All qualified students, regardless of race, sex, color, creed, or national origin, are welcome.

Each student is entitled by law and University policy to examine and challenge most of the records maintained by the University on that student. These records are confidential, and in most circumstances may be released to third parties only with the prior consent of the student. Such matters are detailed in the Policy Governing Disclosure of Information Pertaining to Students and Access to Student Records, available in the Office of the Director of Student Activities, 201 Sproul Hall.

Price: $1.50; $2.50 by mail (see page 203 for ordering information)

How to Use This Catalog
A University General Catalog is, by its very nature, a lengthy and all-inclusive compilation of information. While it attempts to cover every aspect of the University and to answer as many of your questions as possible, there will be areas in which you will want more detailed information. Therefore, throughout the book you will find references to other publications. Also, there is a list of publications, their prices, and where they can be obtained, on page 203.

The best way to approach this book is to first read the areas of the course section which apply to your special interests and to see if the programs and courses offered are suitable to your needs. Then, you should carefully read the front section to get a feeling of what the Berkeley campus has to offer you, both in and out of the classroom. Pay special attention to those sections giving information on the requirements and procedures necessary to becoming admitted, registered, and enrolled in the University. Also, read those areas which are of specific interest to you, such as housing, services to students, facilities, etc.

This is not a book to read in one sitting. Rather, it is one to have close at hand, to go back to again and again as new questions arise in the ever-changing experience of being a student on a large university campus.
"An introduction to a university catalog is likely to be a benevolent lie. Like the catalog itself, it will probably tell the truth untruthfully.

"Would you consider an introduction that simply said that the catalog is a camel—an official document made by many left hands, and that the way you find out what it is that the catalog is not saying is to talk to teachers in the various departments. You might tell the students that teachers—"
particularly senior professors—are more willing to listen and talk to undergraduates than they will admit.

"You might also mention that the program and course descriptions are vague and fluffy for a positive reason: they allow for considerable flexibility in individual programs; the university could not afford to publish, and no student would have the time or patience to read, all the possible permutations that catalog descriptions allow. There are 29,000 different academic programs on this campus. Tell the students to make specific suggestions and ask specific questions about their own programs. Tell them that advisers can be, and are willing to be, and are competent to be what their title says they are. Students should ask them for advice not just for permission.

"What a run through a B.A. program does for the runner is give many years' intellectual and emotional experience in only four years, and speeds progress toward wisdom and intellectual competence. A new B.A. has no more competence in the particulars of particular practical tasks than any other new person on a job. However, he will learn faster, understand better, and be quicker to innovate and improve on methods and goals than he would be if he were not used to using his mind purposefully. Rewards given to people with B.A.'s are not given because of the degree but because their minds have had the experience of earning it.

"The relative value of going to Berkeley instead of somewhere smaller and warmer doesn't fit public relations techniques very well, but the kind of place that sets its students up to be mothered by men who smoke pipes and know Latin sets up benevolently to deny its students exactly what a college education has to offer: the experience of rapid adjustment to unfamiliar intellectual (and emotional) situations. Such places often turn out students who have had four extra years of high school.

"Berkeley doesn't nurture its students; it exercises them. It is pleasant to be nurtured, but it makes one fat. It is not so pleasant to be exercised, but it makes one strong."

Stephen Booth
Professor of English
U.C. Berkeley
"I take it that the basic requirement for the formation of a political community is a common liberal education, an education that is appropriate to a community of free men. This has nothing to do with vocational training or with what is now called career education, whatever that may mean."

Robert M. Hutchins
Educator and founder of the Center for the Study of Democratic Institutions
"But there is a problem in speaking of 'salable skills.' What skills are salable? Right now skills for making automobiles are not highly salable, but they have been for decades and might be again soon. Skills in teaching are not now as salable as they were for the past 20 years, and the population charts indicate they may not be soon again. Home construction skills are another example of varying salability ....

"A school that devotes itself totally and unequivocally to salable skills, especially in a time of high unemployment, sending young men and women into the world armed only with a narrow range of skills, is sending lambs into the lion's den ....

"Skills that are always in demand are those of a mind trained to think and imagine and express itself."

Robert A. Goldwin
Consultant to President Ford
"The prophets of education these days are predicting the decline of the empire of higher education. I suspect that we are seeing signs of a decline in a certain optimism about higher education already. But I suspect that the institutions of the year 2000 will look more like the 1975 model than most of the prophets guess."

Address to AAC/ACPRA, 1975
Richard Rodrigues
Associate of English
U.C. Berkeley

"Undergraduate education at Berkeley is not primarily pre-professional or vocational, rather it is education devoted to the traditional aims of the American liberal arts college. It tries to encourage the student to sharpen his own critical perception of everything he observes … to allow him to lead a more human life and in so doing to discipline his talents to more effective use in every sphere of endeavor from politics to rearing children.

"Berkeley undergraduates are taught by the same men and women who are involved in advanced research and who are aided by those graduate students who are the leading candidates in graduate school—the young scholars who are most closely in touch with the latest advances in their fields. The undergraduate’s perception is being sharpened by contact with just those minds whose abilities are recognized as the best in their generation."

Robert J. Brentano
Professor of History
U.C. Berkeley
Introduction

HISTORY OF THE UNIVERSITY OF CALIFORNIA

The promise of a University of California is contained in the State's constitution, drafted in Monterey in the gold rush year of 1849. California was admitted to the Union the following year, although almost twenty years were to pass before the hope for a public university was realized.

Impetus for the building of a university came from private citizens and the federal government as well as from the State. A forerunner of the University of California was the Contra Costa Academy, established in 1853 in downtown Oakland by a group of churchmen led by the Reverend Henry Durant. In 1855 that institution was incorporated as the College of California, and plans were made to purchase a site north of Oakland. The community developing around this new site was given the name of Berkeley in 1866.

In 1853 the U.S. Congress had bestowed upon the State of California 46,000 acres of public lands with the stipulation that proceeds of the sale of the land were to be used for a "seminary of learning." The Morrill Act of 1862 gave another grant of public lands with the stipulation that proceeds of the sale of the land were to be used for a "college to teach the sciences as may be adapted to the improved wants of the age." In 1864 the legislature approved a bill to establish the University of California at Berkeley.

The College of California offered its buildings and lands to the State in 1868; the University of California was chartered by the State. A forerunner of the University of California was the Contra Costa Academy, established in 1853 in downtown Oakland by a group of churchmen led by the Reverend Henry Durant. In 1855 that institution was incorporated as the College of California, and plans were made to purchase a site north of Oakland. The community developing around this new site was given the name of Berkeley in 1866.

In 1853 the U.S. Congress had bestowed upon the State of California 46,000 acres of public lands with the stipulation that proceeds of the sale of the land were to be used for a "seminary of learning." The Morrill Act of 1862 gave another grant of public lands with the stipulation that proceeds of the sale of the land were to be used for a "college to teach the sciences as may be adapted to the improved wants of the age." In 1864 the legislature approved a bill to establish the University of California at Berkeley.

The University, heir to the lands, buildings, library—and even alumni—of the old College of California, was formally dedicated in 1873; Davis (initially the University Farm) in 1905; Riverside (initially the Citrus Experiment Station) in 1907; San Diego (initially the Scripps Institution of Oceanography) in 1912; Los Angeles (UCLA, initially the Los Angeles State Normal School) in 1919; Santa Barbara (initially Santa Barbara State College) in 1944; and Santa Cruz and Irvine in 1961. The nine-campus University of California is now one of the largest in the world. Each of its campuses has a separate administration, organization, and style of academic life.

The University also maintains research stations, field stations, Extension centers, and other facilities of research and instruction in more than 80 locations throughout California. With such extensive resources, the University enjoys a foremost position among institutions of higher learning, offering advancement of knowledge in virtually every field of human endeavor in modern life, and continuing to serve as an indispensable force in the growth and development of our society.

Students. The inaugural enrollment of fewer than 200 students at the University of California has now grown to over 106,000 of the brightest young people of the college generation. Nearly 85% are residents of California, with the remainder from other states and from 100 foreign countries. Nearly one third are studying at the graduate level.

With certain exceptions, admission to the University is limited to graduates of California high schools in the top 12.1% of their classes; to students transferring from other campuses and universities whose academic records meet University requirements; and to graduate students with distinguished records. Admission requirements are uniform for the nine general campuses, and students may transfer from one to another.

These students come to the University with a tremendous range of educational goals. They seek bachelor's, master's, and doctor's degrees in more than 100 fields of study, spanning the physical and biological sciences, social sciences, humanities, and arts. Many seek intensive professional education in such fields as architecture, engineering, law, medicine, public health, and social welfare, to name a few. In all cases, the University seeks to provide them the broadest and most complete education possible with the demands of their prospective careers.

Faculty and Instruction. The faculty of the University of California is noted for its unusually high number of Nobel laureates, National Academy of Science members, and holders of other notable awards or distinguished achievement. The men and women who teach courses at the University of California are exceptionally able scholars in their fields. They add to their knowledge of their subject by continuing research. They bring to the classroom the excitement of discovery, whether the class is a seminar of nine students or a lecture hall of several hundred. The faculty places a strong emphasis on the relationship between teacher and student. While seeking to meet the growing demand which our society places upon the University for advanced research and other academic services, the faculty holds firmly to its traditional goals of education of the young. Classes are as small as possible—about 70% of instruction is carried on in groups of 25 or less—and students are encouraged to confer privately with instructors.

