lab hours for 9 weeks for first unit; 7 seminar sessions and lab work for second unit.* Students work for the candidate or campaign of their choice for a minimum of 30 hours and meet for one hour weekly during and for several weeks after the campaign (the first nine weeks of the semester) to report on and analyze the candidates and issues of the election. A second unit of credit will be awarded to students who wish to continue meeting as a seminar for the rest of the semester (seven additional meetings) to discuss brief review papers they have written on significant books on Presidential campaigns and elections. Course taken in conjunction with a U.S. or California government course, or independently.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Political Science and consent of the instructor and the Social Science Division Chairman.* Specified individual study or directed research in specific problem areas.

Program Specials

70 PROGRAM SPECIALS (1/2-1). *8 hours for 1/2 unit, 16 hours for 1 unit. One unit maximum each semester.* Coordinated enrichment program of educational lectures, workshops, artistic events, films and discussions led by faculty members and outside speakers on a wide range of topics.

Psychology

1a GENERAL PSYCHOLOGY (3). *3 lecture hours per week.* Introduction to the diverse areas of psychology including principles of learning, theories of personality, tests and measurement, behavioral disorders and mental health, and physiological and developmental aspects of individuals. Experimental design and research data are emphasized.

1b EXPERIMENTAL PSYCHOLOGY (3). *Prerequisite: Psychology 1a or consent of instructor. 3 lecture hours per week.* Scientific inquiry of the nature of behavior of man and other animals utilizing experimental methodology. Major objectives include development of skills in collecting and analyzing data from human and animal subjects with various laboratory apparatus. Emphasis upon professional journal format for experimental reports.

4 COURTSHIP, MARRIAGE AND THE FAMILY (3). *2 lecture hours and one discussion hour per week.* Focus on marriage as a personal and probable event in the lives of the students enrolled: courtship; personality and 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 and as a personal commitment.

5 CHILD DEVELOPMENT (3). *Prerequisite: Psychology 1a. 3 lecture hours per week.* Consideration of social, emotional, physical and intellectual development from the prenatal period through adolescence. Emphasis upon factors influencing personality development. Current learning theorists are explored. One child is studied in depth.

6 SOCIAL PSYCHOLOGY (3). *Prerequisite: Psychology 1a or Sociology 1.* 3 lecture hours per week. Study of human interaction, the effects of social influences on human behavior. Special attention given to social pressure, attitudes, person perception and research methods.

7 THE PSYCHOLOGICAL EXPERIENCE OF LA RAZA IN THE U.S. (3). *Prerequisite: Psychology 1a.* 3 lecture hours per week. The psychological results of being a Spanish-speaking minority within an Anglo society. Emphasis on the psychodynamics of the Spanish-speaking family in the United States.

10 PSYCHOLOGY IN PRACTICE (3). 3 lecture hours per week. Intended for those who wish a general picture of human psychology and do not plan to take further courses in psychology. Emphasis will be on an application of psychological principles to problems of everyday life rather than the technical-scientific approach of Psychology 1a.

11a EARLY CHILDHOOD EDUCATION: NURSERY SCHOOL PRINCIPLES AND PRACTICES (3). *Also Nursery School 11a.* 3 lecture hours per week. Nature and goals of early childhood education. Evolution and exploration of various models of pre-schools and follow-through project. Exploration of the philosophic position, personalities and forces guiding the development of these early childhood programs.

11b EARLY CHILDHOOD EDUCATION CURRICULUM (3). *Also Nursery School 11b.* 3 lecture hours per week. Selecting, developing and managing activities for young children. Developing skills in providing adequate and effective education. Learning and values inherent in children's play. Exploration of creative activities and growth experiences through art, music, language development, dance, science, and Math.

12 CHILD, FAMILY AND COMMUNITY (3). 3 lecture hours per week. Designed for those interested in working with or concerned with education or social service fields. Examination of patterns of child rearing techniques and current family life styles in the contemporary democratic society. The varying factors of the community (resources available, urban and sub-urban aspects, racial and cultural differences, economic concerns) as they affect the child and the family will be the emphasis.

13 INTRODUCTION TO PARAPSYCHOLOGY (3). 3 lecture hours per week. Designed to acquaint the student with the various areas of psychic phenomena with a special emphasis on current trends. Each week will take

up a different aspect and will deal with developments both in this country and abroad.

21 INTRODUCTION TO THE EXCEPTIONAL CHILD (3). *Prerequisite: Psychology 5.* 3 lecture hours per week. A survey course emphasizing the descriptive and diagnostic differences of exceptional children (deaf, mentally retarded, orthopedically handicapped, visually handicapped, communicative disorders, educationally handicapped, emotionally disturbed, blind/ deaf, the gifted). Current approaches concerning educational suggestions are included.

22 INTRODUCTION TO THE MENTALLY RETARDED (3). *Prerequisite: Psychology 5.* 3 lecture hours per week. Course stresses a broad understanding of mental retardation—its characteristics, learning potentials, curriculum guides, community organizations and parent/ teacher suggestions.

33 PSYCHOLOGY OF ADJUSTMENT (3). *Prerequisite: Psychology 1a or permission of instructor.* 3 lecture hours per week. Study of the dynamic processes involved in man's adaptation to the environment. Designed to provide an understanding of the contingencies of normal and abnormal behavior. Emphasis upon identification of coping behavior in problems in living and adjusting. Consideration of factors affecting personal growth.

