The closing date for information in this catalog was January 11, 1985. Notations regarding Fall and Spring course offerings and the faculty designations attached to those courses were still tentative at press time; students should consult with department offices for up-to-date information.

All fees noted within are subject to change.

Nondiscrimination Statement
The University of California, in compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, does not discriminate on the basis of race, color, national origin, sex, handicap, or age in any of its policies, procedures, or practices; nor does the University discriminate on the basis of sexual orientation. This nondiscrimination policy covers admission and access to, and treatment and employment in, University programs and activities, including but not limited to, academic admissions, financial aid, educational services, and student employment. Inquiries regarding the University's equal opportunity policies may be directed to the Assistant Chancellor—Affirmative Action and Special Projects, 200 California Hall, University of California, Berkeley, CA 94720, telephone (415) 642-1991 or TDD 642-6376.

Cover
Looking west at sunset, Sather Tower, Berkeley's landmark, breaks a skyline that includes the Marin Headlands to the north, the Golden Gate Bridge, and the City of San Francisco. Photo by Ben Ailes.
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## Academic Calendar 1985–86

| Summer Session 1985 |  
|---------------------|---
| Four-week Session   | May 20-June 14  
| Eight-week Session  | June 17-August 9  
| Ten-week Session    | June 10-August 16  
| Independence Day    | July 4  

| Fall Semester 1985 |  
|--------------------|---
| Advance Enrollment | April 22*-May 10  
| Fee Payment by Mail| April 22-July 12  
| Fall Semester Begins| August 20  
| In-Person Registration| August 20-21  
| Instruction Begins | August 26  
| Labor Day Holiday  | September 2  
| Thanksgiving Holiday| November 28-29  
| Instruction Ends   | December 7  
| Final Examinations | December 9-17  
| Fall Semester Ends | December 17  
| Winter Holiday     | December 24-25  
| New Year's Holiday | December 31-January 1  

| Spring Semester 1986** |  
|------------------------|---
| Advance Enrollment     | October 21*-November 8  
| Fee Payment by Mail    | October 21-December 14  
| Spring Semester Begins | January 14  
| In Person Registration | January 14-15  
| Martin Luther King Holiday | January 20  
| Instruction Begins     | January 21  
| President's Day        | February 17  
| Spring Recess          | April 14-18  
| Spring Holiday         | April 18  
| Instruction Ends       | May 10  
| Final Examinations     | May 12-20  
| Spring Semester Ends   | May 20  
| Memorial Day Holiday   | May 26  

*Continuing students obtain registration forms beginning April 22 and October 21.

**Academic calendar dates for Spring semester 1986 were still tentative when this catalog went to press. Please contact the Office of Admissions and Records for current information.
Information Guide

University of California, Berkeley
Berkeley, CA 94720
Area Code 415

Admissions, Graduate
1 California Hall, 642-7405
Admissions, Undergraduate
120 Sproul Hall, 642-0200
Advising, Pre-Professional and Pre-Graduate
2224 Piedmont, 642-9207
Alumni Association
Alumni House, 642-7076
Associated Students (ASUC)
300 Eshleman Hall, 642-1431

Athletics: Interecollegiate
Men: Harmon Gymnasium, 642-0508
Women: 177 Hearst Gymnasium, 642-2098

Botanical Garden
Strawberry Canyon, 642-3343

Career Planning and Placement
Building I-8, 642-1716; 642-0592 (TDD)
Child Care Services
2537 Haste Street, 642-1897
Counseling and Psychological Services
Building I-5, 642-2366
Disabled Students' Program
2515 Channing Way, 642-0518
642-6376 (TDD)

Education Abroad Program
2538 Channing Way, 104 Building D, 642-1586

Educational Opportunity Program (EOP)
Building T-8, 642-7224

Financial Aid
201 Sproul Hall, 642-1455

Foreign Student Admissions, Graduate
1 California Hall, 642-7405
Foreign Student Admissions, Undergraduate
120 Sproul Hall, 642-3240
Foreign Student Advising
International House
2290 Piedmont Avenue, 642-2818

Health Services
Cowell Hospital, 642-2000
642-5042—future appointments
642-6890—same-day appointments
Vision Care
School of Optometry Clinic, 642-5701—future appointments

Housing
2401 Bowditch Street, 642-3642

Interfraternity Council (Fraternities)
102 Sproul Hall, 642-5701

Library Information
Main Library Reference Desk, 642-0704 (TDD)
Pacific Film Archive
2625 Durant Avenue, 642-1224
Panhellenic Office (Sororities)
102 Sproul Hall, 642-5700
Police
1 Sproul Hall, 642-6760
Emergency 9-911 or 911 from non-campus extensions
Rape Prevention Education Program
388 Cowell Hospital, 642-7310
Rape Counseling Center
Building I-5, 642-2366

Relations with Schools
103 Sproul Hall, 642-5135

Sports, Intramural and Recreational
193 Harmon Gymnasium, 642-8342
Strawberry Canyon Recreational Area
Strawberry Canyon, 642-5575

Student Activities and Services
102 Sproul Hall, 642-5171
Student Learning Center
Building T-8, 642-7337
Summer Session
22 Wheeler Hall, 642-5611
Tours, Campus
Visitor Center, Student Union, 642-5215

University Art Museum
2625 Durant Avenue, 642-0508

University Extension
2223 Fulton Street, 642-4111
Visitor Center
Student Union, 642-5215
Women's Center
112 Building I-9, 642-4786

Helpful Publications

General Catalog
ASUC Textbook Store, 642-0700
or by mail
Office of Admissions and Records
120 Sproul Hall

Schedule of Classes
ASUC Textbook Store, 642-0700

Resource: A Quick Reference Guide
for New Students
Student Activities and Services
102 Sproul Hall, 642-5171

College and School Announcements
available at colleges or schools

University of California, Berkeley
Policies Applying to Campus Activities,
Organizations, and Students
Student Activities and Services
102 Sproul Hall, 642-5171
ASUC Handbook
Information Center, Student Union, 642-INFO
"If I were founding a university I would found first a smoking room; then when I had a little more money in hand I would found a dormitory; then after that... a decent reading room and a library. After that, if I still had more money that I couldn’t use, I would hire a professor and get some textbooks.”

Stephen Leacock (1869-1944)

With these words, Professor Leacock wryly outlined what he considered the most important elements of higher education. Barely finding room for his fellow teachers, he does not even mention such things as curricula, majors, prerequisites, examinations, theses, and degrees. While a complex and bustling campus of a large public university might find much wanting in his recommendations, there is still something of great value in a view of university life that places prime emphasis on human contact, academic freedom, and good books. For these, whatever else changes with time, remain the nucleus of higher education.

As you enter the Berkeley campus of the University of California—whether as a student, parent or visitor; whether through Sather Gate, Oxford Street, or this General Catalog—you may be overwhelmed by what you encounter. The modern public university has come a long way from Leacock’s “smoking room.” Instead of a handful of people gathered informally to discuss life, you will find thousands of students of all ages, from all backgrounds, pursuing all varieties of educational aims. Instead of one “decent reading room and a library,” there are, in fact, 25 libraries and 6.5 million books. The faculty, considerably more than a daydreamer’s afterthought, is made up of some of the most distinguished teachers and scholars in the world. And, as might be expected, the Berkeley campus occupies a lively place in public life. Its research centers and institutes concern themselves with scientific, technical and social problems that affect the daily lives of millions. The campus, situated within a large metropolitan area, maintains a close communication with the social, economic, and cultural life of the surrounding community. Whatever Stephen Leacock had in mind, it was not the Berkeley campus. Or was it?

Have we, in truth, come very far from a concept of a university where human contact, academic freedom, and the availability of good books are given priority? The student who enters the Berkeley campus has an ample share of all three, and, indeed, may find that his or her entire educational experience is built on these vital elements. The abundant resources of this University make all the more attainable an ideal of academic life.

Where there are more people of varied backgrounds and interests, the value of human contact increases. Where there are more books and more capable teachers and scholars to help those books come alive, the student’s freedom to learn is enhanced—for there is more from which to grow and develop, more by which to measure progress.

The man who founds a university in his daydreams might add to his prescriptions for simplicity the following: room to grow and room to experiment. The Berkeley campus has undertaken broad reforms in its classes and programs, in its administration, and in the learning experience. More seminars and small classes, more creative challenges to the student, a greater service role in the community, and expanded educational innovation—these changes are made with the hope of keeping strong and vital the ideals of a university that people have cherished for centuries. Ultimately the university that seeks to provide a significant experience for its participants is the one that makes the most of what it has. And the Berkeley campus has a great deal.
The faces in the photographs opposite indicate the rich diversity of the students at Berkeley in only a small way. Beyond ethnic and cultural background, students here are also different in their aspirations and goals, their hometowns, their skills and aptitudes, their ages, and much more.

Most of the students are from California, but every state and 100 foreign countries are represented.

Berkeley has experienced the largest increase in minority representation of any of the campuses of the University of California in recent years. Black, Asian-American, Hispanic, Filipino and American Indian students account for over 35 percent of total undergraduate enrollment.

Women account for just under half of the undergraduate enrollment.

Undergraduate enrollment is approximately 21,000 students, and about 9,000 graduate students are enrolled.

During the Gold Rush Days of 1849, California, even before it was a state, committed itself to the creation of a public university.

Nineteen years later the legislature and the governor made their commitment a reality, and in 1868, the University of California came into being. An instant faculty and student body were supplied by a small college in Oakland, and five years later, the University established itself in Berkeley with 189 students and 20 faculty members.

Soon the University was given a medical college in San Francisco, and the foundations of today’s multi-campus system were laid.

In 1905 the University Farm at Davis was added, followed by a research station at Riverside in 1907. Later campuses were opened in San Diego, Los Angeles, Santa Barbara, Santa Cruz, and Irvine.

Today the nine campuses enroll more than 131,000 students and have a full-time faculty of 6,000. Constitutional responsibility for the University rests with the Board of Regents, which in turn delegates authority to the President, the Chancellors of the nine campuses, and the Academic Senate of the faculty.

The Berkeley Campus

South Hall and the oaks along Strawberry Creek link Berkeley to its beginnings. The Campanile, Life Sciences Building, and the Student Union record the changes which have brought the campus to the 1980s, from the country to the city.

With 30,000 students, a distinguished faculty, nearly 300 degree programs, and alumni in positions of national and international leadership, Berkeley today is a large and complex institution, offering students a vast range of scholarly endeavor and an unusual depth of inquiry both for personal growth and individual involvement with others.

The campus is surrounded by wooded, rolling hills and by the town of Berkeley (population 112,000). Students study, work, and relax among academic buildings, wooded glens, and parklands spread across 1232 scenic acres overlooking the San Francisco Bay.

The campus is internationally noted for its academic excellence. Its faculty includes 11 Nobel Laureates, 84 members of the National Academy of Sciences, and more Guggenheim Fellows in the last 20 years than any other university in the country.

Thirty of 32 departments evaluated in a U.S. study rank in the top 10 programs. Berkeley was cited as the “best overall graduate institution” in the country.

The quality of Berkeley’s student body complements the stature of its faculty. The majority of students are Californians, but people come from every part of the United States and 100 foreign countries to study at Berkeley. Perhaps the prime characteristic of all the students is their diversity—one quarter of the student population consists of minorities—which yields the wide range of opinion and perspective essential to a great university.

Colleges and Schools

The Berkeley campus is divided into 14 colleges and schools, most of which are subdivided into departments. Colleges accept students directly from high school or as transfers from other institutions and offer undergraduate instruction, normally as a four-year program, leading to the bachelor’s degree. Schools usually begin instruction at the upper division level and provide students with preparatory training for specific professions.

Each of the colleges and schools has its own regulations for earning degrees and is headed by a dean who has final authority for all academic decision making. Students are encouraged to contact the deans for assistance with academic matters.

Special Studies

There are several innovative and interdisciplinary programs of study not within the colleges and schools. Special Studies courses provide credits directly applicable to a University degree and are established through interrelationships among colleges, schools, and departments, and, in certain cases, in conjunction with community groups, other UC campuses, and other universities.
Organized research units are established to support the research of faculty and to assist in graduate student training. Organized research units may bear the designation of institute, center, laboratory, station, or other titles, depending on the nature of the activity supported and the organization visualized when a particular unit was established. These units are grouped administratively according to the breadth of interest they represent. Specific administrative groupings are listed in the Appendix.

The University Art Museum

The University Art Museum, located on Bancroft Way, is the major art museum serving the University community. Facilities include galleries, a fine arts bookstore, restaurant, sculpture garden, and the Pacific Film Archive. Museum hours are 11 a.m. to 5 p.m., Wednesday through Sunday. Admission is free for UC students. For a taped message about the Pacific Film Archive, call 642-0808; for a taped message about the Pacific Film Archive program, call 642-1124.

The Museum annually offers about 15 exhibitions; some are nationally circulating and others originate at the Museum. A permanent collection of Western and Asian art is on display on a rotating basis. The MATRIX program is a changing exhibition of contemporary art. Special study collections are available to students and faculty, works in storage are made available for study upon request, and various exhibitions are prepared for and by University classes and seminars. In addition, the Museum has a developing program in which advanced students receive practical experience by assisting in museum work.

Lectures on art by artists and art historians are regularly held.

The Museum’s film department, the Pacific Film Archive, is one of the major film exhibition centers in the country. It maintains a study collection of 5,000 prints and provides facilities and a media information service for both film study and research screening. Free film showings for classes are held several times weekly. In addition, the Pacific Film Archive offers 800 public film programs annually.

Lowie Museum of Anthropology

Facilitating scholarly research and educating undergraduate and graduate students from many disciplines including Anthropology are among the primary functions of the Lowie Museum. Teaching exhibits are installed to assist faculty and students with on-going instruction and individual study. The Museum also maintains a program of changing exhibits in its Exhibit Hall and at other points on campus to meet the varied educational and aesthetic interests of the University community and general public. Currently, there are 600,000 catalogued specimens in the Museum’s holdings. The Exhibit Hall is open during the week from 10 a.m. to 4 p.m., closed Wednesdays, and on weekends from 12 noon to 4 p.m. For further information, please call 642-3681.

Botanical Garden

The Botanical Garden was established in the 1890s and transferred to its current location of 30 acres in Strawberry Canyon in 1919. Although relatively small in area, the Garden ranks with the world’s leading gardens in the variety and quality of its plants. There are 8,500 different species, and something is in bloom every month of the year.

The major collection is cacti and other succulent plants. Native plants of California occupy the largest area devoted to a regional collection. Special collections include: herbs and spices, palms, rhododendrons, gymnosperms, ferns, cacti, carnivorous plants, orchids, and economically important species.

The Botanical Garden offers free tours to the public every Saturday and Sunday at 1:30 p.m. Special group tours may be arranged for a nominal charge by phoning 642-3352. The Garden is open to the public daily, except Christmas, from 9 a.m. to 4:45 p.m. An Information/Visitor’s Center is also open daily. There is no admission charge. The Humphrey Go-Bart bus provides free transportation to and from the Garden on weekdays.

Lawrence Hall of Science

The Lawrence Hall of Science is both a public science center and a research unit in science education. To increase public understanding of science, the Hall’s programs are designed to involve participants actively in science. Visitors play logic
games on computers, participate in interactive planetarium shows, and explore a myriad of other exhibits dealing with everything from pulsars to energy conservation. The Hall also offers public lectures; science and general interest films; numerous special events; workshops for school groups and after-school classes in biology, physical sciences, astronomy, computers, robotics, and math; and a unique summer science camp.

Science curricula developed at the Hall are used throughout the world. Teacher-training workshops actively involve participants in curriculum development. The Hall is open every day from 10 a.m. to 4:30 p.m. and on Thursdays until 9 p.m. There is an admission fee. Free transportation to and from the Hall is available on Humphrey Go-Bart on weekdays, excluding UC holidays. For more information, call 642-5132.

Music, Dance, Drama

The University offers a broad variety of extracurricular activities in the humanities. These include:

Cal Performances—a year-round program of music, dance, and drama. Some events are open to students and to the University community without admission charge. For those events requiring tickets, a reduced rate is usually available for registered students. For information or reservations, call 642-9988.

Music—Students may enroll in a variety of student performing groups for credit through the Department of Music, 104 Morrison Hall (642-2678); auditors are also welcome in most groups. Included are the University Chorus, Orchestra, Collegium Musicum, chamber music ensembles, Javanese Gamelan, and African drumming. Extracurricular musical groups are the UC Jazz Ensemble (642-5062), the Cal Marching Band (642-5062), and Student Musical Activities—Vocal (642-3880). The Department of Music also presents free noon concerts on Wednesdays in Hertz Hall. San Francisco and Oakland Symphony tickets are available to students at special prices.