The quality of the University's programs was reaffirmed by the American Council of Education in its evaluation of graduate schools in the United States in a report released in January, 1971. The ACE ranked the University among the largest in the nation. Twenty-six of the thirty-five graduate departments were ranked as the first, second, or third best in the nation. Eight departments were top-ranked.

This General Catalog, together with those of the other campuses, constitutes a directory of the University's resources, the covering spectrum of man's knowledge. Students are given a considerable degree of freedom in choosing courses, although their colleges and departments, or schools, provide a broad framework of minimum general requirements and major requirements. The student plans his program with the aid of an advisor who chooses a field of concentration by his junior year.

Research. The distinction of the University's faculty has already been noted. The University is also known for the quality and scope of its research facilities. Each campus maintains research units, including laboratories, museums, centers, and institutes—covering most of the broad fields of study. There are also research stations, field stations, and other facilities of research in more than 80 locations throughout California. Continuing research is financed by University funds, private endowments, and grants from the federal and State governments. These funds provide research fellowships and assistantships for faculty and outstanding graduate students.

The libraries of the University are a valuable resource for research and instruction. The major collections are at the Los Angeles campus, with more than 2,500,000 volumes, and at the Berkeley campus, with more than 4,000,000. The other campuses also maintain extensive library collections. Altogether, the University libraries cover virtually every research need. To minimize duplication, each campus has a specialized concentration of volumes. Interlibrary loans are arranged with ease.

Administration. Organization and government of the University is entrusted, under the State Constitution, to a corporate body, The Regents of the University of California. The Regents have "full power over the organization and government, subject only to such legislative controls as may be necessary to insure compliance with the terms of the endowments of the University and the security of its funds." Membership of the Board of Regents was changed by a constitutional amendment November 5, 1974: ex officio members were reduced from eight to seven (the Governor of California, the Lieutenant Governor, the Speaker of the Assembly, the Superintendent of Public Instruction, the President and the Vice President of the Alumni Association of the University, and the President of the University), members appointed by the Governor increased from seven to eight, and their terms were shortened from sixteen to twelve years (effective March 1, 1976); an advisory committee was established to aid in selection of Regents (Regents serving more than five full-year terms are unaffected by the amendment.) Further, the amendment provides that: "Regents shall be able persons broadly reflective of the economic, social, and ethnic minorities and women." The amendment also authorizes The Regents to appoint a faculty or a student Regent, or both, as voting Board members with full rights of participation, commencing on July 1, 1975.

The President of the University is the executive head of the University in all its departments and on all its campuses. He is appointed by The Regents and is directly responsible to them. Each of the nine campuses of the University has a Chancellor as its chief administrative officer. The Chancellor is responsible for the organization and operation of the campus, including academic, student, and business affairs. The President has additional authority to the Chancellors, including appointment of faculty, department chairpersons, and directors of local instructional or organized research units.

The Academic Senate, consisting of the faculty and certain administrative officers, participates in the administration of academic matters. The Senate determines conditions for admission of students and for granting of certificates and degrees. It also supervises and approves all courses in the schools and colleges.
University Extension. University Extension makes available a broad range of programs based on the following educational aims: (1) the intellectual and cultural development of adults; (2) the dissemination of new knowledge resulting from teaching and research activities within the University; (3) the continuing education of scientific, technical, and professional personnel; (4) the development of special educational programs for public and private organizations and agencies; and (5) public affairs education through programs designed to aid adults in meeting their responsibilities as citizens.

THE BERKELEY CAMPUS

The Berkeley campus is surrounded by the business and residential districts of Berkeley (population, 113,000), at the foot of the wooded Berkeley hills. Despite its growth, the campus retains much natural beauty, with wooded glens, spacious plazas, and picturesque Strawberry Creek running westward through the length of the campus. The Berkeley hills afford a panoramic view of the San Francisco Bay Area, a nine-county region widely acclaimed for its cultural activities.

One is impressed by the vitality of the campus. Students advocating social change and political activities at Sproul Hall Plaza tables and noontime speeches that make news are, of course, part of the story. A host of other features—public lectures and concerts; campus-sponsored forums and seminars; clubs and workshops; dramatic presentations; international folk-dance festivals; art, photographic, design, architectural, anthropological, and archaeological exhibits and displays; and more than twenty bookstores within one square mile—all of these make Berkeley what it is. In this environment of intellectual restlessness, scholars of all ages gather to share ideas, information, and the experience of creativity.

Enrollment at Berkeley is now greater than 27,500, including 18,000 undergraduates. There are more than eighty academic departments, and most offer instruction at both the undergraduate and graduate levels.

ADMISSION

You may obtain application packets containing all necessary forms and instructions from California high school and community college counselors or from the Office of Admissions and Records, 120 Sproul Hall, University of California, Berkeley, California 94720. This office processes applications on or after the opening dates for filing; Winter Quarter 1976—July 1, 1975, Spring Quarter 1976—October 1, 1975, Fall Quarter 1976—November 1, 1975.

You must include with your completed application forms a fee of $20 (not refundable).

If you have not registered in regular session in any college-level institution since graduation from high school, you will be eligible for admission as a freshman student. You must meet these requirements for admission as a freshman:

(a) History. 1 year. One year of United States history or one-half year of civics or American government.
(b) English. 3 years. Three years of English composition, literature, and oral expression.
(c) Mathematics. 2 years. Two years of subjects such as elementary algebra, intermediate and advanced algebra, geometry, trigonometry, calculus, elementary functions, matrix algebra, probability, statistics, or courses combining these topics. Arithmetic and such nonacademic subjects as shop and business mathematics are excluded.
(d) Laboratory Science. 1 year. A year course in one laboratory science, taken in the tenth, eleventh, or twelfth grade.
(e) Foreign Language. 2 years. One language. Any foreign language with a written literature is acceptable.
(f) Advanced Courses. 1 (or 2) years. This must be chosen from the following:

Mathematics, a total of one year of second-year algebra or an equivalent course in trigonometry, or other certified advanced courses. Foreign language, either one additional year in the same foreign language offered under e or two years of another foreign language. Science, a year course in any laboratory science or a two-year laboratory science completed subsequent to the laboratory science used for d above.

If you are a graduate of a California high school, these courses must appear on a list that your high school principal has certified meet the course descriptions above and that he has placed on file with the Director of Admissions. Additional elective units are also required to complete the minimum of 15 standard entrance units.

You must have at least a B (3.0) average in those courses taken after the ninth year which are used to meet the subject requirements. Subject requirements are satisfied only by courses in which a grade of C (2.0) or higher has been assigned.

If you are applying as a freshman or if you are an advanced standing applicant who has earned less than 12 units of college credit subsequent to high school graduation, you must forward your scores from the following examinations of the College Entrance Examination Board; (1) The Scholastic Aptitude Test; and (2) three Achievement Tests, which must include (a) English composition, (b) social studies or foreign language, and (c) mathematics or science. If your scholarship average in the required high school subjects is 3.00 to 3.09 inclusive, you must score a minimum total of 2500 on the examinations.

For detailed information on these requirements, and admission by examination alone, consult the Undergraduate Admissions Circular or the Undergraduate Admissions Packet.

If you do not meet the requirements for admission to freshman standing or if you cannot qualify by examination alone, you can only be admitted to advanced standing.

If you are registered in a community college, a four-year college, a university, extension classes of college level, or any comparable institution since graduation from high school, you are subject to regulations governing admission to advanced standing. You may not forward your college record and apply for admission to freshman standing.

You must meet the criteria of advanced standing as of the following:

You must have at least a B (3.0) average in those courses taken after the ninth year which are used to meet the subject requirements.

Admission of Nonresident Applicants. The admission requirements for nonresident differ from those for residents in that the required grade-point average is lower. For freshmen, the average is higher. For freshmen, the average is 3.4 rather than 2.0. Admissions procedures and all other regulations are the same as for California residents described above.

Undergraduate Admission, Regulations, & Procedures

This section offers a summary of admission policies and an outline of regulations and procedures for registration, enrollment in classes, and filing of study lists. It also gives a brief explanation of the quarter system, courses and units, grades of scholarship, honors, academic probation, academic disqualification, cancellation of registration, absences, withdrawal, re-entry, and progress toward a degree. The importance of these regulations and procedures cannot be underestimated. Additional information may be found in the Circular for New Undergraduates, published quarterly and sent to all newly admitted students.

Many changes are taking place on the Berkeley campus: classic buildings share ground with modern steel and glass designs; the Venetian-style K. Moffitt Undergraduate Library; the undergraduate campus: classic buildings share ground with modern steel and glass designs; the Venetian-style K. Moffitt Undergraduate Library; the undergradu
Those ineligible for admission from high school because of subject deficiencies may establish eligibility by taking, at an accredited college, a minimum of 56 semester units or 84 quarter units, with an average of 2.0 or better.

Admission in Advanced Standing for Nonresidents. Nonresident applicants who met the admissions requirements for freshman admission must have a grade-point average of 2.8 or higher in the college courses they have taken that are accepted by the University for transfer credit.