34 ABNORMAL PSYCHOLOGY (3). *Prerequisites: Psychology 1a and Psychology 33.* 3 lecture hours per week. Elaboration on the study of deviant behavior and abnormal personality development introduced in previous courses. Topics include the major neuroses and psychoses, character disorders and transient disturbances along with their principal symptoms, dynamics, etiology, and treatments. The course is designed to appeal to both the general student and the pre- (or para-) professional candidate.

39 HUMAN SEXUALITY: PSYCHOLOGICAL ASPECTS (1 1/2) *Half-semester course.* Introduction to human sexual behavior with an emphasis on psychological and interpersonal aspects. Topics will include historical and contemporary thoughts, attitudes, and feelings about various and diverse sexual roles and behaviors.

42 INTRODUCTION TO TREATMENT MODALITIES (1-3). 3 lecture hours per week. Brief study of current theories, techniques and methods employed within the correctional and mental health settings to change behavior. Course is offered in three modules: (1) Brief Therapy and I-Level Classification, (2) Behavior Modification, and (3) Transactional Analysis. One unit of credit is given for each module.

43 PSYCHOLOGICAL ASSESSMENT (3).

Prerequisite: Psychology 1a. 3 lecture hours per week. Quantitative approach to the study of behavior. Introduction to traditional methods of assessment; i.e., intelligence tests, personality tests and clinical diagnostic instruments. Emphasis upon descriptive statistics and consideration of inferential statistics.

44 DRUGS: EFFECTS ON INDIVIDUALS AND SOCIETY (3).

Also Administration of Justice 44. Prerequisite: Psychology 1a. 3 lecture hours per week. Introduction to the effects of various categories of drugs. Exploration of the anatomical and physiological basis of drug action. Designed to enable identification of symptoms and side effects of drug use or abuse. Emphasis upon various modes of treatment and rehabilitation.

45 PRINCIPLES OF GROUP INTERACTION (3).

Prerequisites: Psychology 1a and permission of instructor. 3 lecture hours per week. Introduction to the theories and methods of analysis of group interaction. Emphasis given to the processes by which a professional therapist guides a group in which the objective is the therapeutic welfare of the group. Emphasis on topics, such as conformity pressure, membership qualities, leadership behavior and reference groups.

46 INTRODUCTION TO COUNSELING (3).

Also Administration of Justice 46. Prerequisite: Permission of instructor. 3 lecture hours per week. Introduction to the various theoretical views of counseling and exposure to the general principles of interviewing. Major objectives are to provide an opportunity for the development of skills in establishing rapport, setting counseling goals, recognizing strengths in individuals, recognizing self limitations, and methods for making referrals and terminating counseling relationships.

47 COOPERATIVE EDUCATION (1-4).

Credit/no credit. Supervised field experience by arrangement.

48 SPECIAL TOPICS (1-3).

1 to 3 lecture hours per week. A course on topics of contemporary interest designed to provide a means for discussing changing knowledge and important issues in psychology. Specific subject matter will vary from semester to semester and is announced in advance.

49 INDIVIDUAL PROJECTS (1-2).

Prerequisites: Previous or concurrent work in Psychology and the consent of the instructor and the Social Science Division Chairman. Specified individual study or directed research in specific problem areas.

Quality Control

61 INTRODUCTION TO QUALITY CONTROL (3).

(Evening College) Prerequisite: Mathematics 11 or equivalent. 3 hours per week. Construction and interpretation of variables, charts, frequency distributions, process and specification comparisons, attribute charts, process simulation, acceptance sampling and Mil-Standards.

Radiologic Technology

1 ORIENTATION TO RADIOLOGIC

TECHNOLOGY (2). *Prerequisites: Anatomy 62a and Physics 62 with grades of C or better. 2 lecture hours per week.* Orientation to the profession including, hospital routine, medical ethics, x-ray equipment and accessories, darkroom procedures, biological effects of radiation and introduction to radiation protection.

2 RADIOGRAPHIC ANATOMY AND POSITIONING (6).

Prerequisite: Radiologic Technology 1. 4 lecture and 30 lab hours per week. Positioning of the abdomen, gastrointestinal tract, genito-urinary tract, respiratory system, skeletal system. Includes surface anatomy, pertinent pharmacology and patient care.

3 PRINCIPLES OF RADIOGRAPHIC EXPOSURE

(6). *Credit/no credit. Prerequisite: Radiologic Technology 2. 4 lecture hours and 30 lab hours in hospital per week.* Application of radiation physics to the exposure of x-ray film. Technique formulation includes the use of kilovoltage, milliamperage and time factors as well as the geometrical factors affecting exposure. Also includes the conclusion of positioning of the skull and radiation protection.

4 SPECIAL PROCEDURES IN RADIOGRAPHY (6).

Credit/no credit. Prerequisite: Radiologic Technology 3. 4 lecture hours and 30 lab hours per week in hospital. Application of basic positioning principles to special procedures including vascular procedures, soft tissue radiography, surgical procedures, pediatrics, survey of medical and surgical diseases, nuclear medicine.

5a-5b INTERNSHIP (6-6).