Theater and Dance—The Department of Dramatic Art offers many opportunities for students interested in theater and dance. Credit is offered for all aspects of participation in our productions: acting, dancing, directing, designing, stagecraft, and scenography. A resident dance company tours the West Coast throughout the year and a graduate summer theater season adds to the variety of theater offerings sponsored by the department. For information please call 642-1677.

Computing

The Computing Affairs Organization provides computing services to the entire UC Berkeley academic and administrative community. Many academic departments also have computer systems. At the time this catalog was prepared, the campus computer network used for instruction and research included a large IBM VM/CMS system, about 50 DEC VAX UNIX systems, a Data General system, a CDC system at Lawrence Berkeley Laboratory, various popular microcomputers, and plotters, printers, and typesetters. The campus computing network is connected to several national electronic networks.

The campus has hundreds of terminals and microcomputers for academic work. Computing Affairs maintains terminal rooms in Evans Hall, Davis Hall, Moffitt Library, and other locations; these facilities can be used by any member of the University community. Microcomputer facilities for use by individuals and by scheduled classes are available in Tolman Hall and evaluation facilities are available in Wheeler Hall.

Computing Affairs provides a large collection of computer languages and application software, including statistical, mathematical, and graphics packages; database management systems; microcomputer-to-host communication programs; and text processing software. The Computing Services Library in 218 Evans Hall has information about available software, as well as technical manuals and other publications for reference and purchase.

Non-credit short courses for beginning and advanced computer users are offered each semester. Consultants are available in 262 Evans Hall, at other locations on campus, and via electronic mail to provide guidance in using the computer systems. A free newsletter keeps the campus community informed about new developments in academic computing at UC Berkeley.

Useful phone numbers include the Consultants, 642-4072; the Computing Services Library and short course information, 642-5205; the Computer Facilities and Operations trouble desk, 642-4920; the systems' status recording, 642-4774; the Microcomputer Evaluation Facility, 642-4415; and Computing Services general information, 642-8167.

Women's Center

The Center for the Study, Education, and Advancement of Women is located in 112 Building T-9. Hours are from 9 a.m. to 5 p.m. The Center provides lectures, workshops, and academic and career advising for students and the campus community as well as a variety of internship opportunities for students. It also supports the academic work of students through its library of research materials on women, publications, and Undergraduate Research Project, and an annual research conference on current issues of interest to women. The Center is open to all interested persons from the campus and the community.

University Extension

UC Berkeley Extension is the continuing education branch of the University. It presents some 1,800 courses a year to more than 50,000 people who are pursuing personal and professional goals. Courses are offered in a spectrum of fields—the arts, behavior, business, computers, education, engineering, humanities, mathematics, and sciences—and in a variety of formats including evening classes, one-day and weekend courses, and study tours, as well as 23 planned programs of study. Most courses meet on the Berkeley campus, in San Francisco, and in the South Bay.

Information may be obtained from Extension's campus offices, 2223 Fulton St., or by calling (415) 642-4111.

Summer Session

An extensive offering of regular academic courses and special programs is available through University Summer Session. Students in good standing at any campus of the University or at another collegiate institution are eligible for enrollment. Equally eligible are high school graduates, qualified adult applicants of sufficient maturity and aptitude for the work they plan to undertake, and, in certain cases, high school juniors and seniors.
Tuition varies with the number of units taken. Introductory and advanced courses for University credit are offered, and there are also special sessions for selected intensive language workshops. Extensive cultural and recreational activities are provided. Courses are taught by both regular and visiting faculty.

Physical Education, Sports, and Recreation

Each year more than half the Berkeley student body regularly uses the campus sports, recreation and physical education facilities. The campus has three gymnasiums as well as swimming pools; squash, handball, racquetball, and tennis courts; and athletic fields. Except in summer, when students are required to purchase a gym privilege card, these facilities may be used by registered Berkeley students free of charge.

The Department of Physical Education offers instructional classes to students in aquatics, sports, dance, combative, exercise, and gymnastic activities. Instruction is planned to develop and improve performance skills, to introduce knowledge and concepts relevant to the activity, and to develop and maintain physical fitness. Elementary, intermediate, and advanced level classes are provided in many activities. All classes are open to men and women for credit. (See Schedule of Classes for specific classes each semester.) For further information consult the departmental offices at 103 Harmon Gym and 200 Hearst Gym.

The Department of Intramural and Recreational Sports offers a wide range of intramural, sport club, and open recreation activities. For further information, contact 193 Harmon Gymnasium or call 642-8342. In addition, the Department of Men's Intercollegiate Athletics and Women's Intercollegiate Athletics offers extramural competitive sports for the highly skilled.

California Adventures is Berkeley's Outdoor Recreation Program, offering a wide variety of classes and outings in backpacking, rockclimbing, sailing, kayaking, white-water rafting, natural history, windsurfing, cross country and alpine skiing and much more. A complete line of rental equipment for most outdoor needs is available. The program is open to the community as well as students, alumni and employees. Facilities include the main center located in Unit III Dorms at 2400 Durant Avenue (open Monday-Friday, 10 a.m.-6 p.m.) and a sailing site at the Berkeley Marina. For information and a free brochure, please call 642-4000 or write to California Adventures, 2400 Durant Avenue, Berkeley, CA 94720.

The California Alumni Association

More than 90,000 former students are members of the Association in order to keep in contact with Berkeley and work for the continued welfare of the University and its student body. The Association administers the Alumni Scholarship program, which annually awards more than $130,000 to some 800 undergraduates. The Association co-sponsors career programs with various campus units and maintains the Career Information Aides file, a compilation of Cal graduates whom students may contact to learn more about career fields. In addition to offering free income tax counseling for students each spring, the Association co-sponsors internship programs for students interested in summer work in Sacramento and Washington, D.C. Alumni are actively involved in helping the University to recruit the finest high school students to Berkeley and every year they host receptions honoring newly admitted students.

Among the many benefits enjoyed by Association members are the award-winning publication, California Monthly; free UC library privileges on most UC campuses; access to the Lair of the Bear vacation center; year-round alumni travel programs; and discounts on selected UC Press books. The Association recognizes distinguished alumni achievement and outstanding service to the University, its alumni, and the community, and co-sponsors the Distinguished Teaching Awards for faculty. Alumni Clubs help members stay in close touch with the University and with one another. Information on all Association activities, including young alumni and club programs, and alumni events on Charter Day and at Commencement, is available at the Association's campus headquarters, Alumni House, where students and alumni are always welcome.

The 1,500 men and women of the Berkeley faculty constitute one of the most qualified faculties of any university in the world. In both research and teaching, the quality of their efforts has been recognized by their students and national and international organizations.

In addition to the 11 Nobel Laureates on the faculty, there are three Pulitzer Prize winners and more than 125 members of the national academies of sciences and engineering. Over the last 20 years, more Berkeley faculty have won Guggenheim fellowships than faculty at any other university.

In 1985, for the second year in a row, more young faculty in the sciences and engineering at Berkeley were named Presidential Young Investigators by the National Science Foundation than from any other university.

Berkeley has 60 “organized research units” administered separately from the teaching departments. These interdisciplinary units support the research of faculty and assist in graduate student training. Among them are Lawrence Berkeley Laboratory, Earthquake Engineering Research Center, Institute of International Studies, Earl Warren Legal Institute, Bodega Marine Laboratory, and the Cancer Research Laboratory.
To enter the University of California as an undergraduate, a student must complete a set of requirements which demonstrates, as accurately as possible, whether an applicant has sufficient intellectual knowledge, skills, and interests to pursue a university degree.

Students should begin fulfilling University admission requirements by the ninth grade and may need to continue working on them through the first two years of college. Admission requirements include completion of specific courses with specified minimum grades and achievement of specific scores on nationally administered examinations. While these requirements are somewhat rigorous, consideration is given to special circumstances.

Applying for Admission

You may obtain a University of California Undergraduate Application Packet containing all necessary forms and instructions from California high school or community college counselors or from the Office of Admissions and Records, 120 Sproul Hall, University of California, Berkeley; Berkeley, CA 94720. This office accepts completed applications between November 1 and 30, 1985, for the Fall semester, 1986; and between July 1 and 31, 1986, for the Spring semester, 1987. Dependent upon institutional enrollment needs, some colleges, majors, or class levels may be closed. Prospective applicants should inquire just prior to the filing period to determine if their area of interest is open. After the indicated filing period, applications are accepted only until application targets are met.

You must include with your completed application forms a non-refundable fee of $35.

Admission as a freshman applicant: If you have not registered in regular session in any college-level institution since graduation from high school, you will be applying for admission as a freshman. You must meet the following subject, scholarship, and examination requirements.

Subject Requirement

At the heart of the admission process is a set of high school courses called the "a to f" requirements. These consist of 15 year-long courses, each of which must be completed with at least a C grade. At least 7 of the 15 units must be earned in courses taken during the last two years of high school. Your grades in the "a to f" required courses are the only grades used in calculating your grade-point average for determining admission. Courses that fulfill the "a to f" requirements must appear on a list that your high school principal has certified meet University requirements. This list is called "Courses to Meet Requirements for Admission to the University of California" and can be obtained from your school counselor.

The "a to f" requirement courses are:

- a. History. One year of United States history or one-half year of United States history and one-half year of civics or American government.
- b. English. Four years of university preparatory English composition and/or literature; not more than one year will be accepted from the ninth grade.
- c. Mathematics. Three years of subjects such as algebra, geometry, trigonometry, calculus, elementary functions, and mathematical analysis. Nonacademic courses such as arithmetic and business mathematics may not be used.
- d. Laboratory Science. A year course in one laboratory science, taken in the tenth, eleventh, or twelfth grade.
- e. Foreign Language. Two years of one foreign language with a written literature are acceptable.
- f. College Preparatory Electives. Four units in addition to those required in a. through e. to be chosen from at least two of the following subject areas: history, English, advanced mathematics, laboratory science, foreign language, social science, and fine arts. In general, elective courses should involve considerable reading and should aim to develop a student's analytical and reasoning ability and skill with written and oral exposition.

Scholarship Requirement

If you attain a grade point of 3.3 in courses listed in "a to f," taken after the ninth grade, you will be eligible to enter the University regardless of your scores on standardized tests. Students with grade-point averages below 3.3 but greater than 2.77 will be eligible for admission to the University if they achieve specified scores on the standardized tests. (See University of California Freshman Eligibility Index.)

Grades you received in courses taken in the ninth grade or earlier are not used in determining your scholarship average, although subject requirements (except laboratory science) may be satisfied with grades of C or better in these courses. If you successfully complete more than the minimum units within each required subject, only the best grades are used in calculating your grade-point average. The best grades earned in the required third year of mathematics (intermediate algebra) will be used only if they improve your grade-point average. Two of the 4 units in elective courses used to satisfy the "f" requirement must be completed with a grade of C or better, and all 4 units must be accepted by the high school for graduation. The best grades earned in any two of these units taken in grades 10 through 12 will be used in computing your grade-point average for admission. Grades are counted on a semester basis unless a school gives only year grades.

You may repeat courses in which the original grade was D or F. The better grade will be used in determining your scholarship averages. Although there is no limit to the number of repeats that may be used in fulfilling a-f requirements, you may repeat a course only one time.

If the courses you repeat were originally taken before the ninth grade, they will be treated as if you were taking them for the first time.

The grades earned in up to 4 units (8 semesters) in courses that are (1) certified by your high school as offered at the honors level, and (2) taken in the last two years of high school will be given extra weight in computing your grade-point average for admission. Grades earned in honors courses are counted as follows: A = 5 points, B = 4, and C = 3. To be counted, these grades must have been earned in honors courses in history, English, advanced mathematics, laboratory science, and foreign language. Courses in these subjects that prepare you for the Advanced Placement Examinations of the College Board are examples of honors courses.
High School Proficiency Examination
The University of California will accept the Certificate of Proficiency, awarded by the State Department of Education upon successful completion of the California High School Proficiency Examination, in lieu of the regular high school diploma. However, all other University entrance requirements (subject pattern, grades, tests) must be met. The date of graduation on University records will be the date of the certificate. Entrance by standardized test scores will remain an option for the student ineligible on the basis of high school record.

Examination Requirement
All freshman applicants must submit test scores as described below. If you are applying for admission to the Fall term, you should take the tests by November of your senior year. The following tests are required:
1. One Aptitude Test— Either: (a) the Scholastic Aptitude Test—SAT—(the verbal and mathematics scores you submit from this test must be from the same sitting); or (b) the American College Test—ACT—composite score.
2. Three College Entrance Examination Board Achievement Tests, which must include (a) English Composition, (b) mathematics (level 1 or 2), and (c) any third Achievement Test (not English composition or mathematics).

Admission by Examination Alone
If you do not meet the scholarship and subject requirements for admission and have completed fewer than 12 transferable college units since graduation, you can qualify for admission as a freshman by examination alone. (Note: If you have completed transferable college courses, College Entrance Examination Board tests cannot be taken in academic subjects covered in those courses.) To qualify for admission by this method, you must score at least 1100 on the Scholastic Aptitude Test or 26 on the American College Test. Further, your total score on the three Achievement Tests must be 1650 or higher, with no score less than 500 on an individual Achievement Test.

Admission as a Transfer Applicant
The requirements for admission in advanced standing vary according to your high school record. The transcript you submit from the last college you attended must show that at minimum you were in good standing and you earned a grade-point average of 2.0 or better. If your grade-point average was below 2.0 at any college you attended, you may have to meet additional requirements to qualify for admission.

Requirements for Residents. If you completed all the "a to f" subjects and met the Eligibility Index, you may be eligible for admission any time after you have established an overall college grade-point average of 2.0 or better.
If you have completed fewer than 12 quarter or semester units of transferable college credit since high school graduation, you must also satisfy the examination requirement for freshmen.
If you meet the Eligibility Index but you have not studied one or more of the "a to f" courses in high school, you may be admitted after you have: (a) established an overall grade-point average of 2.0 or better in another college or university; and (b) completed 56 semester (84 quarter) units of college credit in courses accepted by the University for transfer; and (c) completed the following: (1) appropriate college courses, with a grade of C or better, in high school subjects that you lacked—up to two units (a unit is equal to a year's course) of credit may be waived, exclusive of English or math; or (2) one college course in mathematics; one in English; and one in either U.S. history, a laboratory science, or a foreign language, all with grades of C or better. The mathematics course must be at least as advanced as the equivalent of two years of high school algebra (elementary and intermediate) or one year of elementary algebra and one year of high school geometry. Courses other than mathematics must be transferable to the University.

Requirements for Nonresidents. If you met the admission requirements for freshman admission as a nonresident, you must have a grade-point average of 2.8 or better in college courses that are accepted by the University for transfer credit.
If you are a nonresident applicant who graduated from high school with less than a 3.4 grade-point average in the "a to f" subjects required for freshman admission, you must have completed at least 56 semester (84 quarter) units of transferable work with a grade-point average of 2.8 or better. In addition, if you lacked any of the required subjects in high school, you must complete appropriate college courses as outlined under "Requirements for Residents" above.

Inter campus Transfers. An undergraduate student who is registered on any campus of the University, or who was previously registered in a regular session of the University and has not since been registered in another institution, may apply for transfer to another campus of the University by filing the proper forms on the campus where last registered. The intercampus transfer application forms and application for transcript of record forms may be obtained from the Office of Admissions and Records.
and must be filed with that office. There is a fee of $35 at the time of filing. Filing dates are the same as those listed for new applicants.

Note: Additional Requirements for Admission in Advanced Standing. Refer to the announcement of the individual college or school to which you seek admission for additional requirements.

Competitive Admission at the Berkeley Campus
The Berkeley campus is not able to admit all qualified undergraduate applicants. Many undergraduate programs of study attract more qualified applicants than the campus can accommodate as new students each year. Engineering at all levels, all majors in the College of Letters and Science at the freshman level, and Business Administration at the junior level are current examples of oversubscribed programs. While all applicants who apply during the priority filing period will be considered, it is inevitable that some will be "redirected" to other University campuses that offer the same or similar programs and have space available. The Berkeley campus's selection of applications to consider is based primarily on an applicant's demonstrated high scholastic average. Evidence of such proficiency in preparatory work, which often goes well beyond the minimum eligibility requirements.

Applicants should pay close attention to the redirection policies reflected during an admissions cycle and published in the University of California Information for Prospective Students.

Special Admission Circumstances
Admission by Exception. A limited number of students who have not met the regular requirements for admission, but can offer evidence of their potential to succeed at the University, may be considered for admission by exception. Information on such admission may be obtained from the Office of Admissions and Records.

Educational Opportunity Program. This program (EOP) provides the opportunity for entrance to the University to students of minority and low-income background, who might not be able to attend otherwise. Prospective students who meet the regular admission requirements, as well as those who do not, may apply to the University through EOP. Prospective EOP students must show a potential to benefit from higher education. Financial aid counseling, tutoring, and housing aid are available under the program.