Nonresident applicants lacking any of the required subjects in high school must complete college courses in those subjects with a grade of C or higher. A nonresident applicant who graduated from high school with less than a 3.4 grade-point average in the subjects required for freshman admission must have completed at least 84 quarter units (56 semester units) of transferable work with a grade-point average of 2.0 or better. Upon successful completion of that work, two units of the required high school subjects may be waived. Consult the Undergraduate Admissions Circular for complete details.

Intercampus Transfers. An undergraduate student who is registered on any campus of the University, or who was previously registered in a regular session, is not entitled to another campus of the University by filing the intercampus transfer application form. The intercampus transfer application forms and application for transcript of record forms may be obtained from the Office of the Registrar and must be filed with that office. There is a fee of $20 charged, along with other fees, a nonresident tuition fee of $500 for the quarter or $750 for the semester. The residence determination date begins at the 5th of the month that the University of California campuses open to take the quarter, and on for schools on the semester system, the day instruction begins for the semester.

General California residence is established by an adult who has relinquished prior residence and is physically present within the state with the intent to make California the permanent home. California residence must be established for more than one year prior to the term for which admission is requested. Indicia of California residence include, but are not limited to: the University to students of minority and low-income status; paying California income taxes as a resident; obtaining a California I.D. card or driver's license; paying California vehicle registration; paying California income taxes as a resident; establishing an abode where one's permanent belongings are kept; licensing for professional practice in California, etc. Conduct inconsistent with the claim of California residence includes, but is not necessarily limited to: registering and voting in another state; obtaining a divorce in another state; attending an out-of-state institution as a nonresident; maintaining voter registration and voting in another state; obtaining a student's license and vehicle registration, etc.

Students who are within California for educational purposes only do not gain the status of resident regardless of the length of their stay in California.

The residence of the parent with whom an unmarried minor (under age 18) maintains his or her place of abode is that of the minor. When minors live with neither parent the residence is that of the parent with whom they maintained their last place of abode. Minors may establish their residence when both parents are deceased and a legal guardian has not been appointed. The residence of unmarried minors who have a parent living cannot be changed by their own act, by the appointment of a legal guardian, by relinquishment of a parent's right of control.

A man or a woman establishes his or her residence in California if immediately prior to the residence determination date, established residence elsewhere, shall be entitled to resident classification until they have attained the age of majority and have resided in the state the minimum time necessary to become a resident so long as, once enrolled they maintain continuous attendance at an institution.

2. Nonresident students who are minors or 18 years of age and can evidence that they have been totally self-supporting through employment and actually present within California for the entire year immediately prior to the residence determination date and have evidenced the intent to make California their permanent home may be eligible for resident status.

3. Students shall be entitled to resident classification if immediately prior to the residence determination date they have lived with and been under the continuous direct care and control of any adult or adults other than a parent for not less than two years, provided that the adult or adults having such control have been maintaining the necessary time immediately prior to the residence determination date. This exception continues until the student has resided in the state the minimum time necessary to become a resident student, so long
as continuous attendance is maintained at an institution.

4. Exemption from payment of the nonresident tuition fee is available to the natural or adopted child, stepchild, or spouse of a dependent of a member of the United States military stationed in California on active duty. Such resident classification may be maintained until the student has resided in California the minimum time necessary to become a resident. If a student is enrolled in an institution and the member of the military is transferred on military orders to a place outside of the United States, the student must have been on active duty in California, the student is entitled to retain residence classification under conditions set forth above.

5. Students who are members of the United States military stationed in California on active duty, except members of the military assigned for educational purposes to a state-supported institution of higher education, shall be entitled to resident classification until they have resided in the state the minimum time necessary to become a resident.

6. Students who are adult aliens are entitled to resident classification if they have been lawfully admitted to the United States for permanent residence in accordance with all applicable provisions of the laws of the United States and have thereafter established and maintained residence in California for more than one year after acquiring a permanent resident visa prior to the residence determination date.

7. Students who are minor aliens shall be entitled to resident classification if they and the parent from whom residence is derived have been lawfully admitted to the United States for permanent residence, provided that the parent has had residence in California for more than one year after acquiring a permanent resident visa prior to the residence determination date.

8. Children of deceased public law enforcement or fire suppression employees, who were California residents, and who were killed in the course of law enforcement or fire suppression duties, may be entitled to resident classification.

Procedures

New and returning students are required to complete a Statement of Legal Residence. The student’s status is determined by the Attorney in Residence Matters, the Deputy who is located in the Office of Admissions and Records.

Students are cautioned that this summation is not a complete explanation of the laws regarding residence. They should also note that changes may have been made in the rate of nonresident tuition and the residence requirements between the time this catalog statement is published and the relevant residence determination date. Regulations have been adopted by The Regents, a copy of which is available for inspection in the Office of Admissions and Records.

Those classified incorrectly as residents are subject to reclassification as nonresidents and payment of all nonresident fees. If incorrect classification results from false or concealed facts, the student is subject to University discipline and is required to pay all fees he or she would have been charged as a nonresident. Resident students who become nonresidents must immediately notify the Attorney in Residence Matters’ Deputy.

Inquiries from prospective students regarding residence requirements for tuition purposes should be directed to the Attorney in Residence Matters, 590 University Hall, 2200 University Avenue, Berkeley, California 94720. No other University personnel are authorized to supply information relative to residence requirements for tuition purposes. Any student, following a final decision on residence classification by the Residence Deputy, may make written appeal to the Attorney in Residence Matters at the above address within 120 days after notification of the final decision by the Residence Deputy.

ENROLLMENT IN CLASSES AND FILING THE STUDY LIST

You should purchase from the ASUC Bookstore, for 25 cents, the Schedule of Classes, listing all courses given for the quarter, their credit values, meeting times, locations, and final examination groups. From this booklet, and with the aid of your adviser and this catalog, which provides course descriptions and prerequisites, you may assemble your program. You may not choose two courses in the same examination group. Usually courses in the same group meet at the same hour, thus precluding such a problem.

In order to complete your enrollment and receive credit for the work of a quarter, you must file your study list at the time and place designated by the Office of Admissions and Records. Students should arrange for conferences with advisers, review the program of studies they wish to undertake, and make their final choice of courses well in advance of the assigned dates for filing of their study lists. Students who fail to do this may be forced to file their study lists late and may become subject to the $10 late filing fee. The study-list form is returned to the student when you register, along with instructions for completing it and filing it. There is a $10 fee for filing after the assigned date, and no study list is accepted after the third week of instruction. Unapproved withdrawal from, or neglect of, a course entered on the study list will result in the assignment of grade “F,” “NP,” or “U” as appropriate. If you wish to make any changes of program after filing the study list, you must do so by formal petition with the signed approval of the instructor involved and the dean of your college or school.

The QUATER SYSTEM

The 1975-76 school year will consist of three ten-week quarters and one eight-week summer session. The summer quarter was replaced by Summer Session in 1970. This arrangement will continue until further notice. A student making normal progress toward the bachelor’s degree attends three quarters per school year. If desired, progress may be accelerated by Summer Session attendance. For information about the Summer Session, write to the Office of Summer Sessions, 22 Wheeler Hall.

A student proceeding to the bachelor’s degree in four years (twelve quarters) will normally complete a total of 160 units, or 15 units per quarter. This number may be slightly higher in some professional colleges and schools. Students are normally considered to have upper division or junior standing after completion of 90 units.

COURSES AND UNITS

Most University courses are assigned a unit value. One unit represents three hours of work per week by the student, including both class attendance and preparation or review. A unit value of one must be attached to the grades A, B, C, D, or P. A course receiving the grade S is similarly counted unless otherwise specified in the course description. A course in which the grade F, NP, and U is received is not counted toward degree requirements. A course in which the grade of I or IP is received is not counted toward degree requirements until such time as the I or IP is replaced by grade A, B, C, D, P, or S.

GRADE POINTS

Grades point per unit are assigned as follows: A = 4.0, B+ = 3.0, B = 2.0, B- = 1.0, C+ = 1.0, C = 0.0, C- = -0.5. When attached to the grades A, B, C, or D, plus (+) grades carry three-tenths of a grade point per unit; minus (-) grades carry three-tenths of a grade point less per unit than unsuffixed grades, except for the A+, which carries 4.0 grade points per unit as does the A.

GRADE-POINT AVERAGE

The grade-point average is computed on courses undertaken in the University of California, with the exception of courses undertaken in University Extension. Grades A, B, C, D, and F are used in determining a student’s grade-point average; grades IP, P, S, NP, and U carry no grade points and are excluded from all grade point computations. Grade I, if assigned prior to fall 1973, is included and is computed as an F, as an grade assigned fall 1973 and later is excluded from the computations. For additional information, see “Repetition of Courses.”