Credit/no credit. Prerequisite: Successful completion of all requirements to date or permission of instructor. 40 hours in hospital practice per week for 6 months. Full time (40 hours) in-hospital practice under direct supervision of hospital radiography staff. Also includes lectures in radiation therapy and review for the American Registry of Radiologic Technologists Examination given in November of the Internship period.

Recreation Education

40 INTRODUCTION TO RECREATION (2). *For major and minor students in Physical Education and Recreation Education. 2 lecture hours per week with assigned lab meetings.* 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 knowledge 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). *Prerequisites: Recreation 40 and Physical Education 20, one of which may be taken concurrently with Recreation 41. Recreational Leadership may be taken concurrently with Recreation 42. 1 hour of lecture per week with a minimum of 3 additional hours per week in a field assignment.* Practical supervised experience in San Mateo County area recreation programs for students preparing for recreational leadership positions. Course is for major and minor students in Recreation Education.

42 CAMPING AND OUTDOOR EDUCATION (2). *Prerequisite: Recreation 40 or permission of the instructor. 2 lecture hours per week.* Combination course in the theory and practice of camping. Attention is given to the leadership qualities for camp counseling, camper's development, and the growth and significance of organized camping. The principles of camping programs are considered and the practical skills in camping practiced. A weekend camping trip is planned as part of the course.

43 SOCIAL RECREATION (2). *Prerequisite: Recreation 40 or Physical Education 20 is desirable, but not required. 1 lecture and 2 lab hours per week.* Theory and activity course on the effective conduct of social recreation clubs, playgrounds, recreation centers, churches and camps. The leadership of social recreation activities is taught, with the emphasis on the social development and integration of individuals into group programs. Prime consideration given to acquainting students with planning programming and conducting social recreation activities.

44 ELEMENTARY SCHOOL ACTIVITIES (2). *Prerequisite: Physical Education 20, Recreation 40 or Psychology 5 are desirable, but not required. 1 lecture and 2 lab hours per week.* Presentation of games, sports, rhythms and dances as well as other physical education activities commonly taught the elementary school child. Experience in organizing and conducting physical ac-

tivities would be provided. To provide theoretical and practical knowledge of physical activities commonly taught in elementary school Physical Education and recreational programs. This course is recommended for Physical Education and Recreation Education majors and minors. Students enrolled in this section may fulfill their state Physical Education requirement.

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit.* Supervised field experience by arrangement.

Religious Studies

An interdisciplinary Religious Studies major is currently being offered. Courses now existing under this major are:

- English 34-Religion in Literature (3)
- History 13-The Bible as History (3)
- History 14-Religion in America (3)
- Philosophy 6, Option "A"-Introduction to Philosophy with special emphasis on religion (3)
- Philosophy 23-Introduction to Ethics (3)
- Philosophy 24-Intro. to Religion: Religions of the World (3)
- Philosophy 25-Western Religious Philosophy (3)
- Philosophy 35-Asian Philosophy (3)
- Sociology 15-Religion and Society: Toward a Sociology of Religion

A more detailed description of these courses may be found under the department name and number.

Research and Development

1 RESEARCH METHODS AND STATISTICAL ANALYSIS (3). *Also Statistics 1. Prerequisite: High school Algebra. 3 lecture hours per week.* Practical introduction to data collection (interviewing skills, questionnaire design), analysis (coding—descriptive statistics and elementary inferential statistics), and presentation (use of charts, graphs, tables; report design). A major class project involving the above skills is undertaken.

10 INTERACTION AND COMMUNICATION FOR THE PARAPROFESSIONAL (3). *Also Social Science 10. 3 lecture hours per week.* Class emphasizing development of individual and small-group communication skills of a verbal-interactive nature. Designed to increase both listening capacity and delivery skills. Topics include active listening, removing listening barriers, "mid-wifing," establishing rapport, non-verbal communication, probing and interrogation, role-playing and effectively responding to stress situations, etc. Creative problem-solving through student participation is actively pursued.

11 DESIGN AND DEVELOPMENT (3). *Also Social Science 11. 3 lecture hours per week.* Introduces the student to the design of research projects and the development of relevant instruments, including such data-gathering techniques as questionnaires, opinionaires, interviews and unobtrusive measures. Emphasis also on techniques of presenting research results.

12 EVALUATION AND ANALYSIS (3). *Also Social Science 12. 3 lecture hours per week.* Study of the methods and processes involved in completing an evaluation as the basis for a judgment or decision. Focus on the formulation of precise objectives and means relevant to those objectives; formative and summative evaluation; case studies and projects.

Social Science

1 INTRODUCTION TO THE SOCIAL SCIENCES (3). *2 lecture and 1 discussion hours per week.* Methodology of the social sciences, using local problems as a basis of study. 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). *Prerequisite: None; (Social Science 1 preferred). 3 lecture hours per week.* Methodology of the social sciences, using international problems as a basis of study. 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.

3 CONCEPTS OF CRIMINAL LAW (3). *Also Administration of Justice 3. Prerequisite: Administration of Justice 1, Social Science 40 or consent of instructor. 3 lecture hours per week.* 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.

6 CONSUMER IN THE MARKET PLACE (3). *Also Home Economics 6. 3 lecture hours per week.* Designed to help the consumer operate in today's complicated market place. Guidelines for intelligent buymanship and money management. Review of consumerism and the rights and responsibilities of the consumer including legislation.