To be admitted to EOP, you must apply to the Office of Admissions and Records and complete a regular undergraduate application for admission. If you are interested you should apply as early as possible.

International Applicants. An applicant from another country should request the brochure, Information for Prospective Students from Other Countries, designed to answer questions about admission to the University, visas, special examinations, fees and expenses, housing, and travel. Prospective undergraduates should direct inquiries to the Office of Admissions and Records. Applicants who need to improve their English language skills should contact the English Language Program, University of California Extension, 2223 Fulton Street, Berkeley, CA 94720, USA. All nonimmigrant foreign students must check in at the Advisers to Foreign Students and Scholars Office, International House, as soon as possible.

Limited Status. Applicants with a bachelor's degree or with a substantial amount of college work completed with a superior scholastic average may take certain courses toward a definite and limited objective. Only applicants of unusual merit are considered. They must normally have a personal interview with an admissions officer who will determine from the applicant's record the applicant's needs, plans, and conditions of admission, subject to approval from the dean of the applicant's college and school.

Admission is for a specified time, determined beforehand, and students must maintain a prescribed scholastic average. There are no "special courses"; students will be admitted only to those courses for which they are able to demonstrate, in the opinion of the instructor, satisfactory preparation.

Work Toward a Second Bachelor's Degree. Ordinarily this is discouraged by the University, but complete changes in objective occasionally require the attainment of a second bachelor's degree. Applicants for admission to undergraduate study for a second bachelor's degree must indicate, by their previous scholastic record, a strong probability of academic success in such an undertaking. Admission is subject to approval of the Director, Office of Admissions and Records, and the dean of the college or school in which work is to be undertaken.

Graduation Requirements
As soon as you have been accepted for admission to Berkeley you should learn the requirements you will have to fulfill to earn your bachelor's degree. These requirements are described below. You should also be fully aware of the rules and regulations that pertain to all Berkeley students. For more information, please visit the Office of Admissions and Records, 128 Sproul Hall.

University Requirements
The University sets two requirements which all undergraduates must fulfill in order to graduate: Subject A and American History and Institutions.

All students are advised that fulfillment of these requirements is the responsibility of the individual student.

Subject A Requirement. All University departments assume that students are proficient in reading and writing English and understand how to compose an essay on an academic topic. Evidence of such proficiency is required of undergraduates upon entrance to the University.

Students who have not satisfied the requirement must enroll in the Subject A course "Introduction to Language" or in a related course (see Courses for Non-Native Speakers below) during their first semester of residence at the University.

Students who have not fulfilled the requirement after two semesters will not be eligible to enroll in the University for a third semester (students enrolled in related courses excepted).

The Office of Admissions and Records accepts the following in fulfillment of the Subject A requirement (the examinations cited in 1-4 below must be taken prior to entering the University):

1. A score of 600 or above on the English Composition Test of the College Entrance Examination Board (CEEB);
2. A score of 3, 4, or 5 on the CEEB Advanced Placement Test in English;
3. A score of "Pass for Credit" on the California State University and Colleges English Equivalency Examination;
4. A score of 600 or above on the Test of English as a Foreign Language (TOEFL). (Restricted to non-native speakers of English who have had no previous academic work in an English-speaking country and who have taken the test before arrival in the United States.)

5. Completion with a grade of C or better of a college-level course in English composition taken at a previous institution and judged acceptable by the Office of Admissions and Records;

6. A satisfactory grade on an essay examination administered by the Subject A Department. This examination may be taken only once.

Fulfillment of the Subject A requirement (either by one of the ways listed above or by passing the Subject A course with a grade of C or better) is a prerequisite to all freshman reading and composition sequences. Credit for taking these courses will not be granted unless the Subject A requirement has first been fulfilled.

Courses for Non-Native Speakers of English. Students whose native language is not English and who have completed less than five years at American high schools fulfill the Subject A requirement (1) by demonstrating satisfactory writing ability on the Subject A Examination for Non-Native Speakers of English, or (2) by completing with a grade of C- or better one to two specially designated Subject A courses, followed by successful completion of Subject A1, "Introduction to Language." Students must enroll in one of these courses each semester until the Subject A requirement has been fulfilled.

American History and Institutions Requirements. The American History and Institutions Requirements are based on the principle that a U.S. resident enrolled at an American university should have an understanding of the history and the governmental institutions of the United States. These requirements may be met as follows:

I. Options for Students Entering Berkeley for the First Time Fall Semester 1983 or Later:

Both the American History and the American Institutions Requirements may be satisfied in the following ways:

1. By fulfilling the "a" subject requirement for admission (one year of U.S. history or one-half year of U.S. history and one-half year of U.S. government in high school with a grade of C or better).

2. By taking one quarter or semester of basic U.S. history or U.S. government at a college or university prior to entering U.C. Berkeley. Inquiries about specific courses should be directed to the Office of Admissions and Records, 120 Sproul Hall.

3. By passing the high school Advanced Placement American History exam with a score of 3 or better.

4. By passing the College Board Achievement Test in U.S. history with a score of 500 or better.

5. For students transferring from another UC campus: by taking any course or courses that satisfy the AH&I Requirements of that campus.

Students who have not satisfied either or both of the AH&I Requirements prior to entering Berkeley may satisfy the Requirements in the following ways:

1. By taking the American History and/or American Institutions exams (see Section II, 4 below).

2. By petitioning the AH&I Office (in 29 Dwinelle) to take a course or courses at UC Berkeley.

Freshmen: Your first opportunity to see the status of your AH&I Requirements will be on your first Berkeley transcript.

II. Options for Students who Entered Berkeley Between Fall 1981 and Spring 1983:

1. History Requirement: By completion in high school of two semesters of U.S. history with an average grade of B or better. Institutions Requirement: By completion in high school of one semester of U.S. government with a grade of B or better.

2. By completing approved courses at Berkeley in American History and American Institutions. The list of approved courses may change from semester to semester; students should check with the AH&I Office for the current AH&I list.

3. By petitioning courses, taken at an accredited college or university, which are equivalent in scope and content to those on the approved U.C. Berkeley course list. When making such a petition, students should present a course syllabus, reading list and copy of transcript or report card to the AH&I Office.

4. By passing two essay examinations, one for each Requirement. The exams are based on a reading list (three books), are graded pass/not pass, and are offered on campus eight times each year. If you wish to take either or both of the exams, you may obtain the reading list, sample answers, and test dates at the AH&I Office.

5. The American History Requirement can be fulfilled by passing the Advanced Placement Test in American History with a score of 3, 4, or 5. (No A.P. Test exists in American Institutions; another option must be used for this part of the Requirements.) The American History Requirement can also be fulfilled by passing the College Board Achievement Test in American History with a score of 500 or better.

6. By mixing these five alternatives (for example, an exam for one Requirement and a course for the other).

III. Students Who Entered Berkeley Before Fall 1981 may use any of the options listed under Section II above with the following exceptions:

High School courses will not satisfy either the History or the Institutions Requirement.

The College Board Achievement Test will not satisfy the American History Requirement.

Attention foreign students: The AH&I Requirements will be waived for foreign students with at least 90% semester units (senior status), who hold a current, non-immigrant visa (F being the most common) and an I-94 departure record. Students should present their visa and the I-94 record to the Office of Records, 128 Sproul Hall, before the semester in which they will graduate.

College and School Requirements

Every college and school has established a program of requirements for the degree, which may be in addition to those of a field of concentration. These requirements may include: (1) preparatory subject requirements for admission; (2) preparatory college-level courses for your particular field of study—to be completed, if possible, during your early period of residency in the college or school, or in some cases before entrance; (3) breadth requirements, courses outside the field of study, considered essential to a well-rounded curriculum; (4) the credit requirement, which is the total...
number of units to be completed, with specifications of how these credits are to be distributed; and (5) a minimum scholarship requirement. For detailed information you should obtain a copy of the announcement of your college or school.

Declaration and Change of Major. Regulations and procedures for declaring the major vary for each college. You may, at any time up to the last semester of residence, file a petition for a change of major. You must secure approval for this action from the dean or other authorized person in the college or department to which you are transferring.

Undergraduate Honors. Standards for honors status are set by the colleges and schools. Departments may, in addition, recommend students for inclusion on the Honors List. Honor students are usually accorded special privileges, including eligibility for honors programs. For details on undergraduate honors, please consult your college, school, or department.

Minimum Scholarship Requirements. Failure of undergraduate students to maintain a minimum grade-point average prescribed by the college or school will normally result in probation or dismissal. Since scholarship rules are applied only at the close of regular sessions, grade points earned in a University of California summer session or by removing an Incomplete grade are not taken into consideration until the close of the student’s next semester of attendance.

Minimum Progress. For undergraduates, normal progress toward a degree requires 30 units of successfully completed coursework each year. The continued enrollment of a student who fails to achieve minimum academic progress shall be subject to the approval of the dean of the college or school in which the student is enrolled. To achieve minimum academic progress, the student must have successfully completed a number of units no fewer than 15 times the number of semesters less one, in which the student has been enrolled on the Berkeley campus. Summer Session is not counted as a semester. A 15-unit study list is considered to be a normal course load; a study list of fewer than 12 units must be authorized by the dean of the appropriate college or school.

Academic Probation. Regulations and procedures governing academic probation vary with each college and/or school. For specific details, consult your college or school announcement. Students on probation are not entitled to take courses with a passed/not passed option.

Academic Dismissal. Regulations and procedures governing academic dismissal vary with each college and/or school. For specific details consult your college or school announcement.

Dismissed students may appeal, by formal petition, to the dean of their college or school, for a hearing, but the action of dismissal is normally considered final. A dismissed student who wishes to transfer to another college or school at Berkeley may petition the dean of the jurisdiction sought.

Work Toward a Degree. At the close of each semester, the courses, units, grades, and grade points earned are added onto your cumulative University record. From this record, you may determine your progress toward a degree.

In working for a degree, you should keep in mind the various levels on which you are to satisfy requirements—University, college, school, and department—as well as the types of requirements you must fulfill: course, unit, grade point, and amount of upper division work. You may receive additional counsel in these matters from your adviser.

Preparation for Graduate Study. If you are preparing for study toward higher degrees, you should learn, as early as possible, the entrance and degree requirements of your graduate field, in order to include all prerequisite steps in the undergraduate program.

Departmental Requirements

Every student must select a field of concentration and pursue a major or curriculum, normally by taking a minimum number of units in one department or school. Occasionally—as, for example, with Business Administration, Optometry, and others—the school and the department are synonymous. In some cases—as, for example, the humanities field major in the College of Letters and Science—a major may embrace more than one department.

Residence Requirement

After 90 units toward the bachelor’s degree have been completed, at least 24 of the remaining units must be completed in residence in not less than two semesters in the college or school of the University in which the degree is to be taken. Completion of these 24 units must be begun in the semester in which 90 units are exceeded. You should consult the announcement of your college or school for details concerning the senior residence requirement as it pertains to the summer session.

Declaration of Candidacy

For Fall semester 1985, you must file with your study list an announcement of candidacy for a degree at the beginning of the semester in which you expect to complete your work for the degree. For Spring semester 1986, you must fill in the appropriate bubble on the Schedule Request Form if you intend to graduate at the end of the term for which you are enrolling. The period for filing announcements ends with the third week of classes. However, announcements filed during the third week are subject to a $3 late fee. If for any reason you do not meet the requirements for graduation after announcing your candidacy, you must file a new announcement of candidacy in the filing period for the subsequent semester in which the degree will be awarded.

Studying Abroad

While progressing toward the bachelor’s degree, you have a number of opportunities to earn University of California credit while studying abroad. The Universitywide Education Abroad Program has study centers at the following universities:

Africa
Fourah Bay College, Freetown, Sierra Leone
University College, Nairobi, Kenya
University of Benin, Lome, Togo

Asia
Beijing University, People’s Republic of China
Chinese University of Hong Kong
International Christian University, Tokyo, Japan
Nanjing University, People’s Republic of China
National Chengchi University, Taipei, Taiwan
University of Delhi, India

Australia
Australian National University, Canberra
La Trobe University, Melbourne
Macquarie University, near Sydney
Monash University, Melbourne
University of Melbourne
University of Sydney
### Undergraduate Degrees

<table>
<thead>
<tr>
<th>Program</th>
<th>Title</th>
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<tr>
<td><strong>Central America</strong></td>
<td>National Autonomous University of Mexico, Mexico City</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td>Universities in France: Bordeaux, Grenoble, Marseilles, Montpellier, Paris (Film, Literature), Pau-Paris, Poitiers Georg-August University, Goettingen, Germany University of Dublin, Trinity College, Ireland (a part of the United Kingdom and Ireland program) Universities in Italy: Padua; Academy of Fine Arts, Venice; G.B. Martini Music Conservatory, Bologna University of Bergen, Norway Universities in Spain: Barcelona, Madrid University of Lund, Sweden State University of Leningrad, USSR</td>
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<tr>
<td><strong>Middle East</strong></td>
<td>Universities in Israel: Haifa, Jerusalem (Hebrew University) American University of Cairo, Egypt</td>
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<tr>
<td><strong>South America</strong></td>
<td>University of Sào Paulo, Brazil Pontifical Catholic University of Peru, Lima, Peru</td>
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<td><strong>Requirements for participation are a grade-point average of 3.0, upper division standing, and sufficient language preparation. University scholarships, loans, and grants may be used to finance the year abroad.</strong> Berkeley also participates in several inter-collegiate consortia for advanced language studies: Rome Classics Program (requiring Latin fluency), Japanese language study in Tokyo, Mandarin Chinese study in Taipei, and Arabic study in Cairo. Graduate students may study in most of the programs subject to the approval of their advisers and the Graduate Division. One year of graduate study must have been completed prior to the year abroad. If you are interested, consult your academic advisers and the Education Abroad counselor in the International Education Office, 2538 Channing Way, 104 Building D, 642-1356.</td>
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### Undergraduate Education / 19

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<th>Program</th>
<th>Title</th>
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1 Applicants interested in PreVeterinary Medicine should apply for the major in Bioresource Sciences in the College of Natural Resources and contact the PreVeterinary adviser after admission.

2 A student may select either the major of Genetics in the College of Letters and Science or the Bioresource Sciences major with an emphasis in genetics in the College of Natural Resources.

3 The School of Business Administration requires completion of 60 semester units for admission into its program.

4 Applicants interested in Peace and Conflict Studies should apply for the major in Peace Studies (A.B.) or in the College of Letters and Science (A.B.).

5 Applicants interested in PreVeterinary Medicine should apply for the major in Bioresource Sciences in the College of Natural Resources and contact the PreVeterinary adviser after admission.

6 Applicants interested in Peace and Conflict Studies should apply for the major in Peace Studies (A.B.) or in the College of Letters and Science (A.B.).
Fourteen members of the Berkeley faculty have won Nobel Prizes over the years, a testament to the campus tradition of scholarly and creative excellence. The tradition is not only of historical significance; 11 of the Laureates serve on the faculty now.

Left to right, from top left:
Gerard Debreu (Economics 1983), professor of Economics and Mathematics, developed a mathematical foundation for the supply-and-demand equilibrium theory;
Czeslaw Milosz (Literature 1980), professor emeritus, Slavic Languages and Literature, has written some of the finest poetry of the 20th century;
Luis Alvarez (Physics 1968), professor emeritus, Physics, developed a hydrogen "bubble chamber" for detecting nuclear particles;
Charles Townes (Physics 1964), University professor, Physics, conceived the idea of the maser and laser;
Melvin Calvin (Chemistry 1961), University professor, Chemistry, first used the carbon-14 isotope as a tracer in biological studies and exposed the mechanism by which photosynthesis operates;
Donald Glaser (Physics 1960), professor, Molecular Biology, developed a hydrogen "bubble chamber" to track atomic particles;
Owen Chamberlain (Physics 1959) and Emilio Segrè (Physics 1959), professor and professor emeritus, Physics, respectively, discovered anti-protons;
Edwin McMillan (Chemistry 1951) and Glenn Seaborg (Chemistry 1951), professor emeritus, Physics, and University professor, Chemistry, respectively, co-discovered plutonium and nine transuranium elements; and
John Northrop (Chemistry 1946), professor emeritus, Biophysics and Medical Physics, isolated the enzymes that catalyze chemical reactions in the body.

Deceased Berkeley Nobel Laureates are:
William Giauque (Chemistry 1949), who came closer to reaching absolute zero temperature (-459.688 degrees fahrenheit) than anyone previously, by means of a magnetic refrigeration system; Wendell Stanley (Chemistry 1946), who pioneered the isolation and crystallization of viruses; and Ernest Orlando Lawrence (Physics 1939), who invented the cyclotron.

Graduate Education

Graduate study embraces all study for degrees and certificates beyond the bachelor's degree—principally the master's and doctor's degrees.