Examples:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Units</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>B+</td>
<td>5</td>
<td>18.5</td>
</tr>
<tr>
<td>C-</td>
<td>5</td>
<td>8.5</td>
</tr>
<tr>
<td>P</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>5</td>
<td>0 (assigned spring 1973)</td>
</tr>
</tbody>
</table>

| Totals | 45 | Average 2.250 |

<table>
<thead>
<tr>
<th>Grade</th>
<th>Units</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>B+</td>
<td>5</td>
<td>18.5</td>
</tr>
<tr>
<td>C-</td>
<td>5</td>
<td>8.5</td>
</tr>
<tr>
<td>NP</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>5</td>
<td>0 (assigned fall 1973)</td>
</tr>
</tbody>
</table>

| Totals | 45 | Average 3.000 |

REPETITION OF COURSES

A student may repeat only those courses in which he or she received a grade of D-, D, D, F, NP, U, or I. Courses in which a grade of D-, D-, or F has been received, and courses undertaken for a letter grade in which a grade of I has been received, may not be repeated on a Passed or Not Passed basis. Repetition of a course more than once requires approval by the appropriate Dean in all instances. Without this approval, a course repeated more than once will not be included in the grade-point average, but a passing grade in the repeated course will be accepted in satisfaction of unit requirements for the degree. Degree credit for a repeated course will be given only once, but the grade received at each enrollment is permanently recorded. In computing the grade-point average of a student who repeats courses in which a grade of F, D-, or F was received, the units are counted only once and only the most recently earned grades and grade points are used for the first sixteen units repeated. In case of further repetitions, the grade-point average is based on all grades assigned and total units attempted.

CHANGES OF GRADE

All grades except I and IP (see below) are consid-
ed final when assigned by an instructor at the end of a term. An instructor may request a change of a grade when a computational or procedural
error occurred in the original assignment of a grade, but a grade may not be changed as a result of reevaluation of a student's work. No final grade except I may be revised as a result of reexamination or the submission of additional work after the close of the term. A student may appeal a grade of F on such grounds only after petition to the Secretary of the Academic Senate not later than the end of the term following that in which the grade was received. The Secretary will set in motion the required investigation and resolution of the challenge by the Committee on Courses.

GRADE I (INCOMPLETE)

The grade I may be assigned if the student's work in a course has been of passing quality but is incomplete for reasons beyond his control. Prior arrangements must be made with the instructor, because in assigning the grade the instructor is required to specify the reasons to the Department Chairperson and to the Office of Admissions and Records.

For undergraduate students, an I grade assigned fall 1973 and later can be replaced by a final grade within a period not to exceed thirteen months from the date on which it was assigned, subject to the following provisions:

On completion of the required work or deferred examination, grade points will be assigned if the student receives a grade of A, B, C, or D. On repetition of the course, the units will be computed in the grade-point average, but grade points will be granted only with the prior approval of the Dean of the College or School. The Dean may extend the period of time in which an I grade may be completed beyond the thirteen-month limitation. Except as noted below, any I grade which has not been replaced within thirteen months after it has been assigned will, at the end of that time, be converted to grade F (or NP or U) if taken passed/not passed or satisfactory/unsatisfactory. After that time, but not retroactively, the grade is counted in computing the grade-point average.

Exceptions: Within thirteen months of receiving an I grade, a student may notify his Dean that he has not attempted completion and will not complete the work required for removal of the I grade, and may request that the grade not be replaced by an F (or NP or U). This procedure is limited to no more than two courses and the decision is irrevocable. Also, if a student is on academic probation before the end of the term, I grades may be placed within thirteen months following the assignment of an I grade, the grade will not be converted to an F (or NP or U) if the student is still on academic probation at that time. If the course is offered on a passed or not passed basis, it may be deleted from the student’s record. If not completed as scheduled, the I will be replaced by grade I when the instructor has no basis for assigning a grade for the term(s) completed. Further changes in the student's record will be subject to the rules pertaining to I grades (see above).

**PASSED OR NOT PASSED GRADES**

A student must be in good standing (i.e., not on academic probation or subject to academic disqualification) in order to enroll in courses on a passed or not passed basis. Credit for courses graded passed may be assigned for more than one-third of the total units undertaken and passed on the Berkeley campus at the time the degree is awarded. This limitation applies to courses completed for credit after September 1970. Included in this one-third will be half-unit Physical Education and Music 400 series courses, as well as any units completed on another campus by a Berkeley student enrolled in an intercampus Visitor Program, or in an Education Abroad Program.

A course which is required in the major or which is prerequisite to the major may be taken on a passed or not passed basis only upon the approval of the faculty of the student’s College or School. A special student or limited-status student may always take courses on a passed or not passed basis at the discretion of the Dean of the College or School. A student’s level of performance must correspond to letter grade C or better if a passed grade is to be assigned.

A student may not repeat on a passed or not passed basis a course in which he or she received a D or F, or an Incomplete unless the Incomplete was assigned in a course undertaken on a passed or not passed basis.

The option of being graded passed or not passed in a particular course may be withdrawn if the student’s College or School determines that the course is offered on a passed or not passed basis only. It may be deleted from the study list at the option of the Dean of the College or School.

A student’s level of performance must correspond to letter grade C or better if a passed grade is to be assigned.

A student may not repeat on a passed or not passed basis a course in which he or she received a D or F, or an Incomplete unless the Incomplete was assigned in a course undertaken on a passed or not passed basis.

The option of being graded passed or not passed in a particular course may be withdrawn if the student’s College or School determines that the course is offered on a passed or not passed basis only. It may be deleted from the study list at the option of the Dean of the College or School.

Any undergraduate student with 16 or more units of I on his or her record may not register unless permission to do so is granted by the Dean. If the student has registered by mail, the registration may be canceled if, in the opinion of the instructor in charge, the student's performance may properly be tested by an examination. A separate petition must be filed for each course; the fee for each is $5. In certain laboratory, field, or practice courses an examination either written or oral may not be a satisfactory test. Credit by examination is not available if such credit would duplicate credit presented by the student for admission to the University; in elementary courses in a foreign language which is the mother tongue of the applicant; or in subjects for which the University has no competent examiner. Further information concerning credit by examination may be obtained from the Office of Admissions and Records.

**MIDTERM AND FINAL EXAMINATIONS**

The number of midterm examinations varies at the discretion of the instructor. Final examinations are mandatory in undergraduate courses, with the exception of courses listed in the Schedule of Classes as not requiring a final examination, and in the case of a student graduating at the end of the quarter who is being examined in his major by his department and may, at the department's discretion, be excused from finals in all courses within the department.

Final examinations are normally in written form and may or may not cover the entire course. You may, if you wish, inspect a file of sample examinations, listed by course, in the Reserve Room of the Library. Examinations in non-laboratory courses may not exceed three hours. Any infringement of fair examination practice by a student is considered a disciplinary offense.

You may be re-examined only to raise grade I to passing, not to raise any other grade.

**HONORS**

Standards for honors status are set by the colleges and schools, and departments may, in addition, recommend students for inclusion on the Honors List. Honor students are usually accorded special privileges, including eligibility for honors programs. If you have an overall grade-point average of 3.5, you are accorded, through the Committee on Prizes, access to the Main Library loan stacks. For further information, please consult the college, school, or department.

**MINIMUM SCHOLARSHIP REQUIREMENTS**

Failure to maintain a minimum grade-point average prescribed by the college or school will normally result in probation or disqualification. Since scholarship rules are applied only at the close of each regular term, you should keep informed of the student's standing. You may be placed on academic probation if during any term they fail to attain at least a C average in all courses for which they are enrolled.

**ACADEMIC PROBATION**

Except in the Colleges of Chemistry and Engineering, students are placed on academic probation if at the end of any term their cumulative grade-point average is less than 2.0 (C average) computed on the total of all courses undertaken in the University. In addition, students in the College of Environmental Design will be placed on academic probation if during any term they fail to attain at least a C average in all courses for which they are enrolled.

**ACADEMIC DISQUALIFICATION**

College of Chemistry and College of Engineering: Students shall be subject to disqualification from the university (a) if during any term they fail to attain at least a C average in all courses for which they are enrolled; or (b) if at the end of any term they have failed to attain at least a C average in all courses undertaken in the University.
A student who has been disqualified for academic or disciplinary reasons is generally not eligible for readmission. If you have cancelled your registration, withdrawn, or have been absent for any quarter, you will be required to apply for readmission to any future quarter you wish to attend. The Application for Readmission, which may be obtained from the Office of Admissions and Records, must be accompanied by a non-refundable, non-extendible fee of $50, which will be credited to your account when first submitted. It will not be considered until the fee has been paid. The final filing dates are given in the Calendar in the front of this publication.

**PROGRESS TOWARD THE DEGREE**

**Declaration and Change of Major.** Regulations and procedures for declaring the major vary for each college. You should schedule an appointment with the dean of your college to 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.

**Work Toward a Degree.** At the close of each quarter, 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. After the first 36 units toward a degree, you are entitled to a degree transcript, which gives a detailed accounting of the courses and grades you have received for each course you took is issued to you at a time and place designated by the Office of Admissions and Records.

Transcripts of the records—useful and usually necessary in applying to graduate school and for certain types of employment—are available from the Office of Admissions and Records. After the last date for final examinations, transcripts of record for registered students must be held for the inclusion of grades and therefore will not be available for approximately 25 working days. Partial transcripts will not be issued. At times other than the close of the quarter, the normal period required for processing and issuance of transcripts for both registered and former students is four to five working days. The charge for each transcript of every undergraduate, graduate, or separate summer session record is $2, and $1 for each additional copy of any record requested at the same time. The total amount due must accompany the application.

In working for a degree, you should keep in mind the various levels on which you are to satisfy requirements—University, college or school, and department. Beyond the requirements set by the University, certain colleges or departments have their own specific requirements. The University requires 90 units of study toward the bachelor's degree, 120 units toward the master's degree, and 180 units toward the doctorate. Each college or department specifies the level of work required in the various fields of study.