10 INTERACTION AND COMMUNICATION FOR THE PARAPROFESSIONAL (3). *Also Research and Development 10. 3 lecture hours per week.* Class em-

phasizing development of individual and small-group communication skills of a verbal-interactive nature. Designed to increase both listening capacity and delivery skills. Topics include active listening, removing listening barriers, "midwifing," establishing rapport, non-verbal communication, probing and interrogation, role-playing and effectively responding to stress situations, etc. Creative problem-solving through student participation is actively pursued.

11 DESIGN AND DEVELOPMENT (3). *Also Research and Development 11. 3 lecture hours per week.* Introduces the student to the design of research projects and the development of relevant instruments including such data-gathering techniques as questionnaires, opinionaires, interviews, and unobtrusive measures. Emphasis also on techniques of presenting research results.

12 EVALUATION AND ANALYSIS (3). *Also Research and Development 12. 3 lecture hours per week.* Study of the methods and processes involved in completing an evaluation as the basis for a judgment or decision. Focus on the formulation of precise objectives and means relevant to those objectives; formative and summative evaluation; case studies and projects.

20 CURRENT WORLD AFFAIRS (3). *3 lecture-discussion hours per week.* Study-discussion of vital international and national issues of the current year. List of topics varies from semester to semester. Political, social and cultural events are analyzed to give perspective and understanding to them. Emphasis on helping class members relate their personal opinions, feelings, and beliefs to the forces, feelings and beliefs which lie behind and motivate a variety of recent events in international relations, domestic political developments, environmental issues, racial controversies and social reform movements. Brief, timely readings on each topic, supplemented by films, provide a basis for informed discussion.

29 JUVENILE PROBLEMS AND PROCEDURES (3). *Prerequisite: Administration of Justice 1, Social Science 40, or Sociology 2, or concurrent registration in same. 3 lecture hours per week.* This course will provide Administration of Justice and other Social Science students with a survey of juvenile delinquency which will include a social definition of the term "juvenile delinquency," review and analysis of various explanations of delinquency, survey and critique of the juvenile justice system; examination of selected social agencies like the police, probation departments, detention centers, welfare systems and other youth-oriented services.

30 CONTEMPORARY CULTURES (3). *3 lecture hours per week.* Introductory course in the study of cultures in

American society with primary emphasis on people of color. Designed especially for people going into public service careers to make them aware of the nature of American society as multi-cultural and multi-racial. Contemporary problems are used as basis of study and discussed from both a sociological and psychological point of view, emphasizing the dynamics of personal relations.

32 CONTEMPORARY MEXICAN-AMERICAN SOCIAL MOVEMENT (3). *3 lecture hours per week.* Study of contemporary Mexican-American social action. Analysis from a sociological and psychological point of view. Designed to give students a greater understanding of the present and future development of the Mexican-American within American society.

33 AFRO—AMERICAN CULTURE (3). *3 lecture hours per week.* 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 is examined, and culture of the contemporary Black community also is studied in present and historical perspective.

34 MEXICAN-AMERICAN CULTURE (3). *3 lecture hours per week.* Contemporary view of the Mexican-American community covering its cultural heritage, social structure, problems and creative contributions.

35 CHILD IN THE HOME (3). *Also Home Economics 35. Prerequisite: Completion of or concurrent enrollment in Psychology 1a. 3 lecture hours per week.* Emotional, social, intellectual, and physical development of children to six. Understanding the young child, the point of view of a child, individual differences, implications for later behavior and personality growth; emerging resources for coping with the world; and concrete analysis of contemporary parents' concerns.

36 LIFE CYCLE: FAMILIES IN CRISIS (3). *Also Home Economics 36. 3 lecture hours per week.* Understanding of self and social development which affect readiness for adulthood and family interactions. Developmental concerns from birth to death and changes in the family structure, as well as crisis situations, such as marriage, divorce, suicide, alcoholism, drugs, aging, and death.

37 SOCIOLOGY OF WOMEN (3). *Also Home Economics 37. 3 lecture hours per week.* Examination of the historical, socio-economic, psychological, social biological, political, emotional and intellectual. The aim of the course is to increase personal awareness of role change and flexibility.

38 COMMUNITY RELATIONS OF PUBLIC AGENCIES (3). *Also Administration of Justice 38. 3 lecture hours per week.* Role of public agencies in contemporary society with particular emphasis on minority group relations. Examination of the society and the agencies that perform the police and service functions.

40 INTRODUCTION TO SOCIAL SERVICE (3). *3 lecture hours per week.* Designed to assist students in their decision-making about careers in one of the social services and to give students an opportunity to interact with representatives from any social service agencies. A survey of the social services their scope, purposes, problems and issues. Designed to provide an overview of the many local, state and federal services.

41 THE COMMUNITY WORKER (2). *Prerequisite: Concurrent enrollment in Social Science 47-Cooperative Education (1-4) Social Science 40 or consent of the instructor (acceptable field experience). 2 lecture hours per week.* Instruction in writing observations, log entries, reports, evaluation, case studies, and other related writing skills; field trips to various local agencies and institutions. Emphasis on the meaning of "professionalism," the importance and function of professional ethics and the difficulty personnel encounter in living these roles.