Higher degrees fall into two broad categories: (1) Professional—degrees awarded by each professional college and school in recognition of a candidate's command of a comprehensive body of professional knowledge and the ability to organize and carry out investigation of significant problems in the field. (2) Academic—degrees awarded by the academic departments, and also some professional schools, in recognition of a candidate's command of a wide range of related subjects within an academic field, preparation in one or more foreign languages, and ability to pursue original research leading to a significant contribution to the field of study.

These graduate degree programs have been approved by the Graduate Council and the Coordinating Committee on Graduate Affairs. Others may be instituted only with the consent of these bodies. For a list of graduate degrees offered, see the end of this section. For complete information on regulations and procedures for graduates, see Appendix.

The Nature of Graduate Instruction

A graduate course is a highly advanced course in a field of study already intensively presented in the upper division. Graduate courses demand, on the part of both instructor and student, either a capacity for critical analysis or a specialization of research interests not normally appropriate to an undergraduate major. These courses may be conducted in a number of ways: (1) as advanced lecture courses; (2) as seminars in which faculty and students present critical studies of selected problems within the subject field; (3) as independent study or reading courses; or (4) as research projects conducted under faculty supervision.

The main purpose of graduate study is to inspire independence and originality of thought in the pursuit of knowledge. The graduate student is expected to achieve mastery of the chosen field through advanced coursework and—equally important—through independent study and research. Considerable liberty is accorded in the choice of courses, at the discretion of the graduate adviser, as long as minimum requirements for academic residence are met.

Possession of a bachelor's degree does not in itself entitle a student to enroll in a graduate course. These courses assume adequate preparation at the upper division level in the subject field (a minimum of 12 units of upper division work basic to the subject matter of the graduate course; this basic work may be pursued in more than one department). Graduate students are encouraged, therefore, to take such upper division work as will provide them with the background needed for advanced work; they are not confined to graduate courses.

Graduate courses completed before attainment of the bachelor's degree are not acceptable for unit credit toward an advanced degree. Courses in the 300 and 400 series, which are professional in nature, are not acceptable for unit credit as part of the program for an academic degree. They may, however, satisfy certain substantive requirements in particular academic programs, such as engagement in teaching activity or particular kinds of research or technical work.

Graduate Advisers

Graduate advisers are appointed by the Dean of the Graduate Division for each academic unit and are announced prior to the beginning of the fall semester. If a department has more than one graduate adviser, the Dean will ask that one such individual serve as Chair of the Graduate Advisers. The responsibilities of all graduate advisers include: (1) assisting students in selecting programs of study; (2) endorsing study lists; (3) acting on petitions for study list changes only; (4) maintaining records of all students enrolled under their jurisdiction; and (5) supplying information requested by the Dean of the Graduate Division regarding a student's progress. In addition, the Chair of Graduate Advisers is responsible for: (1) endorsing applications for candidacy for higher degrees and for qualifying examination; (2) acting on petitions by
graduate students; and (3) assisting the Dean in the enforcement of regulations, particularly those relating to registration, admission to graduate courses, and maintenance of acceptable scholastic performance. The graduate advisers are deputies of the Dean of the Graduate Division and the chief representatives of the department or school in all matters related to graduate study, and their signatures are recognized as expressing official decisions.

Graduate students also have individual advisers, usually assigned after advancement to candidacy for the doctorate, but frequently appointed in the earlier stages of their training. The individual advisers may or may not be the same as the official graduate advisers. All graduate students should keep in close touch with their individual advisers and must confer with their official graduate adviser at the beginning of each semester to obtain approval of their programs of study (by signature on the Schedule Request Form).

Note: A new class enrollment system became effective in the 1985 Spring semester. The Advance Class Enrollment (ACE) system makes it easier for students to enroll in classes and improves the probability that places will be available for all students who wish to take a course.

Applying for Admission

Completed applications for admission, as well as all additional documents specified on the application form (including transcripts from each college-level institution previously attended) and an application fee of $35, must be filed with the Graduate Admission/Fellowship Office by the established deadlines.

Many departments have earlier final application dates than the Graduate Division, both with respect to admission and to financial assistance. When this is the case, materials must be in both the department and the Graduate Division by the departmental deadline date if the application is to be considered. Many departments also admit students only for the Fall semester. Information on special departmental deadlines and requirements is contained in the application packet.

The final dates of the Graduate Division for acceptance of applications for admission for the 1985-86 academic year are: Fall semester, February 1; and Spring semester, September 1. The School of Law admits only for the Fall semester; the deadline is February 1.

Limited Enrollment

Each graduate program at Berkeley has a maximum enrollment that may not be exceeded. Almost invariably, this maximum is smaller than the number of persons who are at least minimally qualified for admission. Selection procedures are designed to admit applicants in accordance with their relative merit and promise among those at least minimally qualified. It is to the applicant's advantage to make early inquiry about the possibility of study at Berkeley.

Admission Requirements

The University requires of the applicant the following: (1) a degree from an accredited institution, comparable to the bachelor's degree offered at Berkeley; (2) sufficient undergraduate training to undertake graduate study in the chosen field; and (3) a satisfactory scholastic average.

In addition to the general University requirements, certain schools or departments may require additional records, such as separate applications, reading lists, examples of original work, or the results of qualifying examinations. Information on undergraduate requirements for a major field and on graduate programs and requirements is available in the school or departmental announcements and bulletins, and in the "Courses and Curricula" section of this catalog.

Graduate Record Examination. Applicants for graduate admission (with certain exceptions listed below) are required to take the Aptitude Test of the Graduate Record Examination and to have their scores on this examination reported by the Educational Testing Service. Although current test scores are preferred, reports up to five years old—but not older—will be accepted.

International applicants from any country in which the official language is English or those who have studied for one year or more in schools or universities where English is the language of instruction must take the Aptitude Test of the Graduate Record Examination. In general, others applying from countries outside the United States need not submit GRE scores, unless their major departments so require. A list of departments or groups that require the GRE of all their applicants is included in the application packet.

Applicants to the UCB-UCSF Joint Medical Program are not required to take the GRE but must take the MCAT (Medical College Admission Test).

School of Business Administration applicants take the Graduate Management Admission Test (GMAT) in place of the Graduate Record Examination.

Applicants to the School of Law for the J.D. degree take the Law School Admission Test (LSAT) rather than the GRE.

Teaching Credential applicants (Multiple and Single Subject only) are not required to take the GRE. However, applicants for the M.A.T. degree must fulfill the GRE requirement.

Arrangements to take the GRE should be made directly with Educational Testing Service at least three weeks before the desired test date (six weeks, if registering to take the examination outside the United States).

Applications for the GRE examination and GMAT examination are obtainable from the Educational Testing Service, Box 955, Princeton, NJ 08540 or from its western office at 1947 Center Street, Berkeley, CA 94720.

Domestic candidates from families with extremely low incomes may qualify for a waiver of GRE test fees. Such applicants should see their undergraduate financial aid offices to determine whether their institution participates in the GRE Fee Waiver Program and whether they qualify. Fee waivers are not available directly from the Educational Testing Service.
International Applicants must fulfill all previously stated admissions requirements and have an excellent command of English before beginning graduate study at Berkeley. Since no one can be admitted to graduate standing to learn English, applicants from countries in which English is not the official language must take the Test of English as a Foreign Language (TOEFL) and have the results sent directly to the Graduate Admission/Fellowship Office. The test is administered six times a year, so applicants should register as soon as possible by writing either the TOEFL agent in their home countries or TOEFL, Box 899, Princeton, NJ 08541. The results of institutional administrations of the TOEFL are not acceptable in lieu of the international or special center administrations. If the test was taken more than two years ago, it must be taken again.

Duplication of Higher Degrees
Normally, duplication of degrees is not permitted. A student may petition the Dean of the Graduate Division for exception to this policy if the degree desired is in a field of study distinctly different from the field in which the original degree was attained. A professional degree is not regarded as duplication of an academic degree.

On the recommendation of the graduate adviser, and with the approval of the Dean of the Graduate Division, a student may, however, be permitted to earn a second master's degree in the same subject as that of the first master's (or in a closely allied subject), if enrolled in a doctoral program at Berkeley in that subject (or allied subject), and if that particular doctoral program requires that a master's degree be earned at Berkeley.

Notification of Action on Admission
A written notice from the Dean of the Graduate Division is valid proof of admission. Admission to graduate study is limited by the number of places available in the various colleges, schools, and departments of UC Berkeley. Applicants for admission and fellowship consideration will be notified on or about March 1 of the action on their applications. Applicants for admission only will be advised as soon as possible after a decision has been reached. Normally, however, acceptance letters for applicants for admission only will not be issued until after March for the Fall semester.

Statement of Firm Intent to Register and Failure to Register
The admission notice to new (including reactivating) graduate students contains a statement of firm intent to register which must be filled out and returned to the Graduate Admission/Fellowship Office by the date indicated therein. Only the return of the form to the Graduate Admission/Fellowship Office indicating a firm intent to register will reserve the allocated registration slot for the successful applicant. Applicants wishing to retain a record of the return of their firm intent to register should send it by certified or registered mail.

Students who do not wish to accept the offer of admission should return the Notification of Declination of Admission so that their places can be reallocated to other applicants. Students who fail to return the firm intent to register form and those who do, but do not follow through with registration for the semester in which they were admitted, must request reactivation of their application if they wish to attend any subsequent semester. They have no priority over other applicants for any subsequent semester by virtue of their previous admission.

Reactivation of Application
The Graduate Division keeps application materials on file for two years. Any person who filed an application within the past two years but did not complete the application process, was denied admission, or was admitted but did not register may reactivate the previous file by submitting a new application form by the established deadline for the semester in question.

The application fee is $35, and the first reactivation is free. Thereafter, the fee will be required. A request for consideration (reconsideration) in another major field for the same semester shall not constitute a reactivation of application.

Financial Aid and Academic Appointment
Fellowships and Graduate Scholarships
Applications for fellowships and graduate scholarships are considered only once a year; awards are made for the academic year beginning with the Fall semester.

In assigning awards, the Committee on Fellowships and Graduate Scholarships considers the extent and quality of previous academic work, evidence of ability in research or other creative accomplishments, intellectual capacity and promise of productive scholarship. The amount of the award is based on the total resources available to the student as evidenced in the financial statement and on the determined need.

In addition to Regents Fellowships and fellowships funded by endowed income, the following fellowships are awarded in open competition:

The Berkeley Fellowships for Graduate Study. Fellowships are awarded to students of outstanding achievement and high promise who will commence graduate study toward the doctoral degree in any field of study. These are three year awards, based on continued excellence in the fellow's advanced degree program, with an annual stipend of $8,000 plus tuition and fees.

Foreign Language and Area Studies Fellowships. The U.S. Department of Education allocates fellowship funds to institutions of higher education that offer advanced training in modern foreign languages, other than Western European languages, and in areas of international studies.

The fellowships are awarded to enable students specializing in various disciplines, or professional fields of study simultaneously, to acquire a high level of competence in one or more languages critical to the national interest of the United States, and a fuller understanding of the areas, regions, or countries in which that language is commonly used. To be eligible, the applicant must be a citizen or permanent resident of the U.S., show potential for high academic achievement, and plan to enroll in a course in the language of award.
Graduate Opportunity Fellowships. The purpose of the Graduate Opportunity Fellowship Program is to increase the participation of ethnic minorities and of women in departments where they have been traditionally underrepresented. To be eligible for an award under this program, a student must have demonstrated scholastic achievement and be an entering or continuing full-time registered graduate student and a citizen or permanent resident of the United States. Awards are for study in residence on the Berkeley campus and will carry a maintenance stipend plus tuition and fees.

Fellowship Application Procedure. Students applying for admission/fellowship file the combined Application for Admission, Fellowship, and Financial Aid according to instructions included in the application. Important: Applicants for fellowships and graduate scholarships are strongly advised to take the October Graduate Record Examination.

Students applying for admission for the Spring semester must file a Continuing/Returning Graduate Student Fellowship Application (secured from the Graduate Fellowship Office) for an award to commence with the academic year following the semester of admission.

Continuing or returning graduate students at Berkeley may obtain the necessary fellowship application material from the Graduate Fellowship Office. The application and supporting materials must be filed with the department or graduate group.

Fellowship application deadline: December 15.

Announcement of Awards. Awards are announced by April 1 and must be accepted or refused, in writing, by April 15. The acceptance of a fellowship or graduate scholarship carries with it the presumption that the incumbent will devote full time to graduate study and research at UC Berkeley.

Fellowship Supplementation. Fellows may be employed no more than 25 percent time per semester as teaching or research assistants or in similar educationally relevant positions. Any exception to this policy must be approved by the Dean of the Graduate Division upon recommendation of the graduate adviser.

Nonresident Tuition Scholarship
A limited number of nonresident tuition scholarships and Anthony tuition scholarships are awarded to graduate students with distinguished academic records upon the recommendation of the student’s department. Awards may cover a full academic year or partial nonresident tuition only. Recipients of these scholarships must enroll in a full-time program of study and/or research leading to a higher degree.

Applications are available in the Graduate Fellowship Office in 1 California Hall. Completed applications should be submitted to the student’s department by April 15.

Graduate Minority Program
The goal of the Graduate Minority Program is to increase the number of minority students entering and completing higher degree programs at the University. The program assists with recruitment activities and provides financial assistance and supportive services for students from groups which have been traditionally underrepresented in graduate and professional programs in the United States. The University has identified Blacks, Chicanos/Mexican Americans, Spanish Americans, Latinos, Native American Indians, and Filipinos as most severely underrepresented in these programs. U.S. citizenship is required.

Graduate Minority Program awards are based upon evaluation of academic promise, financial need, and available program funds. The amount of the award is determined by financial need and may range from payment of fees to a maximum award which provides an annual stipend of $4,000 plus payment of fees. Awards are made for one year and are renewable for a second year on condition that satisfactory academic progress is being made toward completion of the degree. A limited number of awards may be available for students in the final year of dissertation work.

A limited number of application fee waivers are also available for disadvantaged needy students from underrepresented groups. Graduate Minority Program applicants usually qualify for these waivers. The request forms are available in the Graduate Admission/Fellowship Office or the Graduate Minority Program Office.

Applications for prospective students are available in the Graduate Application for Admission, Fellowships, and Financial Aid. Applicants are also required to complete the Office of Financial Aid application with all necessary supporting documents for determination of financial need.

For further information write to: The Graduate Minority Program, Graduate Division, 1 California Hall, University of California, Berkeley, CA 94720.

Teaching and Research Positions
Stipend figures for all positions mentioned in the following sections are subject to United States income tax deductions. Figures given are gross, not net, and do not reflect deductions. Information about payment schedules should be obtained when an appointment is offered, since payment for work performed is later than dates when registration fees are due. Appointments carry no guarantee of waiver of the nonresident tuition fee or any other fees. Appointments are for a period of one to two academic semesters. Reappointment may be recommended. Summer Session appointments may be additional and, in some cases, full-time. For teaching assistants and teaching fellows, payment is in ten equal installments (five installments per semester). Candidates for higher degrees may not be appointed by the University in any capacity at more than half-time without the express consent of the Dean of the Graduate Division. Registered graduate students appointed half-time by the University are nevertheless considered full-time students if they are taking a full academic load, i.e., registered for at least six units of upper division and/or graduate work.
Teaching Assistantships. Many departments make teaching assistantships available to outstanding graduate students, providing them with a stipend of $881.10 per month (based on a half-time appointment). Appointments are half-time or less. The teaching assistant must be a registered full-time student. Chosen for scholarly achievement and promise as a teacher, the appointee serves the apprenticeship under active supervision of the regular faculty. In some departments, students working for the Ph.D. degree are required to complete a specified minimum period of teaching as a part of their degree program. Application is made directly to the chair of the department in which the student wishes to teach.

Research Assistantships. Qualified registered full-time graduate students may seek positions as research assistants in the departments, centers, and institutes of the University. The stipend is $759 per month for a half-time appointment. The duration and extent of such an appointment is variable. Application is made directly to the department, center, or institute.

Teaching Fellowships. An appointee must be a registered full-time student who has been advanced to candidacy for the doctorate, or who has otherwise achieved appropriate professional maturity. The appointee is chosen for competence to conduct the entire instruction of a group of students in a lower division course, under general supervision of a regular faculty member. The stipend is $907.20 per month for a half-time appointment. Application is made directly to the chair of the department in which the student wishes to teach.

Exchange Programs
Berkeley students participating in any of the following exchange programs, with the exception of the Intercampus Exchange Program, will NOT automatically receive credit for taking coursework at the host campus. The courses will be posted in the memorandum column of their transcript. If a transfer of units is desired, please see page 26, Transfer of Credit from Other Institutions. No more than four semester or six quarter units are transferable toward the master's degree.