**CANCELLATION OF REGISTRATION, ABSENCES, WITHDRAWAL, AND RE-ENTRY**

Students who have registered and who wish to cancel their registration may do so provided they notify the Office of Admissions and Records in writing prior to the first day of classes of the quarter for which registration is to be cancelled. Cancellation of registration must not be accomplished by non-attendance of classes alone. A refund of all but $10 of the registration fees is made on cancellation if the registration card is returned, except for the $50 deposit paid by new undergraduates.

Responsibility for short absences during the quarter is left to the student. Permission to withdraw entirely from the session, without scholarship penalty, is generally not granted after the first few weeks of the quarter except under unusual circumstances. If you do find it necessary to discontinue your studies for the remainder of the quarter, you should obtain a Notice of Withdrawal from the Office of Admissions and Records and submit it together with your registration card, for the first of several required endorsements at the earliest possible date. If the form is submitted prior to the first day of classes, you will be entitled to a refund as would be made on cancellation of registration. The refund of fees is prorated thereafter. You should note that the amount of refund, if any, is determined not by the date on which you discontinue your studies, but on the date on which the Notice of Withdrawal is first presented for endorsement. If you are eligible for further registration in the same quarter, you will be entitled to a Statement of Honorable Withdrawal, whether you withdraw from a session in progress or at the close of a session. You must not discontinue the work of a quarter without formal notice. This may result in the assignment of F grades, academic disqualification, and loss of eligibility for readmission to a future quarter.

The announcement is accepted no earlier than this period. The period for your enrollment ends with the third week of classes. (Announcements filled late 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 period for filing in the subsequent quarter when the degree will be awarded.

**Residence Requirement for the Bachelor's Degree.** After 35 units toward the bachelor's degree have been completed, at least 36 of the remaining units of residence in the college or school of the University in which the degree is to be taken. These 36 units must be completed in the quarter in which 135 units are exceeded plus not fewer than two additional quarters. At least two of the final quarters must be consecutive. You should consult the Dean of your college or school for requirements in the University that pertain to the summer sessions.

**Preparation for Graduate Study.** If you are preparing for study toward higher degrees, you should consult the graduate catalog of the graduate program in which you wish to study. Included in the graduate catalog are requirements for admission to graduate study. You should also consult the graduate catalog of your school, or department, for details concerning the senior residence requirement as it pertains to the summer sessions.

**TWO GENERAL UNIVERSITY REQUIREMENTS**

There are two requirements—beyond those set by the college, school, or department—which all undergraduate students in the University must satisfy in order to graduate. Subject A and American History and Institutions are considered essential to your education, regardless of your academic or professional objectives.

Subject A. All University departments have set up their own specific requirements for the degree. You must enroll in the Subject A Department's course in English, and understand how to compose an essay on an academic topic. For this reason, students are asked to present proof of their writing ability (by the means shown below) on entering the University.

Any student who cannot meet the requirement must enroll in the Subject A Department's course "Introduction to Language", during his or her first quarter of residence at the University or in a preparatory college-level course approved by the Office of Admissions and Records. After 135 units toward the bachelor's degree have been completed, at least 36 of the remaining units of residence must be completed in residence in not less than two additional quarters. At least two of the final quarters must be consecutive. You should consult the Dean of your college or school for details concerning the senior residence requirement as it pertains to the summer sessions.

1. A score of 600 or above on the English Composition Test of the California Department of Education—this test must be taken before the student enters the University.
2. A score of 3, 4, or 5 on the College Board Advanced Placement Test in English.
3. Completion with a grade of C- or better of a college-level course in English composition taken at another institution and judged acceptable by the University.
4. A passing grade on an essay test administered by any of the Subject A departments within the University of California system.
during May, on a testing date set for students in Bay Area high schools; (2) during summer orientation periods when students may arrange with the Subject A office to take the test on an individual basis; and (c) at the beginning of the pre-enrollment week of each quarter (see Calendar for exact dates). The examination is used as the basis on which the department recommends release from the requirement. It is also designed to reveal the writing problems of each individual student held for the course. The same examination is used to determine the status of transfer students who have not been exempted from the requirement (see paragraphs 3 or 4). Completion 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.

English as a Second Language. Students whose native language is not English and who have had less than two years at an American high school may fulfill the Subject A requirement 1) by receiving a score of 500 or better on the SAT Critical Reading section, or a score of 20 or better on the ACT English section; or 2) by taking the American College Testing (ACT) English test and receiving a score of 18 or better; or 3) by passing a test of English Language Proficiency administered by the Testing Services Office, (ESL) the number depending on the student's performance on the Placement Examination and on the grades he receives; an A— or better in ESL 28 or a C— or better in ESL 40 fulfills the requirement. (See English as a Second Language under Courses and Curricula.) These courses must be taken in successive quarters beginning with the student's first quarter in residence at the University.

In addition, it is possible for students who have had two or more years at an American high school but whose writing problems are primarily those of a non-native speaker to fulfill the Subject A requirement by taking one or more courses in English as a Second Language. These students must also take the Placement Examination.

American History and Institutions. These requirements are based on the principle that an American student enrolled at an American university should have some acquaintance with (1) the history, and (2) the political institutions and ideas of his country. These requirements may be met in the following six ways:

1. By passing two examinations, one in each of these subjects. If you wish to take either or both examinations, you should obtain details at the American History and Institutions Office, Room 104, Block 1.

2. By presenting official evidence of completion of the same two requirements at another college-level institution in California.

3. By completing one quarter (or Summer Session) of a course in each of the two groups given below (or, on approval of the Supervisor of American History and Institutions and dean of the college school at Berkeley, any comparable courses offered at another college-level institution, or University Extension):


   (2) Institutions Requirement: Political Science 5, 106, 107, 108, 109, 110, 111A, 112, 157A, 157B, 160, 163, 181, 184, 188; Business Administration 110, 111, 117, 154; Economics 1, 100A, 100B, 121, 123, 151; Forestry 115; Journalism 141; Philosophy 118; Rhetoric 141; Social Welfare 110B; Sociology 118, 120, 124. Additional courses, including Ethnic

Studies courses, may fulfill the History or Institutions requirement on a quarter-to-quarter basis. Contact the American History and Institutions Office for details.

4. By mixing alternatives 1, 2, or 3 for either requirement. You may choose an examination in either, or complete a course in either one, or submit evidence of equivalency for either one.

5. By completing the first two quarters of English 33A, 33B, 33C; History 33A, 33B, 33C; or Political Science 33A, 33B, 33C, of the Experimental College Program dealing with American Studies.

6. The American History part of the requirement can be fulfilled by passing the Advanced Placement Test in American History with a grade of 3, 4, or 5. No Advanced Placement Test exists at this time in American Institutions, so this part of the requirement cannot be fulfilled by this means.

The requirements will be waived for foreign students who, in the course of their registration, have submitted to the Office of Admissions and Records for inspection travel documents certifying that they hold student (F) or exchange visitor (J) visas. Those who wish to verify that the waiver has been granted may call at the Office of Admissions and Records, 120 Sprout Hall, for confirmation, preferably no earlier than the close of their second quarter of attendance.

All students are advised that fulfillment of these requirements is the responsibility of the individual student, and preferably should be completed by the end of the junior year.

Steps to Becoming a Student at Berkeley

The following is a simplified outline of the steps you will take in becoming a student at Berkeley, either as a freshman or in advanced standing.

1. Obtain Undergraduate Admissions Packet from your high school or community college counselor, if a California resident, or from the Office of Admissions and Records, 120 Sprout Hall.

2. Return completed forms and cards contained in Admissions Packet, plus nonrefundable fee of $20 during the first month of the filing period for the quarter for which you are applying.

3. Receive from the Office of Admissions and Records a card acknowledging that your application has been received.

4. Receive from the Office of Admissions and Records, if redirection of applicant is necessary, a letter concerning redirection of the application to an alternate campus.

5. Receive from the Office of Admissions and Records for additional transcripts or confirmation of academic work in progress.

6. Receive from the Office of Admissions and Records a notification of admission, a statement of your intention to register, and the Circular for New Undergraduates.

7. Return your statement of intention to register, plus nonrefundable fee of $50.

8. Receive from the Office of Admissions and Records a Registration Packet. Applicants admitted too late to register by mail will receive supplementary instructions concerning the registration procedure to follow.

9. Return completed forms and cards contained in the Registration Packet.

10. Receive from the Office of Admissions and Records, just prior to the opening day of the quarter, a second registration packet consisting of Study List, Registration Card, enrollment cards, etc.

11. File your Study List after you have planned your program of study with the aid of this catalog, a booklet called Schedule of Classes, and your assigned adviser.

The Graduate Division

Graduate study embraces all study for degrees and certificates beyond the bachelor's degree—principally the master's and doctor's degrees—and is administered by the Graduate Division under the policies and regulations established by the Graduate Council of the Berkeley Division, a standing committee of the Academic Senate. Higher degrees fall into two broad categories: (1) Professional—degrees awarded by each of the professional colleges and schools on the Berkeley campus 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 contribution of significant ideas 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.

ADMISSION TO GRADUATE STUDY

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 a fee of $20, must be filed with the Graduate Admissions Fellowship Office by the established deadlines. The final dates for acceptance of applications for admission for the 1976-77 academic year are: fall quarter, February 1; winter quarter, September 1; and spring quarter, December 1. The School of Law admits only for the fall term; the deadline is March 1.