42 HISTORY AND PRACTICE OF ADOLESCENT PLACEMENT (3). *Also Administration of Justice 42. 3 lecture hours per week.* As a basic course in the Adolescent Group Worker program, this course explores the variety of systems in the Juvenile court system, ranging from maximum security to the professional foster home. A survey of placement considerations and procedures. Emphasis on the growth and implications of the treatment modal.

43 EDUCATIONAL RESOURCES (1). *2 hours per week for 8 weeks.* Basic introduction to the Education Code, the welfare and other institution codes, and a working knowledge of negotiations with various school officials. Use of the variety of services available to the community, e.g., home teachers, special tutors and special education program.

44 COMMUNITY DEVELOPMENT (3). *3 lecture hours per week.* The dynamics of community decision-making process in relation to meeting social welfare needs and problems; the variables in the functions and roles of the community organization and community development worker; the process of effecting change in communities.

45 JUVENILE RIGHTS AND COURT LAW (1). *2 hours per week for 8 weeks.* Designed to assist foster

parents and welfare workers in understanding their legal rights and responsibilities and what is expected of foster parents. Also defines the children's rights when they have violated the court order or statutory law.

47a-47b COOPERATIVE EDUCATION (1-4). *Credit/no credit.* Supervised field experience by arrangement.

48 SPECIAL TOPICS (1-3). *1 to 3 lecture hours per week.* A class dealing with topics of special interest. Specific subject matter will vary from semester to semester and will be announced in advance.

49 SPECIAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Social Science and the consent of the instructor and the Social Science Division Chairman.* Specified individual study or directed research in specific problem areas.

Sociology

1 INTRODUCTION TO SOCIOLOGY (3). *3 lecture hours per week.* Main focus centers on the identification and analysis of society's basic structures and the central forces that motivate and give direction to social behavior. Includes an introduction to the method of Sociology, interpretations of individual and group behavior, and a survey and analysis of America's regulating social institutions. Class discussions and readings primarily concerned with developing an understanding of selected sociological references, as well as the impact of political, economic and social conditions.

2 SOCIAL PROBLEMS (3). *3 lecture-discussion hours per week.* Important issues and problems currently facing the American society, including the response from government agencies, provide the substance of this course. By analyzing the nature and extent of selected problems like crime, institutional racism and social inequality-poverty, attention is necessarily focused on conditions that foster and support their growth and development. Related issues such as drug abuse, treatment of offenders, health problems, education and legislative decisions provide important elements of this course.

3 MINORITIES IN AMERICAN SOCIETY (3). *Prerequisite: Sociology 1 or 2, History 33 is recommended.* *3 lecture hours per week.* Sociology of inter-ethnic contact with emphasis on the experience of minorities of color in the United States. An examination of the dual themes of racism and equality in American society.

5 SOCIOLOGY'S FUTURE: SURVIVING THE COLLISION WITH TOMORROW (3). *Prerequisite:*

Should have had an introductory course in Sociology. 3 lecture hours per week. Projecting the trends of today to their ultimate "illogically-logical extreme," in order to illuminate where our decisions of today can carry us in the future.

12 URBAN SOCIOLOGY (3). *Prerequisite: Sociology 1 recommended. 3 lecture hours per week.* The nature, causes and consequences of industrial urbanization with special emphasis on social problems and urban planning associated with metropolitan communities and metropolitan complexes in the United States.

15 RELIGION AND SOCIETY: TOWARD A SOCIOLOGY OF RELIGION (3). *Prerequisite: A Sociology course is strongly recommended. 3 lecture hours per week.* Analysis of the sociological consequences of religious experience and its expression in man's efforts to organize his society; deals with the types of religious organization of society as well as religion's role in shaping societal notions of authority and differentiation. Finally, some consideration of the above analysis in society today.

43 INTRODUCTION TO CRIMINOLOGY AND PENOLOGY. (3). *(Evening College) 3 hours per week.* Theories of criminal behavior, legal procedures before and after judgment and the rehabilitative process including alternatives to jail or prison, objectives of correction, minimum security institutions and the department of corrections.

47 COOPERATIVE EDUCATION (1-4). *Credit/no credit.* Supervised field experience by arrangement.

49 INDIVIDUAL PROJECTS (1-2). *Prerequisites: Previous or concurrent work in Sociology and the consent of the instructor and the Social Science Division Chairman.* Specified individual study or directed research in specific problem areas.

Spanish

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

1 ELEMENTARY SPANISH (5). *5 class hours 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).

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. 5 class hours per week. 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).

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. 5 class hours per week. 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).

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. 3 class hours per week. 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.

25a-25b ADVANCED SPANISH (3-3).

Prerequisite for 25a: Spanish 4; prerequisite for 25b: 25a. 3 class hours per week. Oral and written composition, class reading of works of Spanish and Spanish-American literature, extensive collateral reading of varied types of Spanish and Spanish-America literature, and review of grammar.

46 FOREIGN LANGUAGE LABORATORY (1/2-1).

Credit/no credit. 3 lab hours per week. A program consisting of 25-50 hours of work in the language laboratory, emphasizing speaking and understanding Spanish.

49 INDIVIDUAL PROJECTS (1-2).

Prerequisite: Spanish 25b or permission of the instructor. A minimum of 3 hours of reading per unit per week is required. Reading of Spanish and Latin-American classics and contemporary literature. Conferences for oral reports. Time to be arranged.

100a INTRODUCTION TO ORAL SPANISH (2).