Foreign Language Training
When space is available, graduate students and faculty may facilitate their research and overseas field work by enrolling in courses for oral proficiency training in any of the languages taught at the Defense Language Institute of the Presidio of Monterey. Application forms may be obtained from the Secretary, Language Training Advisory Committee, Merrill College, University of California, Santa Cruz; Santa Cruz, CA 95060.

Intercampus Exchange Program
A graduate student registered on any campus of the University may go to another campus of the University as an Intercampus Exchange Graduate Student with the approval of the graduate adviser, the chair of the department in which study is proposed, the Dean of the Graduate Division on the home campus, and the Dean of the Graduate Division on the campus visited. Application forms for the Intercampus Exchange Program for Graduate Students may be obtained from the Office of the Dean of the Graduate Division on the student's home campus. Application forms should be completed and filed at least three weeks before the opening of the semester of enrollment in the program.

It is anticipated that this privilege will be used by graduate students who seek the opportunity for association with scholars or fields of study not available on their home campus, or who seek the use of special facilities and collections. Whenever possible, personal arrangements between faculty members on the two campuses should be made to insure that the courses, seminars, or facilities will be available to meet the student's needs. This privilege will be granted where there is evidence of serious and high-quality scholarship.

Intercampus exchange students register and pay fees on the home campus but have library, infirmary, and other student privileges on the host campus. Exchange students should make arrangements with the Office of Admissions and Records to follow the enrollment procedure of the host campus so that grades obtained in courses taken on the host campus will be transferred to the record on the home campus. Exchange students are considered graduate students in residence on the home campus. The enrollment of intercampus exchange students is not transferred to the host campus and formal admission to the host graduate school and department is not granted. Unless specifically restricted, holders of fellowships may participate in the Intercampus Exchange Program.

Stanford-California Exchange Program
Graduate students with superior academic records may participate in the Stanford-California Exchange Program, with the approval of the Graduate Division and the department, when it is deemed desirable for them to take a limited amount of work in courses offered at Stanford and not available at Berkeley. Normally, students are not allowed to participate in the Exchange Program until they have completed a year of graduate study at Berkeley. Participants in this program register and pay the applicable fees at Berkeley and are exempt from tuition and fees at Stanford. The same privilege is accorded to Stanford students who wish to take courses at Berkeley. Participants in these programs may register in at least one course at Berkeley. Further information and application forms may be obtained from the Petitions Desk in the Graduate Division, I California Hall.

Exchange Program with Hayward, Mills, and Sonoma
Graduate and undergraduate students may participate in exchange programs with California State University, Hayward; Mills College, Oakland; and California State University, Sonoma. With the approval of the Graduate Division and the department, participants in these programs may register and pay applicable fees at Berkeley and be exempt from tuition and fees at the host campus. Participants may enroll for only one course per semester at the host campus.
Graduate Theological Union
There are two types of programs which include the facilities of the Graduate Theological Union in Berkeley: the "Casual Program" and the joint Ph.D. program in Near Eastern Religions.

The Casual Program is open to all students in the GTU community and all graduate students at UC Berkeley. This program provides cross registration between the two campuses whereby a student registered on one campus may take courses on the other campus, subject to the appropriate academic approvals. Applications and deadline dates can be obtained from the Petitions Desk in the Graduate Division, 1 California Hall.

The Joint Doctoral Program in Near Eastern Religions is open only to students who intend to work toward the Ph.D. degree, but all students must first possess an M.A. (or equivalent) in the field of Near Eastern Studies or a related field and must have at least two ancient languages suitable to the proposed program. Applicants must be admitted to both the Graduate Theological Union and the University, as the degree is conferred jointly by both institutions. Students in the joint doctoral program are under the administrative supervision of the graduate dean at each institution, and final action on a student matter may only be taken after both deans have participated in the decision. Students in this program may use the extensive library holdings of the Union and supplement their programs with selected courses in Palestinian archaeology, Biblical studies, Semitic epigraphy, and philology. Initial information about the program, a catalog, and application forms should be obtained from the Graduate Theological Union, 2465 LeConte Avenue, Berkeley, CA 94709.

The Exchange Scholar Program
The Exchange Scholar Program is a three-year experimental program designed to enable graduate students who are enrolled in a doctoral program and who have superior academic records to study at one of the participating institutions for a limited period of time so as to take advantage of particular educational opportunities not available on the home campus. Normally students will be eligible to become Exchange Scholars only after completing one year in a graduate degree program at their home campus. Students may take courses and/or conduct research with particular faculty at the host institution while remaining registered at the home institution. The participating institutions are: UC Berkeley, Brown University, University of Chicago, Columbia University, Cornell University, Harvard University, Massachusetts Institute of Technology, Princeton University, Stanford University, and Yale University. Further information and applications may be obtained from the Petitions Desk in the Graduate Division, 1 California Hall.

Please note: Guidelines for participation in the exchange program with Stanford University are outlined above.

Study Abroad
Graduate students who have been admitted to study toward a higher degree may, under certain conditions, be granted permission to study abroad. An applicant must have completed at least one year in residence before departure for study abroad and must demonstrate language proficiency where required.

Graduate students are eligible to apply to most of the study centers under the Universitywide Education Abroad Program. A student must obtain the approval of both the department and the Dean of the Graduate Division.

Internship/Study Opportunities in Professional Studies Program in India. The Professional Schools in Berkeley conduct a program in New Delhi. Students earn credit for internship work in local government agencies appropriate to their professional interest, and enroll in an Indian university. For additional information on all the above programs, write to: Office of International Education, 2538 Channing Way, 104 Building D, University of California, Berkeley; Berkeley, CA 94720.

Tropical Biogeography
Registered graduate students interested in doing field research in the tropics may be assisted by the Associates in Tropical Biogeography, who, among other objectives, serve as an advisory committee to the Dean of the Graduate Division. Please see listing under Biology 250 for more information.

The Master’s Degree
Instruction is offered on the Berkeley campus leading to both academic and professional degrees as listed in this section.

Specific regulations governing the professional master's degrees are set forth in the individual announcements of the colleges and schools. This section will deal primarily with the academic master's degree.

Residence Requirement
A minimum of two semesters of academic residence is required for the master’s degree. Academic residence is defined as enrollment in at least 4 units in 100-200 series courses. Specific subject requirements and performance levels are set by the schools, departments, and groups.

Transfer of Credit from Other Institutions
A request for a transfer of units should be made initially at the end of the first semester of attendance. The graduate adviser should make a formal request to the Dean of the Graduate Division specifying the units and courses involved. Acceptance of such transfer credit is possible if the units are equivalent to work normally offered within the student’s current program of study, the grade recorded was at least a B, and the student has a superior scholastic record at the original institution and at Berkeley (at least a 3.3). Final action will be taken when half the program has been completed and the student is applying for advancement to candidacy. No more than 4 semester or 6 quarter units are transferable, the work must have been completed previously in graduate status at an institution of high standing, and the units transferred cannot be used to reduce the minimum required in the 200 series courses or the minimum residence requirement.
Also, work which has formed part of the program for a master’s degree previously conferred (either at the University of California or elsewhere) may not be used toward a current degree program.

Credit for graduate work completed on other campuses of the University of California may be granted in excess of 6 quarter units or 4 semester units. Requests are handled on an individual basis.

Concurrent Enrollment/University Extension
Concurrent courses through Extension are those taken on the Berkeley campus under the instruction of a regular member of the Berkeley faculty. In general, such coursework cannot be applied toward a Berkeley master’s degree. These courses are intended to provide Extension students with an opportunity to take coursework that would not ordinarily be available to them. They are not intended to provide a substitute for normal registration by Berkeley graduate students, nor are they to be used as a means of accumulating credit toward a Berkeley degree by an individual not formally admitted to graduate standing on this campus. Exceptions to this rule will be made only when there is clear evidence that such coursework was taken by the student while in graduate standing at another institution and with the intent of applying the units earned toward a graduate degree at that institution. Exceptions must be fully justified by the graduate adviser and will require special approval by the Dean of the Graduate Division.

Amount and Distribution of Work
Students working for academic master’s degrees on the Berkeley campus will pursue one of two plans, as determined by the individual school, department, or group. (Units may adopt either or both plans, and will, in the latter case, designate which plan is to be followed by each student.)

Plan I requires at least 20 semester units of upper division and graduate courses and a thesis. At least 8 of these units must be in graduate courses (200 series) in the major subject. Course units are not granted for the thesis.

Plan II requires at least 24 semester units of upper division and graduate courses, followed by a comprehensive final examination administered by the student’s school, department, or group. At least 12 of the units must be in graduate courses in the major subject.

Students under both plans are guided by their graduate advisers regarding distribution of coursework among the departments. Please note that departments, schools, and groups have the option of requiring performance standards higher than the minimum B average required by the Graduate Division. Further requirements are specified by the major department.

Advancement to Candidacy
Admission to candidacy for a master’s degree is not automatic upon completion of the degree requirements; it requires a formal application to the Dean of the Graduate Division that bears the approval of the chair of graduate advisers in the student’s major school, department, or group and a precise statement of the studies on which the application is based. Application must be made not later than the end of the third week of instruction of the semester in which the degree is to be awarded. If a student is to submit a thesis, however, the adviser should be consulted about advancement to candidacy as early as possible so that the appropriate committee can be formed.

The Master’s Thesis
Students under Plan I, described above, must submit a thesis in typewritten form, double-spaced on medium weight, 8½ x 11-inch approved paper, with a minimum left-hand margin of 2 inches. Consult the Degrees Staff in the Office of the Dean of the Graduate Division for approved brands of paper.

The thesis must be unbound and without perforations. The type must be adequate for photographic reproduction. Following approval by the student’s thesis committee, two copies are filed with the Dean of the Graduate Division. Further information regarding the organization and format of the thesis is available from the Degrees Staff, Office of the Dean of the Graduate Division.

The thesis constitutes a report, in as brief a form as possible, of results obtained in an original investigation of a problem. While it is understood that the problem in question need be one of only limited scope, the thesis should be comparable in style, organization, and depth of understanding to investigations of greater scope, such as the dissertations of doctoral candidates.

The thesis is submitted to a committee of three members of the faculty appointed by the Dean of the Graduate Division, with one member of the committee being chosen from a department other than that of the candidate’s major subject. The candidate is required to confer with all members of that committee before undertaking the work of a thesis. Since the committee is not appointed until a student is advanced to candidacy, the student, to avoid the possibility of having to make extensive revisions, should not begin thesis work before advancement. Responsibility for placing the completed thesis in the hands of the committee members rests with the student.

Three years is the normal time period allowed for completion of the thesis. Candidacy for the master’s degree will lapse automatically at the end of that time. Reinstatement can be accomplished upon the recommendation of the graduate adviser to the Dean at the time a final draft of the thesis has been approved by the thesis committee members.

If all three members of the committee approve the thesis, they sign the official title page prepared by the Office of the Dean of the Graduate Division, where two copies of the thesis are filed by the student for later deposit in the University Library. If any member of the committee doubts the acceptability of the thesis, the chairperson convenes the committee to discuss it. If the committee then reaches agreement on its acceptability, the thesis is signed and filed as previously indicated. If there is disagreement, the thesis is sent to the Dean of the Graduate Division together with a brief statement of each committee member’s opinion. If the thesis is rejected by all members of the committee, it is sent to the Dean with a statement to that effect by the committee chairperson. In all cases of rejection or split vote, the Administrative Committee of the Graduate Council makes the final decision.
The Doctor's Degree

Instruction is offered on the Berkeley campus leading to both academic and professional degrees. Professional degree programs are outlined in the individual announcements of the colleges and schools offering them. The general procedures given in this section apply primarily to the academic doctoral degree.

The Doctor of Philosophy degree is not granted solely for fulfilling technical requirements such as residence and completion of specified courses. The degree is awarded in recognition of a candidate's knowledge of a broad field of learning and for distinguished accomplishment in that field through an original contribution of significant knowledge and ideas. The candidate's research must reveal high critical ability and powers of imagination and synthesis.

Program of Study

Programs of study for doctoral degrees are more individualized than those for master's degrees, permitting more specialization within a field or the establishment of connections among fields. Nevertheless, aspirants must have their programs of study approved by the graduate adviser of the department or group to which they are admitted or later transferred. University policy requires continuous registration from entrance until receipt of the degree, unless a formal withdrawal is granted by the Dean of the Graduate Division.

The field of study may be in a single department, except for essential related courses in other departments, in several departments, or in an interdisciplinary group. Once a field of study has been chosen, students should confer with their graduate advisers to select the sequence of courses that will best prepare them for qualifying examinations and research work.

Residence Requirement

A minimum of two years or four semesters of academic residence is required for the Ph.D. degree. A maximum period in candidacy determined by the department and the Graduate Division is permitted, after which candidacy for the degree is likely to lapse. The department or the Graduate Division should be consulted for the time permitted in candidacy.

Foreign Language Requirement

The foreign language requirement serves (1) to make certain that Ph.D. candidates have the ability to acquire wide knowledge in their field of study; and (2) to enable them to keep up with foreign developments in the field. Students are urged to complete the foreign language requirement early in their graduate career. They must fulfill the foreign language requirement for the Ph.D. before advancement to candidacy and preferably before admission to the qualifying examinations according to the policies current in the department or group. Each graduate program may have somewhat different foreign language requirements, not only with respect to the particular languages required but also with respect to their number. Some graduate programs include the satisfaction of the foreign language requirement for the doctorate in their requirements for admission to doctoral programs. Prospective students are urged to inquire about the foreign language requirement as soon as possible and, if they can, to fulfill it while still in undergraduate status.

Qualifying Examinations

Before admission to candidacy, students must pass a series of qualifying examinations administered by a five-member committee approved by the Graduate Council. An oral component is required. The student must be registered in the semester in which the examinations are taken. Any previous deficiencies in training must have been removed, including satisfactory resolution of any incomplete grades in courses required by the graduate adviser for the individual program. At least a B average in all coursework undertaken in graduate status must have been maintained, and the language requirement(s) must have been fulfilled.

Please note: Departments, schools, and groups have the option of requiring performance standards higher than the minimum B average required by the Graduate Division.

Berkeley's library system, composed of approximately 6.5 million volumes and 100,000 periodicals, contains the best research collection west of the Mississippi.

Most of the collection is housed in the Doe Library and Moffitt Undergraduate Library, where the core collections emphasize social sciences and the humanities.

The Bancroft Library, devoted primarily to the documentation of western North America, maintains the largest collection of Mark Twain archives in the world. The Berkeley collection is also distinguished for its East Asian Library, which contains rare editions of early manuscripts, scrolls, woodblock and engraved maps, stone rubbings, and bronze inscriptions from that area of the world.

Special collections of the library system include some of the rarest books, illuminated manuscripts, and other publications in the nation.

*Academic residence is defined as enrollment in at least 4 units in 100-200 courses.*
Il corpo era muscoloso, barcollando durante un toco. La testa era portata ad uno torno, tronco di Dendroco fo, dal momento che era una specie di pino, perché la testa era impiegata come un fusto. Dal momento che era un membro, il tronco era impiegato come un fusto. Dal momento che era un membro, il tronco era impiegato come un fusto. Il corpo era muscoloso, barcollando durante un toco. La testa era portata ad uno torno, tronco di Dendroco fo, dal momento che era una specie di pino, perché la testa era impiegata come un fusto. Dal momento che era un membro, il tronco era impiegato come un fusto. Il corpo era muscoloso, barcollando durante un toco. La testa era portata ad uno torno, tronco di Dendroco fo, dal momento che era una specie di pino, perché la testa era impiegata come un fusto. Dal momento che era un membro, il tronco era impiegato come un fusto. Il corpo era muscoloso, barcollando durante un toco. La testa era portata ad uno torno, tronco di Dendroco fo, dal momento che era una specie di pino, perché la testa era impiegata come un fusto. Dal momento che era un membro, il tronco era impiegato come un fusto.
Advancement to Candidacy
Application is made on a form furnished by the Graduate Division, no later than the semester following the one in which the qualifying examinations were passed. The completed form, bearing the endorsement of the student's department, is filed with the Dean of the Graduate Division, who determines whether all formal requirements have been met. A fee of $25 must be paid when the application is filed. All requirements for the doctoral degree except the dissertation must have been completed before the student may be advanced to candidacy.