1 Fees are subject to change.
Many departments have established earlier final application dates of their own, 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 department's deadline for admission to be considered. Many departments also admit students only for the fall quarter of the year. Information on special departmental deadlines and requirements is contained in the application packets.

Under the Master Plan for Higher Education in California, there are limitations on enrollment at each public institution. Consequently each graduate program at Berkeley has a maximum enrollment that may not be exceeded. Almost invariably, this limit will be higher than the number of persons who are at least minimally qualified to enter the program, and selection procedures are designed to admit applicants in accordance with their relative merit and promise, for the particular program, among those at least minimally qualified. Therefore the competition for admission is severe, and 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 valid degree from an accredited institution, comparable to the bachelor's degree offered at Berkeley (occasional exceptions may be made for persons holding a professional baccalaureate and desiring entrance only into a corresponding graduate professional program); (2) sufficient undergraduate training to undertake graduate study in the chosen field; and (3) a satisfactory scholastic average. Since the methods of determining eligibility vary with each program, an extensive evaluation of the university record(s) and the supporting materials of each applicant is necessary.

A satisfactory score on the Graduate Record Examination (administered by the Educational Testing Service), though not required for admission to the Graduate Division in general, is required by some departments and schools on campus. If it is required, the score should be forwarded to the applicant's proposed school or department and not to the Graduate Admission/Fellowship Office.

In addition to the general University requirements, certain schools or departments may require additional materials. To avoid redundancy, separate applications, reading lists, examples of original work, or qualifications in the methods of determining eligibility vary with each program, an extensive evaluation of the university record(s) and the supporting materials of each applicant is necessary.

Notification of Action on Admission. Only a written notice from the Dean of the Graduate Division, not letters from departments or faculty, is valid proof of admission. Announcement of admission is limited by the number of places available in the various schools, colleges, and departments of the University. Admission committees base recommendations on the record of the candidate and the opinion of recommendation. 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.

Accommodation of Postdoctoral Fellows and Visiting Scholars. A prospective fellow or scholar should communicate with the chairperson of the department, school, or research unit with which he wishes to work before making any formal application for admission. An offer of admission is necessary for the individual to apply for financial assistance. The University requires proof of funds in the form of such things as records of grants, fellowships, or special stipends to be available to support the scholar in the event that University funds are not awarded. The University requires that the prospective fellow or scholar secure written assurance that a place will be reserved for him for the time he wishes to enter the University and that he be apprised of the conditions under which support will be given.

Intercampus Exchange Program. A graduate student registered on any campus of the University may go to another campus of the University as an exchange student. It is anticipated that this privilege will be used by graduate students who seek the opportunity for study with certain scholars or with fields of study not available on their home campus, or who seek the use of special facilities and collections. Whenever possible, arrangements between Berkeley and the other campus should be made so as to insure that the courses, seminars, or facilities will be available to meet the student's needs. This privilege will be granted where evidence of serious and high-quality scholarship is available. Although the Intercampus Exchange Program is open to all departments, excepting those restricted to non-United States citizens, it is anticipated that the privilege will be used primarily by graduate students in the humanities and social sciences.

Admission to graduate study is limited to students who are at least minimally qualified to enter the program. Admission to graduate study is limited to students who are at least minimally qualified to enter the program. Admission to graduate study is limited to students who are at least minimally qualified to enter the program.
Registration. Every student in good standing, unless granted withdrawal by the Dean of the Graduate Division, will be required to register with the Office of Admissions and Records each quarter until the completion of all requirements for the degree or to obtain permission to leave the University. Withdrawal is normally effected by the Dean on the recommendation of the Graduate Adviser and Dean of the Graduate Division. Failure to register or to obtain formal withdrawal by the Dean constitutes voluntary withdrawal from the Academic Division. The requirement of full-time continuous registration for graduate students is satisfied by attendance in the three quarters of an academic year. A student is required to be registered or pay the filling fee, whichever is applicable, for the quarter in which the degree is conferred. All holders of nonimmigrant visas must be registered for fall, winter, and spring quarters of each academic year unless special permission has been obtained from the Immigration Service to do otherwise. Consult the Foreign Student Adviser for further information.

Consistent with these principles, graduate students must register in any quarter in which they are enrolled in formal courses of instruction, or making any use of University facilities, including access to the faculty, except those uses that are accorded the general public.

If a student's studies or research require absence from the State of California for the quarter, a petition must be filed for this, including a request for reduction of the University Registration Fee, with the Office of the Dean of the Graduate Division, Room 1, Sproul Hall.

Student Conduct and Discipline. A student enrolling in the University assumes an obligation for conduct compatible with the University's function as an educational institution. Rules concerning student conduct, student organizations, use of University facilities, and related matters are set forth in both University policies and campus regulations, copies of which are available upon request at the Office of Student Activities, 201 Sproul Hall. Particular attention is called to the booklet University of California Police: Applying to Campus Activities, Organizations and Students, and to the Standard of Conduct set forth therein.

Withdrawal. A student who wishes to withdraw from the University at the end of a quarter, or finds it necessary to discontinue studies before the close of a quarter, must apply for formal withdrawal. Failure to obtain release prior to withdrawal permits readmission. Withdrawal petitions are available from the Petitions Desk, Graduate Division, Room 1, California Hall, and are filed with the same office. During the period of absence a graduate student is exempt from all fees and is expected, in turn, to maintain no connections with the University. The student may not use University facilities (except those uses accorded the general public) or place demands on faculty time. Withdrawal requires the endorsement of the student's department, school, and group and the Dean of the Graduate Division.

Standards of Scholarship and Dismissal for Academic Deficiencies. Only courses graded A, B, C (with or without signe) or P (pass) are accepted in satisfaction of degree requirements. Courses graded below C—do not yield unit credit toward a higher degree, irrespective of the overall grade-point average. Graduate students must maintain a minimum grade-point average of 2.00 in all upper division and graduate course work undertaken in graduate standing in the University of California or its exchange programs and must follow academic or professional program to which they were admitted or later officially transferred. Expedient pursuit of the degree program implies full-time study unless a lessor program is approved by the Graduate Adviser. Successful completion of all course work required by the departmental or group program, passage of the required examinations and other requirements as specified for the program, and advancement to candidacy as specified for the various degree programs.

For a course extending over more than one quarter, withdrawal is deferred until the end of the final quarter, provided grades of in progress (IP) may be assigned in the intervening quarters. The provisional grades are replaced by the final grade if the student completes the full sequence. If the full sequence is not completed, the Berkeley Division of the Academic Senate is authorized to regulate the award of credit.

With the consent of the department involved, graduate students may enroll in courses in the 600-series. Such courses are evaluated by means of the grades satisfactory and unsatisfactory (S and U). They prepare students for appropriate master's or doctoral examinations and do not count toward academic residency or the degree requirements for a higher degree. No credit is allowed for work graded unsatisfactory.

Graduate students are subject to dismissal for academic deficiencies at the discretion of the Dean of the Graduate Division under the policies and practices established by the individual faculties appropriate for professional disciplines and schools and colleges, and under the policies established by the Graduate Council of the Berkeley Division. Dismissal for academic deficiencies is normally effected by the Dean on the recommendation of the Academic Senate. Graduation of academic deficiencies is normally formalized by the Dean on the recommendation of the Graduate Adviser, but the Dean may initiate dismissal after his own review of the record. Dismissal for academic reasons by the Dean may be appealed to the appropriate committee of the Graduate Council of the Berkeley Division.

Re Pembmission. A student who has withdrawn for one quarter or more must file an Application for Readmission, obtainable from the Office of Admissions and Records, and must pay a nonrefundable, nontransferable Readmission Fee of twenty dollars ($20). This fee must accompany the Application for Readmission when first submitted or the application will not be reviewed. Approval of readmission is not automatic. A formal review of the student's petition and academic record is made by the Berkeley Division and the appropriate college, school, group or department, and the student is notified whether the petition has been approved or denied.

California Legal Residence. Students who have not been legal residents of California for more than one year immediately prior to the residence determination date for each quarter in which they propose to attend the University are charged, along with other fees, a nonresident tuition fee for the quarter. The present fee is $500 per quarter. For information pertaining to the establishment of legal residence see heading "Nonresident Tuition Fees" in this catalog. All inquiries regarding legal residence requirements for tuition purposes should be directed to the Attorney in Residence, 590 University Hall, 2200 University Avenue, University of California, Berkeley, California 94720. For information on waiver of the nonresident tuition fee for graduate students who are nonresidents, see Graduation Division.

Academic Residence. In order to meet the academic residence requirement for higher degrees—not to be confused with state residence, previously defined—every graduate student must enroll in and complete a minimum of 4 units of upper division and/or graduate courses per quarter of academic residence. Only courses in the 100 or 200 series satisfy this requirement. (Students should also familiarize themselves with the regulations on academic residence for the individual graduate degrees.)

The Study List and Study-List Limits. Each quarter in which registered the student fills out a study list, entering on it all courses or any other graduate work, including thesis and/or research approved by the graduate adviser, to be undertaken for the quarter.

Courses are classified as lower division (numbered from 1 through 99); upper division (100—199); and graduate (200—299). Lower division courses are not counted as part of a full program of study leading to a higher degree. For information on courses in the "600-series" see Standard of Scholarship.