Credit/no credit. 3 class hours per week. Practical course in the Spanish language approached by way of conversation. Intensive drill in the formulas and idioms of daily speech is supported with sufficient grammar to give flexibility in the spoken language.

Speech-Communication**1a FUNDAMENTALS OF SPEECH-COMMUNICATION (3).**

Prerequisite: Enrollment in English 1a or permission of instructor. 3 class hours per week. 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 communications.

10 INTERPERSONAL SPEECH-COMMUNICATION (3).

3 class hours per week. Experimental approach to the study of inter-personal speech-communication, rational dialogue and cooperative analysis of communicative events. Study and practice of communicative action-interaction-transaction, the symbolic process, reasoning and advocacy, and the effects of verbal and non-verbal communication on the individual and society.

11 AMERICAN SPEECH (3).

3 class hours per week. Broad survey of American speech - its origins, development, characteristics and use. Emphasis on language as it is spoken today, with a strong thesis that study of the past use of language will help to develop a fuller understanding of the language as it is spoken by the culture and by the individual.

12 BLACK AMERICAN SPEECH (3).

(Evening College) 3 lecture hours per week. Intensive study of the spoken language used by Blacks in America. The course will include a study of the origins of Black American English.

30a-30b ORAL INTERPRETATION OF LITERATURE (3-3).

3 class hours per week. Oral reading of literature (poems, short stories, plays); analysis of meaning; analysis of voice quality, pronunciation and expressiveness.

49 INDIVIDUAL PROJECTS (1-2).

Prerequisite: Approval of instructor and the chairman of the English Division. Students participate in and/or set up meaningful speech-communication events in the college community. Topics can range from on-campus panel discussions or debates to presenting speeches to community organizations. Topics are restricted only in that they must go beyond the scope of offered courses.

57a-57b SPEECH-COMMUNICATION FOR FOREIGN STUDENTS (5-3).

Prerequisite: Assignment by the Foreign Student Advisor or by S.D.P. Counselor. 57a-5 class hours per week, 57b-3 class hours per week. 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.

Statistics

1 RESEARCH METHODS AND STATISTICAL ANALYSIS (3). *Also Research and Development 1. Prerequisite: High School Algebra. 3 lecture hours per week.* Practical introduction to data collection (interviewing skills, questionnaire design), analysis (coding; descriptive statistics elementary inferential statistics), and presentation (use of charts, graphs, tables; report design.) A major class project involving the above skills is undertaken.

2 INTRODUCTORY STATISTICS (4). *Prerequisite: Mathematics 13 or consent of instructor. 4 hours per week.* Introduction to descriptive and inferential statistics; sampling; prediction; correlation; regression. This course is more advanced mathematically than Statistics 1, but does not include interviewing techniques.

Student Government

1-2 STUDENT GOVERNMENT (1/2-2 - 1/2-2). *Credit/no credit. Hours by arrangement.* Designed to assist interested students acquire skills and background for effective participation in College activities. Includes parliamentary procedures; group leadership skills; people, organization and structure of the College and District; student body finance and budgeting; College procedures related to the activities program. Provides involvement in student government, clubs and committees.

Tourism

4 INTRODUCTION TO TOURISM (3). *(Evening College) 3 hours per week.* Survey of the economic importance of tourism and of career opportunities in the travel industry. Will include how to read and use reference material, reservations procedures, elementary travel planning, the structure of the travel industry, field trips to view various phases of travel (such as cruise ships and airplanes).

52 ATC TEST: TARIFF AND TICKETING (ATC) (2). *(Evening College) Prerequisite: Employment in a travel agency or consent of the instructor. 36 hours over 6-week period.* Advanced training in airline ticketing and tariff preparatory to taking the ATC exam (for ATC Certification). Advanced tariff and ticketing classes to help prepare travel industry personnel for the ATC exams; also to provide advanced training in retail travel for those already employed in the travel industry and those students who have already completed the basic courses in travel.

X-Ray Technology

See "Radiologic Technology."

Zoology

1 GENERAL ZOOLOGY (5). *Prerequisite: High school Biology with grade of B or better, or Biology 1 with a grade of C or better. 3 lecture and two 3-hour lab periods per week.* Study of invertebrate and vertebrate animals, their organs and functions, adaptations, evolution and natural history.