The Candidate's Degree
The degree, "Candidate in Philosophy," which gives formal recognition to a definite state of progress toward the doctorate, may be awarded to students when they are advanced to candidacy for the Ph.D. degree. The following departments and groups currently offer this degree.
- Agricultural and Resource Economics
- Ancient History and Archaeology
- Anthropology
- Applied Mathematics
- Architecture
- Astronomy
- Biochemistry
- Biostatistics
- Botany
- City and Regional Planning
- Classics
- Comparative Literature
- Computer Science
- Demography
- Dramatic Art
- Economics
- Education
- Endocrinology
- Engineering
- English
- Entomology
- Environmental Planning
- Ethnic Studies
- French
- Genetics
- Geography
- German
- Hispanic Literatures
- History
- Immunology
- Italian
- Latin American Studies
- Library and Information Studies
- Linguistics
- Logic and the Methodology of Science
- Mathematics
- Microbiology
- Molecular Biology
- Near Eastern Religions
- Near Eastern Studies
- Nutrition
- Oriental Languages
- Paleontology
- Physical Education
- Physiology-Anatomy
- Plant Pathology
- Plant Physiology
- Political Science
- Psychology
- Rhetoric
- Romance Languages and Literatures
- Romance Philology
- Scandinavian Languages and Literatures
- Science/Mathematics Education
- Slavic Languages and Literatures
- Soil Science
- Statistics
- Wildland Resource Science
- Wood Science and Technology
- Zoology

The Doctoral Dissertation
The format of the doctoral dissertation is similar to that outlined in the last section for the master's thesis. Further information is available from the Dean of the Graduate Division.

The dissertation, the product of independent investigation under faculty supervision, must be submitted to the committee in charge (see below), and must receive both its approval and the approval of the Graduate Council. The dissertation is the most important requirement for the doctoral program; the degree is in no case granted for completion of coursework only, no matter how extensive.

The candidate is to work under one of two plans, as adopted by the department or group:

Plan A: The Administrative Committee of the Graduate Council appoints a five-member committee which determines whether the candidate has met the requirements for the degree. Three members of the committee, one of whom must be from a department other than that of the student's major subject, guide the candidate in research and pass judgment on the merits of the dissertation. The whole committee conducts a final oral examination dealing with the relationship between the dissertation and the general field of study in which the subject of the dissertation lies. Admission to the final examinations may be restricted to the members of the committee, members of the Academic Senate, and guests of equivalent rank from other institutions.

Plan B: The Administrative Committee of the Graduate Council appoints a committee of three members, one of whom must be from a department other than that of the student's major subject, to guide the candidate in research and judge the merits of the dissertation. This committee may require any necessary conferences for elucidation of the subject treated in the dissertation. After presentation of the dissertation but before final action is taken upon it, the committee may, if deemed necessary, require the candidate to defend the dissertation in a formal oral examination.
Plan B
Agricultural and Environmental Chemistry
Agricultural and Resource Economics
Ancient History and Archaeology
Anthropology
Applied Mathematics
Architecture
Astronomy
Biochemistry
Bioengineering
Biophysics
Biostatistics
Botany
Business Administration
Chemical Engineering
Chemistry
City and Regional Planning
Classical Archaeology
Classics—Emphases: Greek, Latin
Comparative Biochemistry
Comparative Pathology
Computer Science
Demography
Dramatic Art
Economics
Education
Endocrinology
Energy and Resources
Engineering
Engineering Science
English
Entomology
Environmental Health Sciences
Epidemiology
Ethnic Studies
French
Genetics
Geography
Geology
Geophysics
German
History
History of Art
Immunology
Italian
Jurisprudence and Social Policy
Latin American Studies
Library and Information Studies
Linguistics
Mathematics
Medical Anthropology
Medical Physics
Microbiology
Molecular Biology
Molecular and Physiological Plant Biology
Music
Neurobiology
Nutrition
Oriental Languages
Paleontology
Parasitology
Philosophy
Physical Education
Physics
Physiological Optics
Physiology
Plant Pathology
Political Science
Psychology
Public Policy
Rhetoric
Scandinavian Languages and Literatures
Science/Mathematics Education
Slavic Languages and Literatures
Sociology
Soil Science
Statistics
Wildland Resource Science
Wood Science and Technology
Zoology

Normative Time
The primary goals of this program are to provide incentives to both students and instructional units to reduce the average amount of time taken to complete requirements for the doctoral degree, to facilitate a greater degree of continuity in doctoral studies, and to provide a more equitable assessment of fees for doctoral students advanced to candidacy. After advancement to candidacy, eligible students will receive a special grant to offset the cost of the educational fee.

Normative time is defined as the elapsed calendar time in years that under normal circumstances would be needed to complete all requirements for the doctoral degree, assuming that the student is engaged in full-time, uninterrupted study and is making desirable progress toward the degree.

The program is obligatory for all doctoral students (independent of original degree goal) first enrolled on the Berkeley campus in Fall 1978 and thereafter. Students who entered earlier may elect to join the program. The conditions of the Normative Time Program are described in the Appendix.

Interdisciplinary Groups
UC Berkeley has established graduate programs in a number of fields that cut across conventional departmental lines yet comprise distinct cores of knowledge. These programs are administered by groups of faculty from several related departments and, in certain instances, from several campuses. Students enrolled in these programs can work with any faculty member in the group without having to pursue the particular discipline of the department with which the faculty member is associated. Moreover, this arrangement makes available to group students a range of facilities not ordinarily open to students enrolled in departmental programs. In some cases (e.g., medieval studies), a faculty committee is specifically appointed to advise both the student and the interested departments on setting up a program that will best meet both the student’s needs and the departments’ views of the proposed program’s intellectual quality. Since groups have no budgets or facilities of their own, however, most applicants, to be accepted by a particular group, must first obtain the sponsorship of one of its faculty members.

Following is a current list of Graduate Groups on the Berkeley campus:

Group in Agricultural and Environmental Chemistry
Professor Isao Kubo, Chair
c/o Department of Entomological Sciences
201 Wellman Hall

Group in Ancient History and Archaeology
(Chair to be announced)
c/o Department of History of Art
405 Doe Library

Group in Asian Studies
Professor Lowell Dittmer, Chair
460 Stephens Hall

Group in Bioengineering
Professor Stanton A. Glantz, Chair
c/o School of Public Health
UC San Francisco

Group in Biophysics, Medical Physics, and Bioradiology
Professor Robert K. Mortimer, Chair
465 Donner Laboratory

Group in Biostatistics
Professors E.L. Scott and C.L. Chiang, Co-chairs
c/o School of Public Health
19 Warren Hall

Group in Buddhist Studies
Professor Lewis Lancaster, Chair
c/o Department of South and Southeast Asian Studies
1203 Dwinelle Hall

Group in Comparative Biochemistry
Professor Lester Packer, Chair
c/o Department of Physiology-Anatomy
2549 Life Sciences Building
Group in Comparative Pathology
Professor Neylan Vedros, Chair
c/o School of Public Health
3510 Life Sciences Building

Group in Demography
Professor Eugene A. Hammel, Chair
c/o Graduate Group in Demography Office
2234 Piedmont Avenue

Group in Endocrinology
Professor Howard A. Hem, Chair
c/o Department of Zoology
4079 Life Sciences Building

Group in Energy and Resources
Professor Robert Sawyer, Chair
c/o Group Office
100 T-4

Group in Environmental Health Sciences
(Chair to be announced)
c/o School of Public Health
322 Warren Hall

Group in Epidemiology
(Chair to be announced)
c/o School of Public Health
19 Warren Hall

Group in Folklore
Professor Alan Dundes, Chair
c/o Department of Anthropology
232 Kroeber Hall

Group in Food Science
(Chair to be announced)
c/o Department of Nutritional Sciences
119 Morgan Hall

Group in Genetics
Professor James Fristrom, Chair
c/o Department of Genetics
345 Mulford Hall

Health and Medical Sciences
Professor Phillip Cowan, Chair
Program Office
106 T-7

Group in Immunology
Professor Phyllis B. Blair, Chair
c/o Department of Microbiology and Immunology
3573 Life Sciences Building

Group in Latin American Studies
(Chair to be announced)
Center for Latin American Studies
2334 Bowditch Street

Group in Logic and the Methodology of Science
(Chair to be announced)
c/o Department of Mathematics
731 Evans Hall

Committee on Medieval Studies
(Chair to be announced)
c/o Department of English
322 Wheeler Hall

Group in Microbiology
Professor Dennis Ohman, Chair
c/o Department of Microbiology and Immunology
3573 Life Sciences Building

Group in Molecular and Physiological Plant Biology
Professor Bob Buchanan, Chair
c/o Department of Molecular Plant Biology
313 Hilgard Hall

Group in Neurobiology
Professor Frank S. Werblin, Chair
c/o Department of Electrical Engineering and Computer Sciences
231 Cory Hall

Group in Nutrition
Professor Janet King, Chair
c/o Department of Nutritional Sciences
119 Morgan Hall

Group in Parasitology
Professor Clarence J. Weinmann, Chair
c/o Department of Entomological Sciences
201 Wellman Hall

Group in Physiological Optics
Dean Jay M. Enoch, Chair
School of Optometry
350 Minor Hall

Group in Range Management
Professor James Bartolome, Chair
c/o Department of Forestry and Resource Management
145 Mulford Hall

Group in Romance Languages and Literatures
Professor Jerry R. Craddock, Chair
c/o Department of Spanish and Portuguese
4236 Dwinelle Hall

Group in Romance Philology
Professor Suzanne Fleischman, Chair
c/o Department of French
4125 Dwinelle Hall

Group in Science/Mathematics Education
Professor Richard M. White, Chair
c/o Department of Electrical Engineering and Computer Sciences
4533 Tolman Hall

Group in Soil Science
(Chair to be announced)
c/o Department of Plant and Soil Biology
108 Hilgard Hall

Group in Wood Science and Technology
Professor Donald G. Arganbright, Chair
c/o Forest Products Laboratory
478 Richmond Field Station

Advisory Group
(not degree programs)
Committee on Psychoanalytic Studies of the Arts and Society
Professors Robin Lakoff and Joseph Lipshutz; Co-chairs
c/o Department of Linguistics
2337 Dwinelle Hall

Program in Public and Nonprofit Management
Gene Bardach, Coordinator
Graduate School of Public Policy
2607 Hearst
(see Special Studies: Interdepartmental Studies, for courses)

Committee for Certificate in Russian and East European Studies
Professor Gail Lapidus, Chair
Center for Slavic and East European Studies
372 Stephens Hall

Individual Doctoral Programs
To allow the student an approach to a field that, in its breadth, falls between that of the department and the interdisciplinary group, the Graduate Division has encouraged the informal establishment of ad hoc programs leading to the Ph.D. degree. Only students who have completed at least two semesters of graduate study in a doctoral program on this campus and who have shown superior academic performance in their graduate studies here will be considered for an interdisciplinary program. In such programs, the student may prepare a proposal for a course of study under the sponsorship of five faculty members. Final approval of every individual graduate program and admission of each student into such a program must be granted by the Graduate Council. Degree requirements must be completed in accordance with Plan A of the Graduate Council policies, and the degree is awarded in a field approved by the council for the individual student.
Graduate Degrees

Academic degrees are the M.A., M.S., M.F.A., and Ph.D. All others are professional degrees. The J.D. in Law is the basic law degree. It is a graduate degree, and application is made directly to the School of Law.

Agricultural and Environmental Chemistry, M.S., Ph.D.†
Agricultural and Resource Economics, M.S., Ph.D.
Anatomy, M.A., Ph.D.
Ancient History and Archaeology, M.A., Ph.D.†
Anthropology, M.A.,* Ph.D.
Applied Mathematics, Ph.D.
Architecture, M.Arch., Ph.D.
Art, M.A., M.F.A.
Asian Studies, M.A., Ph.D. M.A. program emphases: East Asian, Southeast Asian, South Asian?
Astronomy, M.A.,* Ph.D.
Biochemistry, M.A., Ph.D.
Bioengineering, M.S., Ph.D.† (Joint program with San Francisco campus)
Biophysics, M.A., Ph.D.†
Biostatistics, M.A., Ph.D.†
Botany, M.A., Ph.D.
Buddhist Studies, Ph.D.†
Business Administration, M.B.A., M.S., Ph.D.
Chemical Engineering, M.S., Ph.D.
Chemistry, M.S., Ph.D.
City and Regional Planning, M.C.P., Ph.D.
Classical Archaeology, M.A., Ph.D.
Classics, M.A., Ph.D. M.A. program emphases: Greek, Latin
Comparative Biochemistry, M.A., Ph.D.†
Comparative Literature, M.A., Ph.D.
Comparative Pathology, M.S., Ph.D.†
Computer Science, M.S., Ph.D.
Demography, M.A.,* Ph.D.†
Design (Visual), M.A.†
Dramatic Art, M.A.,* Ph.D.
Economics, M.A.,* Ph.D.
Education, M.A., M.A.T., Ph.D., Ed.D.
Education (Special Education Group), Ed.D., Ph.D. (Joint degree program with San Francisco State University)
Endocrinology, M.A., Ph.D.†
Energy and Resources, M.A., M.S., Ph.D.†
English, M.A., Ph.D.
Entomology, M.S., Ph.D.
Environmental Health Sciences, M.S., Ph.D.†
Environmental Planning, Ph.D.
Epidemiology, M.S., Ph.D.†
Ethnic Studies, M.A., Ph.D.
Folklore, M.A.†
Food Science, M.S.†
Forestry, M.F.
French, M.A., Ph.D.
Genetics, M.S., Ph.D.†
Genetics, Ph.D. (Joint degree Program with San Diego State University)
Geography, M.A., Ph.D.
Geology, M.A., M.S., Ph.D.
Geophysics, M.A., Ph.D.
German, M.A., Ph.D.
Greek, M.A.
Health and Medical Sciences, M.S. Program emphases: Dual Degree Option, Genetic Counseling, UCSC-UCSF Joint Medical Program, Mental Health
Hispanic Languages and Literatures, Ph.D.†
History, M.A., Ph.D.
History of Art, M.A., Ph.D.
Immunology, M.A.,* Ph.D.†
Italian, M.A., Ph.D.
Journalism, M.I.
Jurisprudence and Social Policy, M.A., Ph.D.
Landscape Architecture, M.L.A.
Latin, M.A.
Latin American Studies, M.A., Ph.D.†
Law, J.D., LL.M., J.S.D.
Library and Information Studies, M.L.I.S., Ph.D., D.L.I.S.
Linguistics, M.A., Ph.D.
Logic and the Methodology of Science, Ph.D.†
Mathematics, M.A., Ph.D.
Medical Anthropology, Ph.D. (Joint program with San Francisco campus)
Medical Physics, Ph.D.†
Microbiology, M.A.,* Ph.D.†
Molecular and Physiological Plant Biology, M.S., Ph.D.†
Molecular Biology, M.A.,* Ph.D.
Music, M.A., Ph.D.
Near Eastern Religions, Ph.D. (Joint degree program with the Graduate Theological Union)
Near Eastern Studies, M.A., Ph.D.
Neurobiology, M.A., Ph.D.†
Nutrition, M.S., Ph.D.†
Oriental Languages, M.A., Ph.D.
Paleontology, M.A., Ph.D.
Parasitology, M.S., Ph.D.†
Philosophy, M.A.,* Ph.D.
Physical Education, M.A., Ph.D.
Physics, M.A., Ph.D.
Physiological Optics, M.S., Ph.D.†
Physiology, M.A., Ph.D.
Plant Pathology, M.S., Ph.D.
Political Science, M.A., Ph.D.
Psychology, M.A.,* Ph.D.
Public Health, M.P.H., Dr.P.H.
Public Policy, M.P.P., Ph.D.
Range Management, M.S.†
Rhetoric, M.A., Ph.D.
Romance Languages and Literatures, Ph.D. Emphases: French, Italian, Spanish?
Romance Philology, Ph.D.†
Scandinavian Languages and Literatures, M.A., Ph.D.
Science/Mathematics Education, Ph.D.†
Slavic Languages and Literatures, M.A., Ph.D.
Social Welfare, M.S.W., D.S.W.
Sociology, M.A.,* Ph.D.
Soil Science, M.S., Ph.D.†
South and Southeast Asian Studies, M.A., Ph.D. M.A. program emphases: Hindi-Urdu, Malay-Indonesian, Sanskrit, Tamil, South Asian Archaeology, and South Asian Civilization; Ph.D. program emphases: Hindi-Urdu, Malay-Indonesian, Sanskrit, Tamil, and South Asian Archaeology
Spanish, M.A.
Statistics, M.A., Ph.D.
Wildland Resource Science, M.S., Ph.D.
Wood Science and Technology, M.S., Ph.D.†
Zoology, M.A., Ph.D.

*Students are not admitted to work for the M.A. degree, although it may be awarded to students pursuing work toward the Ph.D. degree after fulfillment of the appropriate requirements.
†Indicates established interdisciplinary group or field.