Teaching assistants and research assistants must normally carry a minimum of 6 units of upper division or graduate work. Fellowship holders and foreign students on nonimmigrant visas must carry a full program of study, the minimum range in such cases being 15 units of upper division and/or graduate courses, although cognizance is taken of the amount of individual study being pursued in the form of language preparation, comprehensive and qualifying examination preparation, etc., for the Ph.D. degree. In such cases reduced unit loads are accepted as full programs with the consent of the Graduate Adviser and Dean of the Graduate Division. Formal classification of a student's program as full-time, half-time, or quarter-time is determined by the Graduate Adviser and entered on the study list each quarter. For the convenience of advisers and students a suggested maximum schedule is given below.

Maximum Program

<table>
<thead>
<tr>
<th>Graduate Units</th>
<th>Upper Division Units</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>1</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

Maximum Program for Teaching Assistant and Research Assistants

<table>
<thead>
<tr>
<th>Graduate Units</th>
<th>Upper Division Units</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>1</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Program for Persons Employed

<table>
<thead>
<tr>
<th>Graduate Units</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Changes in the Study List. Graduate students may file petitions to add, substitute, or drop courses entered on their study lists at any time through the twentieth day of instruction. Discontinuance of a course after this time will normally result in a grade of F. In unusual circumstances, and when approved in writing, the Dean of the Graduate Division, the penalty of an F grade may not be assessed.
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 specialization of interest or a need for breadth of interest not normally appropriate to an undergraduate major. These courses may be conducted in a number of ways: (1) as advanced lecture courses in which faculty and students present critical studies of selected problems within the subject field, (2) 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 work—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 18 units of upper division work basic to the subject, 6 units of the organism, and 3 units of the basic work may be pursued in more than one department). Graduate students are encouraged, therefore, to take any upper division work that will provide foundation 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 creditable toward the various certificates and 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.

Course Credit by Examination. A graduate student in residence may petition to receive a limited amount of course credit toward the degree by passing examinations on material covered in certain courses taken at the undergraduate level. Laboratory courses or graduate seminar or research courses are excluded. The petition is obtainable from the Office of Admissions and Records and must be approved by the course instructor, or, where no instructor is designated, by the departmental chairperson.

Duplication of Higher Degrees. Normally duplication of degrees is not permitted. A student may petition the Dean of the Graduate Division for permission to take courses in lieu of taking those courses. Approval to take such examinations must be obtained by the student's entire record before undertaking the work of a graduate degree. A student may take tests in up to six units earned in University Extension concurrent courses toward the unit requirement for the degree. Concurrent courses are those courses taken on the Berkeley campus and subject to the instruction of a regular member of the faculty.

Requirements for the Multiple Subject or Single Subject Teaching Credentials may be met in part by courses offered in University Extension, as described in the Announcement of the School of Education.

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. The present regulations are largely in accord with the academic master's degree, though the rules and procedures described will be of interest to candidates in all fields.

Residence Requirement. A minimum of three quarters of academic residence is required for the master's degree. Specific subject requirements are set by the schools and departments.

Transfer of Credit from Other Institutions. Up to 6 quarter units (or 4 semester units) of courses taken at other institutions may be applied toward the degree, upon approval of the Dean of the Graduate Division. These units are allowed if earned in graduate status at an institution of high standing, but they cannot be used to reduce the minimum residence requirement or minimum number of graduate units. The thesis course for such courses are not considered until a student has completed at least one half of the program for the master's degree and is applying for advancement to candidacy. The student's entire record must indicate superior scholarship.

Pass Grades. No more than one-third of the master's program may be fulfilled by courses graded Pass and/or Satisfactory, and then only if approved by the department or group.

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 department (departments may adopt either or both plans, and, in the latter case, designate which plan is to be followed by each student):

- Plan I requires at least 30 quarter units of upper division and graduate courses and a thesis. At least 12 of these units must be in graduate courses (200 series) in the major subject. Course work may be in residence or by University Extension.
- Plan II requires at least 36 quarter units of upper division and graduate courses, followed by a comprehensive final examination administered by the student's 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 course work among the departments. Further requirements are specified by the major department.

Advance 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 student's major department or school and a precise statement of the studies on which the application is based. Application must be made no later than the end of the second week of instruction of the quarter 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 or printed form (or other form deemed acceptable by the Graduate Council). If typewritten, it must be on good quality paper, at least one inch in width at the margin of 2". It must be bound and without perforations, and the type must be adequate for photographic reproduction. One copy of the original (if typewritten), following approval by the student's thesis committee, is filed with the Dean of the Graduate Division. Further information regarding the format of the thesis is available from that office.

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 original scope, the thesis, preferable 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 the 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 work before advancement. Responsibility for failure of the completed thesis in the hands of the committee members rests with the student.

If all three members of the committee approve the thesis, they sign the official title page prepared by them. Copies of the thesis are deposited 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 the 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 as listed on page 14. Professional degrees 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 doctor's degree, though the information will be of interest to candidates in all fields.

The Doctor of Philosophy degree is not granted at
the University of California 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.

Residence Requirement. A minimum of two years or six quarters of academic residence (as defined earlier under Academic Residence) is required for the Ph.D. degree. For most students the actual period of time spent obtaining the degree, however, is close to six years.

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 program of study approved by the Graduate Adviser of the department or group to which they are admitted or later transferred. As noted earlier, University policy requires continuous residence 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 adviser to select the sequence of courses that will best prepare them for qualifying examinations and research work.

Interdisciplinary Groups. The University has established graduate programs in a number of fields that cut across conventional departmental lines yet comprise definite 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. 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 list of Graduate Groups on the Berkeley campus:

- **Group in Agricultural Chemistry**
  - Professor Donald G. Crosby, Chairperson
  - Professor David L. Brink, Graduate Adviser
  - 478 Richmond Field Station, Campus

- **Group in Asian Studies**
  - Professor Ronald W. Needham, Chairperson
  - 2317 Dwinelle Hall

- **Group in Biophysics, Biomedical, and Medical Physics**
  - Professor Robert M. Glaeser, Chairperson
  - 365 Donner Laboratory

- **Group in Biostatistics**
  - Professors E. L. Scott and C. L. Cnian, Co-Chairpersons
  - 386 North Hall

- **Group in Buddhist Studies**
  - Professor John L. Lancaster, Chairperson
  - 246 Dwinelle Hall

- **Group in Comparative Biochemistry**
  - Professor J. A. Bassham, Chairperson

- **Group in Comparative Pathology**
  - Professor Stewart H. Madin, Chairperson
  - 351 Life Sciences Building

- **Group in Endocrinology**
  - Professor Howard A. Bern, Chairperson
  - 4275 Life Sciences Building

- **Group in Environmental Health Sciences**
  - Professor R. C. Cooper, Chairperson
  - 206 Earl Warren Hall

- **Group in Epidemiology**
  - Professor George W. Chang, Chairperson
  - 119 Morgan Hall

- **Group in Folklore**
  - Professor William Bascom, Chairperson
  - 103 Kroeber Hall

- **Group in Food Science**
  - Professor Eli M. Bowler, Associate Dean
  - Building 7-1, Room 106

- **Group in Immunology**
  - Professor Phyllis B. Blair, Chairperson
  - 3573 Life Sciences Building

- **Sponsoring Committee for Latin American Studies**
  - Professor Woodrow W. Borah, Director
  - 3029 Dwinelle Hall

- **Committee for Law and Society**
  - Center for the Study of Law and Society
  - 2224 Piedmont Ave

- **Group in Neurobiology**
  - Professor Gunther S. Stent, Chairperson
  - 525 Stanford Hall

- **Group in Nutrition**
  - Professor Rosemarie Ostwald, Chairperson
  - 116 Morgan Hall

- **Group in Parasitology**
  - Professor Deane P. Furman, Chairperson
  - 414 Wellman Hall

- **Group in Psychobiology**
  - Dr. Meredith Morgan, Chairperson
  - 105 Minor Hall

- **Group in Plant Pathology**
  - Professor Louis Jacobson, Chairperson
  - 108 Hilgard Hall

- **Group in Range Management**
  - Professor R. Heady, Chairperson
  - c/o College of Natural Resources
  - 27 Mulford Hall

- **Group in Romance Languages and Literatures**
  - Professor Gustavo Costa, Chairperson
  - 5125 Dwinelle Hall

- **Group in Romance Philology**
  - Professor Ruggero Stefanini, Chairperson
  - c/o Department of Italian
  - 5125 Dwinelle Hall

- **Committee for Certificate in Russian and East European Studies**
  - Professor Andrew C. Janos, Chairperson
  - 210 Barrows Hall

- **Group in Science/Mathematics Education**
  - Professor Frederick Reid, Chairperson
  - c/o Physics Department
  - 347 $Hall

- **Group in Soil Science**
  - Professor Walden Churchill, Chairperson
  - c/o Department of Soils and Plant Nutrition
  - 108 Hilgard Hall

- **Group in Wood Science and Technology**
  - Professor Fred E. Dickinson, Chairperson
  - 478 Richmond Field Station, Campus

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 some graduate study elsewhere and have already been admitted to a doctoral program will be considered for an interdisciplinary doctoral program. In such programs, the student may prepare a proposal for a course of study under the sponsorship of three faculty members. Final approval of any 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 Graduate Council policies and the degree is awarded in a field stipulated by the Graduate Council for the individual student. 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. Advice on procedures for such ad hoc programs is available from the Office of the Dean of the Graduate Division.