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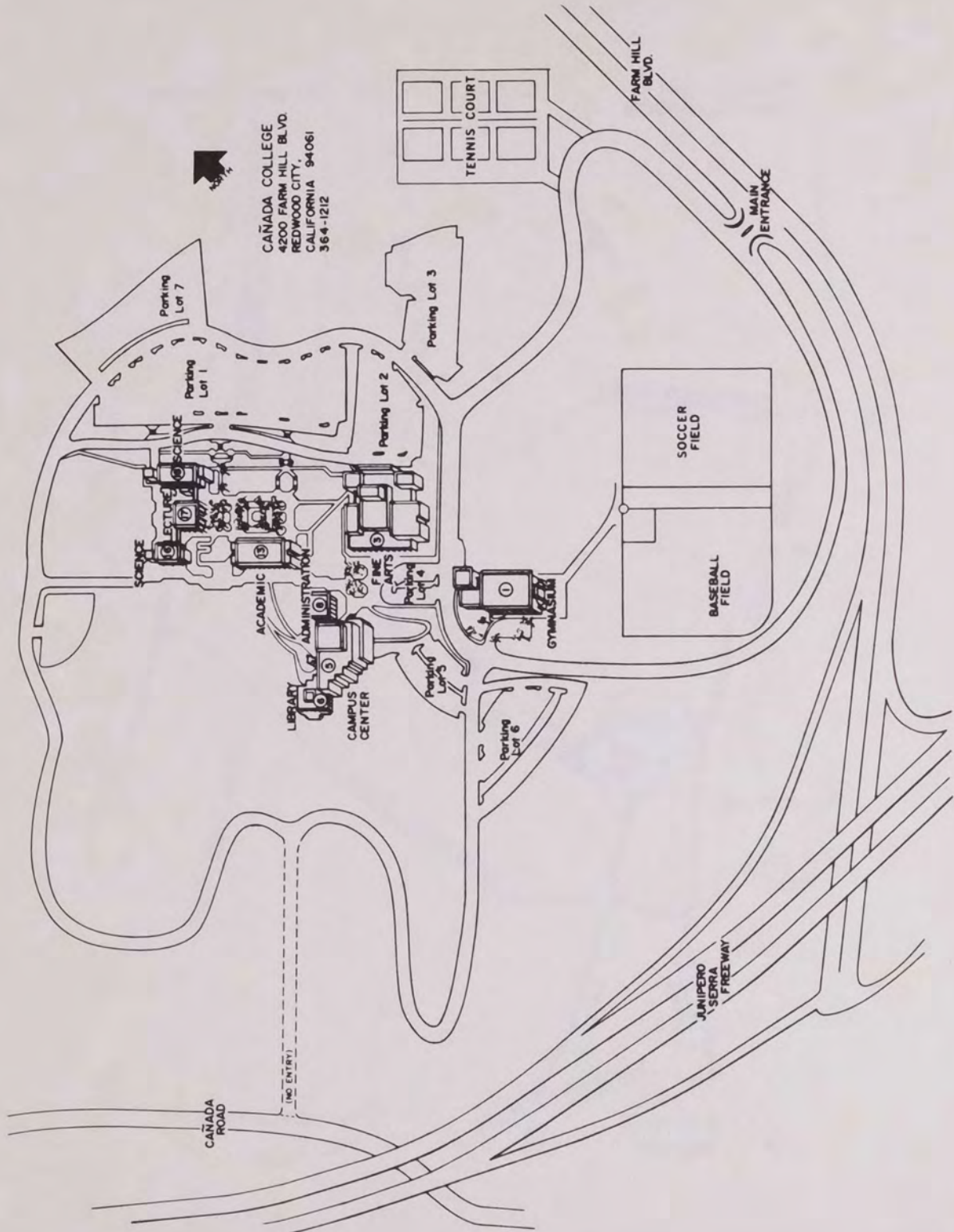
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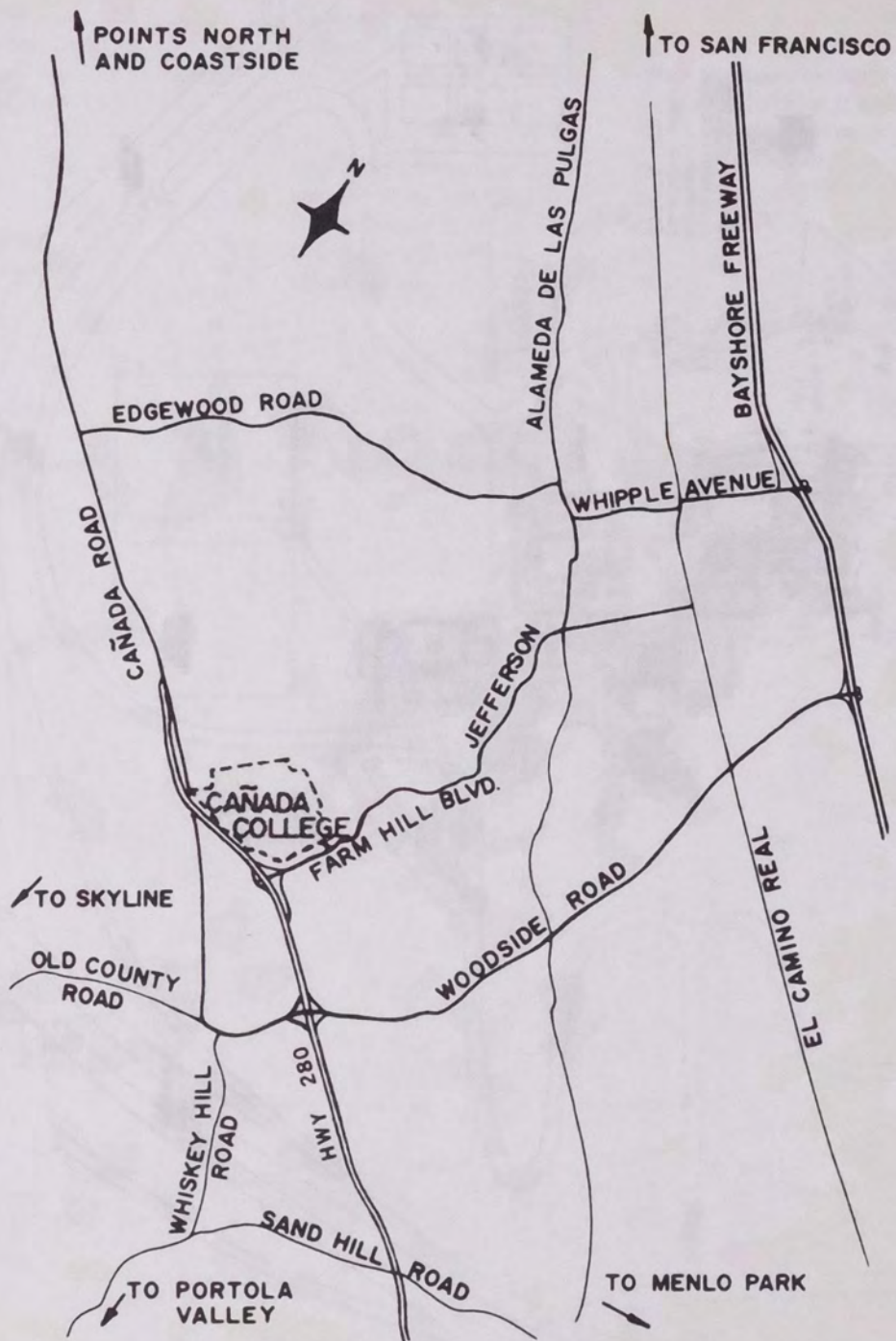