Certificate in Russian and East European Studies

The Certificate in Russian and East European Studies has been developed in response to renewed interest in area studies shown by students enrolled in master’s or doctoral programs in Slavic languages and literatures as well as those in the various social sciences who wish to broaden their knowledge of the Russian and East European area. The program is to include at least 18 semester units in three or more disciplines, not including that in which the student has received or is planning to receive the master’s or doctoral degree. The courses chosen must be relevant to the Russian or East European area. Advanced language courses in grammar, composition or conversation may not be used to fulfill this requirement. Of the 18 required units, at least 6 must be at the 200 level; the remaining units may be at the 100 or 200 level. Each student’s program is to be approved by one of the graduate advisers appointed to supervise the certificate program.
Certificates of Completion of Graduate Curricula in Library and Information Studies
A certificate program has been established which is designed to meet the need for advanced studies beyond the first professional degree (M.L.I.S.) and short of the doctoral degrees (Ph.D., D.L.I.S.). Inquiries should be directed to the School of Library and Information Studies.

Certificate of Completion of Graduate Curricular in Optometry
Students will spend 9 to 18 months in graduate professional training and must have previously earned the Doctor of Optometry degree.

Master of Arts in Teaching
The degree of Master of Arts in Teaching is offered by the School of Education jointly with the Department of English. Candidates must satisfy all requirements to be certified to teach in the State of California in addition to completing academic training in one of the subject fields. Inquiries should be directed to the appropriate academic department and to the School of Education.

Joint Doctoral Programs
There are two intercampus joint degree programs between Berkeley and the University of California, San Francisco: Bioengineering and Medical Anthropology. Students should apply to the campus most appropriate to their research interests, but they will have access to facilities and faculty on both campuses through intercampus exchange registration. For information, write to the Department of Anthropology or the Group in Bioengineering.

Near Eastern Religions—A program leading to the Ph.D. degree has been established which will be conducted jointly by the Berkeley campus and the Graduate Theological Union. Applicants should apply both to the Graduate Admission/Fellowship Office on the Berkeley campus and to the Graduate Theological Union.

Special Education — A joint doctoral program in special education leading to either the Ph.D. degree or the Ed.D. degree is offered by the Berkeley campus and San Francisco State University. The program is interdisciplinary, including clinical experience as well as preparation in depth in the behavioral sciences and in statistics and research methods. For application material and additional information, write to: Special Education Group, c/o School of Education, UC Berkeley, or Department of Education, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132.

Concurrent Degree Programs
Concurrent degree programs provide an integrated curriculum of greater breadth between two disciplines. Inquiries should be directed to the departments or schools involved.

Architecture, M.Arch.—Engineering (Structural), M.S.
Business Administration, M.B.A.—Law, J.D. (Berkeley)
Business Administration, M.B.A.—Law, J.D. (Davis)
Business Administration, M.B.A.—Law, J.D. (Hastings)
Business Administration, M.B.A.—Public Health, M.P.H.
City and Regional Planning, M.C.P.—Civil Engineering, M.S.
City and Regional Planning, M.C.P.—Law, J.D. (Berkeley)
City and Regional Planning, M.C.P.—Law, J.D. (Hastings)
City and Regional Planning, M.C.P.—Public Health, M.P.H.
Economics, M.A.—Law, J.D.
Journalism, M.J.—Law, J.D.
Journalism, M.J.—Asian Studies, M.A.
Library and Information Studies, M.L.I.S.—History of Art, M.A.
Library and Information Studies, M.L.I.S.—Law, J.D.
Library and Information Studies, M.L.I.S.—Near Eastern Studies, M.A.
Nutrition, M.S.—Public Health, M.P.H.
Public Health, M.P.H.—M.D. (School of Medicine, San Francisco)
Public Policy, M.P.P.—Law, J.D.
Public Policy, M.P.P.—Engineering, M.S.
Social Welfare, M.S.W.—Law, J.D.

Teaching Credentials
Work leading to the Multiple Subject or Single Subject Teaching Credentials is given on the Berkeley campus. For details, please consult the Announcement of the School of Education.

The rich cultural life of the Berkeley campus rivals that of San Francisco in diversity and scope. "Cal Performances" sponsors a dazzling array of music, dance and theatrical performances by major dance and theater companies, orchestras, chamber ensembles, and solo performers. Many of these are held at Zellerbach Hall, a 2,100-seat auditorium that has an orchestra pit capable of accommodating the largest symphony orchestras and a stage wide enough for major operas and ballets.

The more intimate Hertz Hall and the Zellerbach Playhouse are used for smaller-scale professional and student productions.

Berkeley's museums—including the University Art Museum and Lowie Museum of Anthropology and the Museum of Paleontology—offer world-class exhibits from other museums and rotate exhibits from their permanent collections as well. The Pacific Film Archive in the University Art Museum has received international recognition as a resource for film scholarship and exhibition.

The Botanical Garden, a 30-acre facility, has more than 8,500 plant species from around the world.
Fees and Financial Aid

It is extremely important that students carefully consider the total financing of their education, from the entering term to the completion of the degree objective. If financial help will be needed beyond those funds which the student or the family is able to provide, the student should make the necessary applications for financial assistance well in advance of enrollment. Students should pay particular attention to early deadlines for application for grants, scholarships, work-study, and National Direct Student Loans. While the needs and resources of each student differ, the University can provide a general list of fees and expenses normally encountered. Students should note that fees are subject to change without notice.

Part of the fees may be refunded to students who cancel their registration prior to the opening day of the semester or who withdraw before the beginning of the sixth week of classes of any semester. (See Index, Schedule of Refunds.) A separate circular on refunds, Student Fees and Deposits, is also available from the Office of Admissions and Records, 120 Sproul Hall.

Total Expenses. The cost of attending the University varies according to individual circumstances. The expenses listed below are approximate costs for the 9-month academic year and should be used only as a guideline.

<table>
<thead>
<tr>
<th>1985–86 Student Budgets (Projections)</th>
<th>Commuter</th>
<th>Dorm1</th>
<th>Off-Campus</th>
<th>Married</th>
<th>Single Parent2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing &amp; Utilities</td>
<td>-0-</td>
<td>$3,807</td>
<td>$2,503</td>
<td>$5,006</td>
<td>$5,006</td>
</tr>
<tr>
<td>Food</td>
<td>1,100</td>
<td>709</td>
<td>1,765</td>
<td>3,530</td>
<td>2,647</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Personal</td>
<td>1,082</td>
<td>1,082</td>
<td>1,082</td>
<td>2,164</td>
<td>2,164</td>
</tr>
<tr>
<td>Transportation</td>
<td>248</td>
<td>-0-</td>
<td>248</td>
<td>496</td>
<td>496</td>
</tr>
<tr>
<td>Fees1 (if resident)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>1,346</td>
<td>1,346</td>
<td>1,346</td>
<td>1,346</td>
<td>1,346</td>
</tr>
<tr>
<td>Graduate</td>
<td>1,506</td>
<td>1,506</td>
<td>1,506</td>
<td>1,506</td>
<td>1,506</td>
</tr>
<tr>
<td>Law</td>
<td>1,536</td>
<td>1,536</td>
<td>1,536</td>
<td>1,536</td>
<td>1,536</td>
</tr>
<tr>
<td>Budget Totals (rounded)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>$4,176</td>
<td>$7,344</td>
<td>$7,344</td>
<td>$12,942</td>
<td>$12,059</td>
</tr>
<tr>
<td>Graduate</td>
<td>4,336</td>
<td>7,504</td>
<td>7,504</td>
<td>13,102</td>
<td>12,219</td>
</tr>
<tr>
<td>Law4</td>
<td>4,514</td>
<td>8,378</td>
<td>7,709</td>
<td>13,307</td>
<td>12,424</td>
</tr>
</tbody>
</table>

1Housing, utilities and food portion are based on projected 8% increase in dorm costs. Will change once actual figures have been established in April 1985.
2Add $893 extra food allowance for each dependent child over 12 years. Add $1,967 for each additional child. Single parent budget includes first child.
3Housing and Utility figure includes regular meals.
4Food figure covers vacation and break costs for dorm residents.
5Add nonresident tuition of $3,564.
6Law budget total includes an extra $175 book allowance.
7Will adjust to actual costs for students living in family student housing.
8Law dorm budget higher due to Manville Hall rates.

Table of Fees

At the time of registration, by mail or in person, the following fees are paid by each student:

<table>
<thead>
<tr>
<th>Student Category</th>
<th>Fall, Spring Semester 1985–86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Undergraduate</td>
<td>$ 673</td>
</tr>
<tr>
<td>Nonresident Undergraduate</td>
<td>2,581</td>
</tr>
<tr>
<td>Foreign Undergraduate1</td>
<td>2,581</td>
</tr>
<tr>
<td>Resident Graduate</td>
<td>703</td>
</tr>
<tr>
<td>Nonresident Graduate</td>
<td>2,511</td>
</tr>
<tr>
<td>Foreign Graduate1</td>
<td>2,511</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School of Law</th>
<th>Fall, Spring Semester 1985–86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Graduate</td>
<td>$ 718</td>
</tr>
<tr>
<td>Nonresident Graduate</td>
<td>2,500</td>
</tr>
<tr>
<td>Foreign Graduate1</td>
<td>2,500</td>
</tr>
</tbody>
</table>

1Students on nonimmigrant visas pay an additional health insurance fee of approximately $85.

Required Fees

University Registration Fee—$265 per semester. Paid by all students. Covers normal expected usage of such facilities as laboratories, gymnasiums, counseling and placement services, health services, etc.

Educational Fee—Paid by all undergraduates at $361 per semester and by all graduate students at $391 per semester. Used to support a portion of the cost of the educational program. In exceptional circumstances the educational fee may be reduced by one-half for part-time undergraduate students. Approval of part-time undergraduate study is made only in exceptional cases. Criteria are related to occupation, family responsibility, and health. Application must be approved by the appropriate dean prior to the start of each term. A student may not enroll in more than two courses. Fee reduction will only be made under these circumstances.
Berkeley Campus Fee—Paid by all students in the amount of $47.25 per semester. Provides support for a wide range of activities sponsored by the ASUC, including work with academic and administrative units of the campus. Covers use of the Student Union, helps pay costs of construction of the Union building, and assists with the provision of ethnic studies on the Berkeley campus.

Nonresident Tuition—$1,908 per semester. At the time of registration, every entering student is classified as a resident or nonresident for tuition purposes. Only U.S. citizens and holders of immigrant visas can become qualified for resident classification. Under California law a student is classified as a resident for tuition purposes if the student has resided in the state for more than one year immediately prior to the day instruction begins at the last of the campuses to open for a semester. Residence is the combination of physical presence within the state plus intent to reside in California permanently. Nonresidents must pay a nonresident tuition fee each semester. For detailed information regarding the establishment of California residence, see Appendix, or write to the Attorney in Residence Matters, 590 University Hall, University of California, Berkeley; Berkeley, CA 94720.

Foreign Student Health Insurance—Approximately $85 per semester. Required of all students on nonimmigrant visas. Payment of the fee for two consecutive semesters covers the student for the full year, including summer.

Additional Fees and Expenses

Late Fee Payment—$50. Students who pay fees after the Fee Payment by Mail period are liable for this fee.

Late Enrollment—$50. Students who fail to Advance Enroll (see Calendar for dates) are liable for this fee.

Reinstatement after having been dropped from University rolls—$10.

Athletic Privilege Cards—$26, Student Football Season Ticket; $20, Basketball/All Sports Card. Both Optional. Permit free admission or reduced rates to most University athletic events.

Financial Aid

The Financial Aid Office is located on the second floor of Sproul Hall. By visiting or writing that office you may obtain information about the various types of student aid offered. Undergraduate students may apply to the Financial Aid Office for undergraduate scholarships (including Regents’ Scholarships) and Supplemental Educational Opportunity Grants (SEOG). Both undergraduate and graduate students may apply for University Grants-in-Aid, Berkeley Fee Grants, National Direct Student Loans, University Loans, Guaranteed Student Loans, Work-Study Program, and other aid programs.

Financial aid application information for entering undergraduate students is in the Admission Packet. Financial aid application forms for entering graduate students are in the Graduate Admission Application. Application forms for continuing undergraduate and graduate students are available from Sproul Hall. The deadline for submitting these forms will be announced during the Fall semester.

Information and application materials concerning graduate fellowships and graduate scholarships may be obtained separately from the Graduate Division, 1 California Hall. The application is normally due by December 1.

Cal Grants A (California state scholarships) are awarded by the state and are open for application to undergraduates and, in some years, to graduates. They apply toward the registration and educational fees. Cal Grants B (College Opportunity Grants) are also awarded by the state and are open to undergraduates who can demonstrate exceptional financial need.

Financial Aid application information for entering undergraduate students is in the Admission Packet. Financial aid application forms for entering graduate students are in the Graduate Admission Application. Application forms for continuing undergraduate and graduate students are available from Sproul Hall. The deadline for submitting these forms will be announced during the Fall semester.

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While considered an urban university, Berkeley retains much of the beauty associated with more pastoral settings.

The campus's 1,200 acres are spotted with groves of oak, redwood, and eucalyptus trees. Strawberry Creek meanders through the central campus, amidst hiking and running trails, athletic fields and spacious lawns.

Buildings on campus provide a collection of outstanding architectural designs, from the very traditional to modern. Among the more notable structures are the Hearst Greek Theatre, an outdoor amphitheater seating 10,000; Wurster Hall, home of the College of Environmental Design; Doe Library, with its magnificent reading rooms; and South Hall, constructed in 1873.

Student Services

This section offers general information on student services available on the Berkeley campus. Further information may be obtained directly from the appropriate office or from Resource, the student handbook.

Student Activities and Services

Located in 102 Sproul Hall, the student activities and services office operates an orientation program for new students in the summer (CalSO) and at the start of each semester. Information and advice are provided to new students to assure a quick and easy adjustment to life at UC Berkeley.

Among other services provided are: Resource, covering general information about student life at Berkeley; a notary public service for student only University-related matters; coordination of student conduct activities (regulations, disciplinary hearings); and the programs for residential life, commuter students, immigrant and refugee students, and Regents' and Chancellor's Scholars.

The student activities and services staff also works closely with students and staff in their initiation, planning, and implementation of activities, programs, and events to meet the needs of students and the University community. Sponsored groups include honor societies, service organizations, sororities, and fraternities. Assistance is given in registering student groups for facilities, in dissemination of information regarding campus rules and regulations, and in administering funding for sponsored activities and programs, e.g., UC Marching Band, UC Jazz Ensembles, SMA-Vocal, Forensics, Model United Nations, Cal-in-the-Capital/Sacramento, and Committee on Student Publications.

A lawyer is available to provide legal advice and referral for representation.

Student Health Service

Health services for Cal students comprise medical care for illness and injury and educational programs for self-care and health promotion. Most services are available at no additional cost to students paying the University Registration Fee.

Education programs begin each semester and are open to all students. Announcements appear in The Daily Californian and information is available by calling the Health Education Office, 642-7202. Programs include stress management, weight control, smoking cessation, menstrual pain, back care, and nutrition counseling. Selected students provide peer counseling and present educational programs on specific topics, such as alcohol use, contraception, and sexuality.

Medical services at Cowell Hospital are provided by physicians and nurse practitioners. Students are encouraged to establish an on-going relationship with a clinician who can coordinate their care through their years here. The services that they provide include examination and treatment, contraception services and pregnancy counseling, in-patient care, 24-hour emergency care, and treatment by medical specialists. Laboratory, x-ray, pharmacy, and physical therapy services are also provided at Cowell.

Office of the Ombudsperson

The ombudsperson serves all students and academic staff of the University community who feel they have been treated unfairly or need help in resolving a problem. The ombudspersons at Berkeley are professors appointed for two-year terms by the Academic Senate. Ombudspersons have no official authority or administrative power to impose solutions. They are independent “agents of justice” who investigate complaints and the conditions which led up to the complaint and attempt to work with all parties to mediate a satisfactory solution. All matters referred to the ombudsperson are held in the strictest confidence.

If you are confronted with a bureaucratic impasse or feel you have been treated unfairly or need help with a procedural or academic problem, contact an ombudsperson at 328 Stephens Hall. The office is open Monday-Thursday, 9 a.m.-noon and 1-4 p.m. To make an appointment come by or call 642-5754.

Student Health Service

Health services for Cal students comprise medical care for illness and injury and educational programs for self-care and health promotion. Most services are available at no additional cost to students paying the University Registration Fee.

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The Student Health Service is organized to provide the best possible medical care for problems that have developed while at the University, in order to minimize the disruption of a student's education caused by illness or injury. The SHS is not responsible for the care of chronic medical problems or for the continuing care of problems diagnosed prior to registration at Berkeley. Referrals will be made for care in the Berkeley community upon request.

Students should bring with them to campus information about their medical insurance coverage. The Health Service does not pay for hospitalization, surgery, or other non-emergency care that is not provided by the SHS or authorized in advance.

Students enrolled for the Summer Session pay a health fee that entitles them to outpatient medical care at SHS during the session. After the session is over, they may use the health service on a fee-for-service basis. Continuing students who are not registered for a given semester or for Summer Session may also use the health service on a fee-for-service basis.