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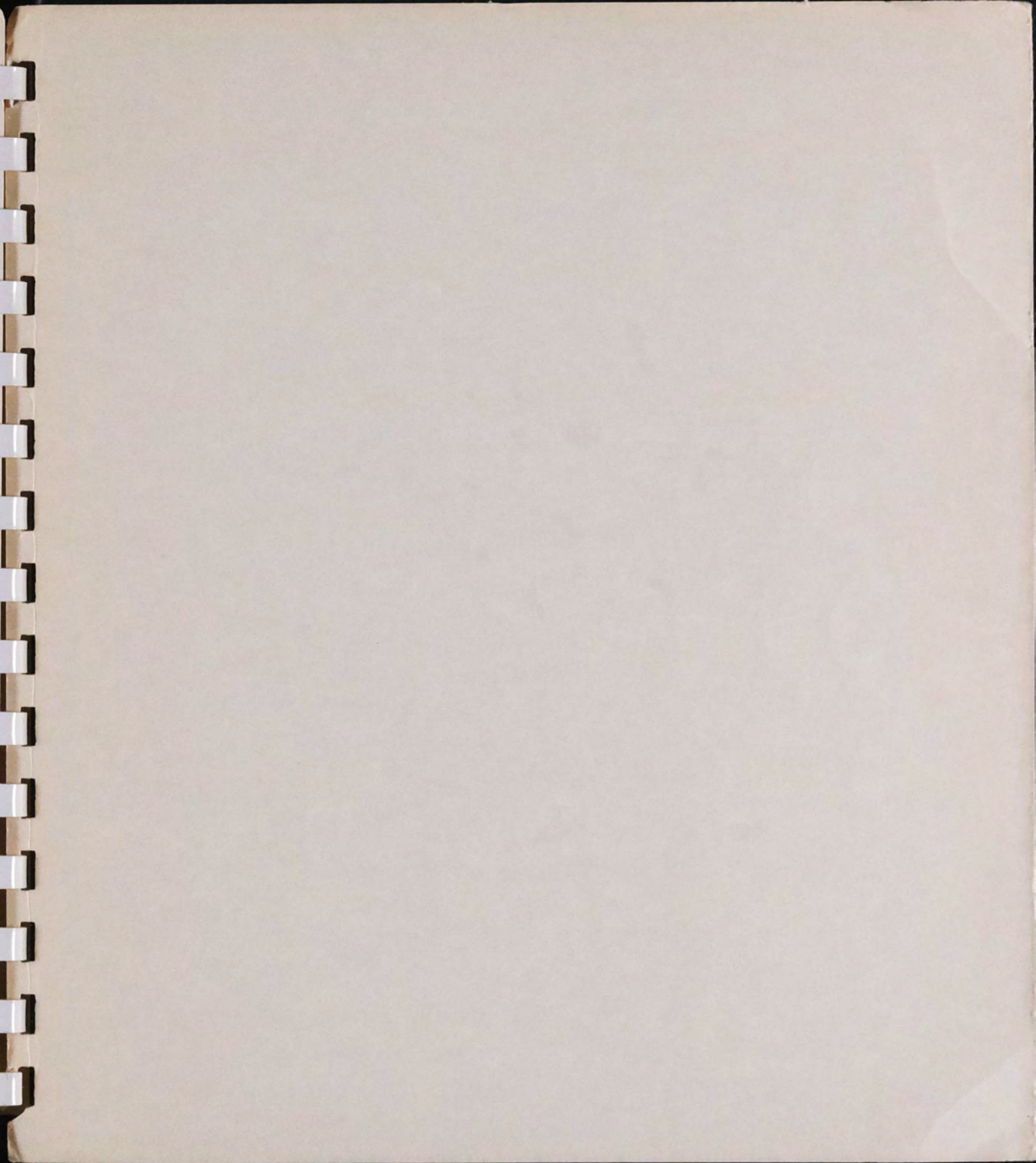
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4200 FARM HILL BLVD.
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