For additional information about services and how to use them, visit the Student Health Service or phone 642-2000.

Housing

Admission to the Berkeley campus does not guarantee housing reservations. You should acquaint yourself well in advance of your enrollment with the various living arrangements. Undergraduates check the appropriate section of the Application for Admission to receive descriptive material; graduate students should write directly to Housing, Child Care, and Food Services, 2401 Bowditch Street, Berkeley, CA 94720, to receive descriptive material. The office also maintains listings of rentals in the community, but you must visit the office after you arrive on campus to make use of files, which change daily.

More than 3,000 men and women live in University residence halls. An equal number live in fraternities, sororities, and cooperatives. There are apartments for 1,022 students in University Family Student Housing. Early application to living groups is recommended. The remaining students live in rooms and apartments in the community.

Co-ops

The University Student's Cooperative Association (USCA) is a nonprofit, student-owned and operated organization that is independent of the University. The Co-op houses approximately 1,450 students in 18 two- and three-story houses and apartments. Members must work five hours a week at a variety of duties. Contracts may be cancelled at the end of each semester. You may also join a program which allows you board although you do not room there. Admission priority is given to EOP/AA and disabled students. For more information contact USCA, 2424 Ridge Road, 848-1936.

International House

International House is a coeducational residence and program center for American and international students, primarily at the graduate level. Cultural and social events, home hospitality, and tours and visits around California are designed to promote better understanding and friendship among all nationalities. For application and further information, write or call the Residence Office, International House, UC Berkeley; Berkeley, CA 94720; 642-9470 or 642-9490.

Career Planning and Placement Center

The Center provides students and alumni with assistance in defining their career objectives based on factual information about the world of work and an understanding of interests and skills acquired through education and life experience; teaches job search skills that assist in finding employment consistent with career objectives; provides extensive on-campus interviewing opportunities for students seeking both summer and permanent employment; and lists opportunities for internships and full-time, part-time, summer, and casual employment.

Advisers are available by appointment to assist students and alumni with any aspect of the career planning and placement process. An adviser is available in 111 Wheeler Hall to provide specialized assistance to disabled students and alumni.

Workshops and programs are conducted throughout the year on a variety of career development topics. Examples include Career/Life Planning, Identifying Your Marketable Skills, Managing Your Job Search, Resume Writing, Interviewing, and Summer Jobs.

A career library (T-6, second floor) provides many valuable reference materials including occupational information, job market studies, directories of employers, and past job listings.

Students and their spouses seeking internships or part-time, temporary, odd-job, or summer employment should go to 111 Wheeler Hall. Students interested in work-study positions should go to the Office of Financial Aid, 207 Sproul Hall.

Individuals seeking positions in business, industry, government, social services, and nonprofit organizations should go to Building T-6, 111 Wheeler Hall, or 26 Barrows Hall.

Individuals seeking careers in education should go to the lower level of Building T-6.

The Career Planning and Placement Center supports and subscribes to all state and federal equal opportunity employment practices.
Cooperative Education Internship Program

The Cooperative Education Internship Program is a unique opportunity for undergraduate and graduate students to integrate classroom study with supervised practical and professional experience in the field. Students may work with government, industry, business, or non-profit organizations in positions related to their academic and/or career objectives prior to graduation. These positions may be paid or non-paid, full- or part-time, and may last for one semester or as long as two years, depending upon the type of internship desired.

Two offices constitute the campus-wide cooperative education program: SCOPE and the Engineering Cooperative Work-Study Program. Each program office has separate application procedures and requirements. Interested students should contact the appropriate program for specific information.

SCOPE

Liberal arts, sciences, natural resources, environmental design, and business administration majors may apply through this office. Positions are varied in nature: paid or non-paid, full- or part-time, lasting for one semester or as long as two years. For general requirements, contact the SCOPE Office, Career Planning and Placement, upper level, Building T-6, 642-1552.

Engineering Cooperative Work-Study Program

All engineering, computer science, and chemical engineering majors may apply through this office. Positions offered are full-time, paid, for a minimum of one semester. For general requirements, contact the Engineering Co-op Office, 209 McLaughlin Hall, 642-6385.

Disabled Students’ Program

2515 Channing Way, 642-0518, 642-6376 (TDD). Students with permanent disabilities or temporary injuries can receive help with personal and academic support services such as admissions, pre-enrollment, readers, notetakers, sign language interpreters, attendant referral, adapted transportation, wheelchair repair, limited tutoring, and housing assistance. A residence program for severely disabled students needing attendant care is available. Many other services are available and most are free. Students with visual, hearing, orthopedic, mobility or learning disabilities should contact DSP for complete information about on-going services.

Fraternities and Sororities

Membership in a fraternity or sorority is by invitation after a period of “rushing.” If you are interested, apply through the Interfraternity Council for men, or the College Panhellenic Association for women, both located in 102 Sproul Hall. Each will supply general information regarding programs and costs.

Counseling and Psychological Services

Counseling and Psychological Services include the Counseling Center, Psychiatry, Student Advising—Pre-professional/Pre-graduate, the Student Learning Center, and EOP/Affirmative Action counseling.

Counseling Center

Regularly enrolled students may talk in confidence with professional staff about scholastic performance, choice of a major, personal concerns, assessing interests and aptitudes, or exploring long-range career opportunities. Group counseling is also available. Psychological and aptitude testing is provided as part of the counseling process.

The Counseling Center maintains a library of reference materials on occupations, professions, and career opportunities; a comprehensive collection of college catalogs; and directories of colleges, professional schools, and training programs which students may use, even if not seeking counseling services. Special testing for admission to graduate or undergraduate programs (except ETS and Psych Corp.) is administered at no charge. The Counseling Center is located in Building T-5.

Psychiatry Services

The services are available to all Berkeley students. The highly trained professional staff includes licensed clinical social workers, clinical psychologists, and psychiatrists. The Psychiatry Department is open from 8 a.m. to 5 p.m., Monday through Friday; initial appointments usually are made in person. Appointments are possible prior to and during enrollment as well as during defined academic sessions. The service is located in 81 Cowell Hospital.

Student Advising—Pre-professional/Pre-graduate

Students interested in advanced study in business, a health science, law, or many other graduate or professional fields may obtain comprehensive advising in these areas and assistance with applications and letters of recommendation to the schools of their choice. The office is located at 2224 Piedmont Avenue.

Student Learning Center and EOP/Affirmative Action Counseling

Located in Building T-8, the Center offers a wide range of group and individual programs that aid students in specific courses and in developing effective general learning skills. Assistance for Educational Opportunity and Affirmative Action students is provided by a staff of counselors.

Learning Center. Learning Assistants provide individual service in a variety of undergraduate courses. There are also noncredit mini-courses in reading improvement, writing, and study skills. Other group sessions include preparation for graduate and professional school exams. The Center’s library-lab contains books on study skills, learning materials for a number of courses, and programs for improving reading, note-taking, and vocabulary.

All students are welcome; the Center gives priority to individual assistance to EOP and Affirmative Action students, athletes, and students on probation. For additional information or to register for any of the Center’s programs, see the receptionist, ground floor, Building T-8, 642-7332.
EOP/Affirmative Action Counseling. The Counseling Component is a guidance service that helps students to realize their potential and achieve academic success at Berkeley. Counselors assist students with housing, financial aid, and personal concerns. The Counseling Component is located in Building T-8, 642-7224.

Special programs offered through EOP include: (1) the Summer Bridge Program, offered to new EOP and Affirmative Action students to help orient them to the University; (2) the Student Involvement Program, designed to aid new students in their social and personal adjustment to the University; and (3) Peer Advising Services, which are available to assist EOP and Affirmative Action students with pre-enrollment, registration, course selection, and other matters.

Optometry
The School of Optometry Clinic offers complete optometric services (including contact lens fitting). The clinic is open to students, faculty, and the general public. For information or appointments, call 642-5761 or 642-5763, or come to the Optometry Clinic located in the addition of Minor Hall, near Cowell Hospital. Patients are seen by third and fourth year optometric interns under the supervision of the Clinic faculty.

Advisers to Foreign Students and Scholars
This office offers a wide range of services to foreign students, foreign scholars, and their families, including a foreign student orientation program, guidance on visa matters, help in solving financial problems, health care counseling, advice on personal difficulties, and information on almost any topic of special interest to foreign students and scholars. Located in International House, 2299 Piedmont Avenue, 642-2818, the office is open Monday through Friday, 9 to 12 noon and 1 to 4 p.m.

The Program Office, also in International House, 642-9460, plans trips to neighboring communities, industries, and places of geographical interest, and organizes cultural events, dances, and slide shows to enrich the extracurricular life of foreign students and scholars and to introduce them to American institutions, customs, and families.

Child Care
The Child Care Program is available to registered students and provides care for more than 200 children between the ages of three months and nine years. Families with the lowest income are given the highest priority. Two hours per week of parent participation are required. The Fall semester application deadline is June 15. Late applicants are placed on an eligibility list. Applications and information: 2537 Haste Street, Berkeley, CA 94720, 642-1827. Address mail inquiries to Child Care Services, 2401 Bowditch Street, Berkeley, CA 94720.

Aid to Veterans and Dependents of Veterans
If you are a veteran or a veteran's dependent, you may secure the appropriate forms from Veterans Services, Office of Admissions and Records, 37 Sproul Hall, or from the Veterans Administration Regional Office, 211 Main Street, San Francisco, CA 94105. Information about application deadlines is contained in the Veterans Affairs publication available in 37 Sproul Hall.

University Police
Police services for the University community are located in the basement, Room 1 Sproul Hall. Emergency calls can be made on a 24-hour basis by telephoning 9-911 from office non-restricted phones, 642-3333 from restricted phones, and 911 from campus pay phones. For general business, call 642-6760. Emergency numbers should be utilized to report any occurrence requiring an immediate response, including fires and ambulance service. Other services are also available from the police department, such as personal safety counseling and crime prevention training (642-3186); Rape Prevention counseling and referrals (642-7310); Operation Identification, engraving of personal and University property to protect against theft; Bicycle Bureau, located in the Old Art Museum at the end of Barrows Street, Berkeley, CA 94720.
Lane, issuing bike licenses and advice on bike security (10 a.m. to 2 p.m. Tuesday through Saturday); *Lost and Found* service is located in the basement, Room 1 Sproul Hall (10 a.m. to 4 p.m. Monday through Friday, 642-4936). Night escort service is available if you are stranded on campus; call 642-WALK. A variety of employment programs are provided for UC students to work as police aides.

**Reserve Officers Training Corps**

The University of California, as a land-grant institution established by the Morrill Act of 1862, offers courses and programs in military training. This training is voluntary and affords students the opportunity to qualify for a commission as an officer in the Army, Marine Corps, Navy, or Air Force while completing their college education. Reserve Officer Training Corps (ROTC) courses are offered by three departments: Aerospace Studies (Air Force), Military Science (Army), and Naval Science (Navy and Marine Corps). The scholarship programs carry a monthly stipend and pay for books and most fees for qualified students. Individual programs are described under Military Officers' Education Program.

**Student Organizations and Activities**

**Student Union**

The Student Union, located on Bancroft Way at Telegraph Avenue, is a focal point of student activities and recreation. It contains the Student Information and Visitor's Center, lounges, meeting rooms, Pauley Ballroom, an art exhibit area, a full-service bank, the ASUC Box Office, a complete travel service, the ASUC Store (a comprehensive book, stationery, special services, poster and print sales, and sundry supplies store), the Recreation Center with bowling, billiards, and arcade, a hair care center, a garage, a creative arts studio, the Bear's Lair Pub and Grill, and facilities for UC musical organizations. Operating costs of the Student Union are largely financed by revenues from ASUC enterprises and a portion of the Berkeley campus fee.

Eshleman Hall, the student government office building located on Bancroft Way next to the Student Union, houses the elected student officers, the Personnel Office for employment with the ASUC, Senate Chambers, and many student activities. Zellerbach Auditorium, the Dining Commons, Ludwig's Fountain, and the Lower Sproul Plaza complete the Student Center.

**The ASUC**

The Associated Students of the University of California is the official organization of Berkeley students. This nonprofit organization, through its student-elected senate, is responsible for directing a large variety of student activities and serves as the official student spokesperson in University affairs. Graduate students also elect departmental representatives to the Graduate Assembly, which meets regularly in Anthony Hall.

The ASUC also provides a wide range of programs and activities. Each year, roughly $200,000 is distributed to student activity groups, including associations, ethnic and cultural groups, hobbies, and sports. The ASUC, moreover, sponsors vital programs such as student advocacy, draft counseling, the Renters' Assistance Project, and the Student Union Program, Entertainment, and Recreation Board (SUPERB).

The basic goals of the ASUC are to enhance the quality of life for both students and the community, as well as to increase the avenues for student participation in education and campus operations. Other important goals of the ASUC are to protect full freedom of assembly and expression in the University community and facilitate academic and social responsibility.

**The Community Projects Office (CPO)**

The Community Projects Office, located in 303 Eshleman Hall, serves as the ASUC's resource agency for the development of new student-initiated projects. If a student is interested in starting a new project or doing volunteer work of any type, the CPO offers grants (seed monies) and provides orientation programs and information on various projects administered by CPO.

Foundation information is also kept in the CPO for references on funding sources, project administration, and contracts for proposal writing. The CPO also works with various campus and outside agencies that provide similar services. The CPO employs part-time students and often utilizes volunteers. For these students, the CPO provides a link to the community and the opportunity to share their learning experiences with campus and community peers.

**SUPERB Productions**

The Student Union Program, Entertainment, and Recreation Board, located in the Student Union, is responsible for developing and implementing an activities program for the ASUC to satisfy the cultural, educational, recreational, and social needs of the campus. Programs and activities planned include concerts, speakers, dances, exhibits, coffee hours, recreational exhibitions, cabarets, drama, movies, music and art festivals, and special presentations, including free noon concerts in the Student Union Plaza each week and the Annual UC Berkeley Jazz Festival.

**CalPIRG**

The California Public Interest Research Group (CalPIRG) is an independent, nonprofit corporation established by UC Berkeley students for research and advocacy of contemporary public issues. Students propose and conduct CalPIRG projects with the aid of professional staff, and policy is set by a nonpartisan student board of directors. The CalPIRG office is at 407 Eshleman Hall, 642-9429.
Student Publications
Several student publications provide opportunities for activities in all phases of publishing, writing, editing, reporting, art and design, advertising, sales, and general management. Interested students should inquire at the library on the 7th floor, Eshleman Hall.

Special Interest Clubs
Besides regular ASUC-sponsored activities, there are more than 300 registered student organizations on campus serving special interests and abilities. In the spring and fall of each year, an Activities Fair is held in Sproul Plaza to acquaint you with many of the organizations and to give you an opportunity to join.

Academic and professional societies, including clubs organized by many of the schools and departments, as well as national professional fraternities, provide students with an opportunity for seminars, discussions, lectures, tutoring services (both giving and receiving), and communication with members of academic or professional fields. Honorary academic societies are open to students of outstanding ability. These groups include: Honor Students' Society; Phi Beta Kappa (a national society open by invitation to the top seniors in nonprofessional fields); Tau Beta Pi (a national society of upper division students in the College of Engineering and in chemical engineering); and various other groups within the several disciplines. Most of these groups offer tutoring services.

Religious Activities
While the University, as a state-supported institution, does not offer chapel services or religious activity on campus, there are more than 35 churches and student religious clubs located within a few blocks of the campus. For additional information, contact the Office of Student Activities and Services, 102 Sproul Hall.

Graduate Assembly
The Graduate Assembly is the graduate component of Berkeley's student government, the ASUC. The Graduate Assembly is designed to represent and serve the interests of graduate students. All graduate students are welcome to participate in the various projects and activities of the Graduate Assembly, but formal representation is assigned through Departments.

Graduate departments send one representative for each 100 students enrolled to the monthly Assembly meetings. The Assembly nominates graduate student members to committees of the Academic Senate, ASUC, and Chancellor's Advisory Committees. An Assembly officer serves on the Universitywide Student Body President's Council, which makes policy for the UC Student Lobby.

Services the Graduate Assembly offers include an annual new graduate student orientation, teacher's assistant training programs, a Graduate Minority and Women's Project, and a lounge and meeting room for general use. Staff assistance is available for a variety of information and referral services including information on fellowships, affirmative action, and other campus units. The Graduate Assembly offices are in Anthony Hall (Pelican Building), 642-2175.

Direct funding for graduate student groups and activities is also available. The three funding categories are: Graduate Events, Projects and Services, and Educational Improvement Grants. Graduate Events provides short-term funds for events and activities. Projects and Services receives applications once a year and provides long-term organizational funds. Educational Improvement Grants are specifically designed for improving graduate education; applications are reviewed three times a year for a maximum of $900 per grant.

The Assembly invites graduate students to visit Anthony Hall and participate in the Assembly.