Foreign Language Requirement. The 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 must fulfill the foreign language requirement for the Ph.D. before advancement to candidacy and preferably before admission to the Qualifying Examinations (see next page), according to the policies current in their 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. Although the Graduate Council has granted variances to the general legislation of the Academic Senate for some programs, little overall requirement of knowledge of foreign languages may, in general, be satisfied by one of the following options in accordance with the Academic Senate Regulation 2001, June, 1971:

1. Demonstration of a reading knowledge of two languages by passing an examination in each, set by the department(s) concerned. The department(s) determine(s) whether a dictionary may be used; the length of the passage and the time allowed are subject to regulation by the Graduate Council. For one of these examinations, the student may, subject to the approval of the department(s) concerned, substitute a five-quarter (or equivalent) sequence of courses in that language, of University grade, passed with an average of C or better. The Graduate Council establishes general policies respecting such sequences, including time limits beyond which they no longer carry credi-
2. Demonstration of an exceptionally thorough reading knowledge and an adequate knowledge of the grammatical structure of a single language. Such command is tested under the direction of the Graduate Council. In the above options the terms “language” and “languages” refer to any language certified to the Graduate Council by the departments concerned.

Students who by virtue of background have a native speaker’s command of a certified language will be considered to have met the language requirement as specified in 2. above. Standards for evidence of background will be established by the Graduate Council.

Noncredit courses for graduate students are offered by the various language departments to prepare students for reading examinations.

Notice of Intended Candidacy. Notice of intention to proceed to candidacy for a doctoral degree shall be given by students to their department or graduate division and the Graduate Adviser as early as possible in their graduate career, preferably by the end of the second quarter of residence.

Qualifying Examinations. Before admission to candidacy, students must pass a series of qualifying examinations administered by a committee appointed by the Graduate Council. Any previous deficiencies in training must have been removed, including satisfactory resolution of any incomplete grades. Examinations must be supervised by the Graduate Adviser for the individual program. At least a B average in all course work undertaken in graduate status must have been maintained, and the language requirement(s) must have been fulfilled.

Advancement to Candidacy. Application is made on a form furnished by the Graduate Division, no later than the quarter 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. A new 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 programs for the doctoral degree except the dissertation chairperson, is also filed with the Graduate Division.

After the dissertation has been approved by the candidate's committee, two copies (one an original) are filed with the Dean of the Graduate Division on a date specified by that office. Along with the dissertation, an abstract of it in triplicate not exceeding 600 words, with one copy signed by the dissertation chairperson, is also filed with the Graduate Division.

All of the procedures and regulations described above, and in the preceding section on master's degrees, constitute the minimum requirements for the higher degrees, as set by the Graduate Division. Each academic department may adopt additional requirements, as approved by the Dean of the Graduate Division and the Graduate Council.

Graduate Theological Union. The Graduate Theological Union in Berkeley offers graduate programs in religion that consist of Union courses as well as courses offered in the Graduate Division at Berkeley. Examinations, the dissertation, and the general scope of the program are under the direction of faculty members representing both the Union and the Graduate Division.

Further information and application forms may be obtained from the Secretary, Language Training Advisory Committee, Merrill College, University of California, Santa Cruz, CA 95060.

Stanford-California Exchange Program. Graduate students with superior academic records may participate in the Stanford-California Exchange Program when it is deemed desirable for them to take graduate work in departments 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. Students may participate 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 Stanford students who wish to take courses at Berkeley.

The program requires an initial application by December 1; this may be obtained from the Petitions Desk, Graduate Division, Room 1, California Hall.

Graduate Theological Union. The Graduate Theological Union in Berkeley offers graduate programs in religion that consist of Union courses as well as courses offered in the Graduate Division at Berkeley. Examinations, the dissertation, and the general scope of the program are under the direction of faculty members representing both the Union and the Graduate Division. Each academic department may adopt additional requirements, as approved by the Dean of the Graduate Division and the Graduate Council.

Initial information about the program, a catalog, and application forms should be obtained from the Graduate Theological Union, 2465 LeConte Avenue, Berkeley, CA 94720.

Joint Doctoral Programs. Immunology — An interdisciplinary program in the biological sciences has been established between the Berkeley and San Francisco campuses of the University of California leading to the Ph.D. degree in Immunology. The program does not replace the existing independent program on the Berkeley campus but is in addition to it, and is arranged to allow students to pursue study, on either campus, representing varied interests in the field of immunology. The program is obtained by application to the home campus participating in the joint program. The home campus is that on which the student expects to do research for the dissertation.

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. Students should make application 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 the Ph.D. degree has been established through the University at Berkeley and San Francisco State University. The program is interdisciplinary, including clinical experience as well as preparation in depth in the behavioral sciences and in statis...
tics and research methods. For application material and additional information, write to: Dean, School of Education, University of California, Berkeley, CA 94720, or to the Department of Education, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. Genetics – A joint doctoral program in genetics leading to the Ph.D. degree is offered by the University at Berkeley and San Diego State University. For application material and additional information, write to: Professor James W. Fristrom, Department of Genetics, 345 Mulford Hall, University of California, Berkeley, CA 94720.

Concurrent Degree Programs. Concurrent degree programs have been established in the disciplines listed below. The aim of these programs is to provide an integrated curriculum of greater breadth between the two disciplines. Inquiries for additional information should be directed to the departments or schools involved.

Business Administration, M.B.A.–Law, J.D. (Berkeley)
Business Administration, M.B.A.–Law, J.D. (Davis)
City and Regional Planning, M.C.P.–Law, J.D.
City and Regional Planning, M.C.P.–Public Health, M.P.H.
Criminology, M.Crim.–Law, J.D.
Economics, M.A.–Law, J.D.
Law Librarianship, M.L.S.–Law, J.D.
Librarianship, M.L.S.–Near Eastern Studies, M.A.
Public Health, M.P.H.–M.D. (San Francisco)
Public Policy, M.P.P.–Law, J.D.
Social Welfare, M.S.W.–Law, J.D.

STUDY ABROAD FOR GRADUATE STUDENTS

Graduate students who have been admitted for study toward a higher degree may, under certain conditions, secure permission to study abroad. Such study may consist of independent thesis study or participation in University-sponsored programs. 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 all of the study centers under the Education Abroad Program. A student must obtain the approval of both the department and the Dean of the Graduate Division.

Intensive language study is offered in Arabic at Cairo, in Japanese at Tokyo, and in Mandarin Chinese at Taipei.

Internship/Study Opportunities in Professional Schools Program in India. The Professional Schools at Berkeley conduct a program in New Delhi. Students may supplement their 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, 2207 Haste Street, Building D, Room 104-A, University of California, Berkeley, CA 94720.

FINANCIAL AID AND EMPLOYMENT OPPORTUNITIES FOR GRADUATE STUDENTS

Fellowships and graduate scholarships are offered on the Berkeley campus. Some are restricted to beginning graduate students, others to advanced graduate students; some are restricted to specific fields of study, others are open to all students by competition. Provision is made also for a number of traveling fellowships.

Some funds for these awards are made available from endowments held in trust by the University and given by interested friends and alumni; others are made available from annual donations from educational foundations, industry, government, and individual benefactors.

Information. Information on awards available each year is issued early in the fall. Requests for information should be addressed to the Graduate Division, 1 California Hall, University of California, Berkeley, CA 94720.

Application Procedure. The fellowship application deadline for the 1976-77 competition is December 1, 1975. Since the date is subject to change, a deadline set for receipt of fellowship applications.

Newly entering foreign students, however, must file a separate application for admission, not the combined form. Since the number of fellowship and graduate scholarship awards available to them is extremely limited, the following procedure has been adopted: as the applications for admission of new foreign graduate applicants are reviewed, departments may recommend to the Fellowship Committee that individuals of high academic distinction be considered for awards. This will be done entirely on the basis of recommendation, not by the applicant’s special request. Those who receive fellowship awards will be notified by the Committee of their award. If an April fellowship award is also approved by the Committee, the student’s admission application will be accepted. Fellowships and graduate scholarships are awarded without making further application. However, fellowship or graduate scholarship award programs mentioned here and in other notices do receive fellowship awards will be notified by the Office of Financial Aid as close to the December 1 deadline for the 1976-77 competition as possible.

Applications for all the fellowship and graduate scholarship award programs mentioned here and in the following page are considered only once a year, and are for the academic year beginning with the fall quarter and extending through the winter and spring quarters. None of the awards is made in mid-year.

Announcement of Awards. Awards are announced on or about April 1, and must be accepted or refused, in writing, by May 15. 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 the University of California, Berkeley. Any member of the Council of Graduate Schools in the United States or the Canadian Association of Graduate Schools that recommends the appointment of a student to graduate study must be willing to accept the student, on the recommendation of the University or the College of the University to which the student is admitted. Any member institution, receive Consent to do so from the university that first made the appointment.

Criterions of Appointment. The purpose of graduate appointments is to provide able and productive scholars for the future. Awards are thus made as a mark of honor, primarily on the basis of outstanding scholastic achievement and promise. The following criteria are used in considering these awards: academic record in undergraduate and graduate study; research or of some other creative accomplishment, intellectual capacity, and general promise, are all strongly considered. Financial need is taken into account in determining the level of stipend. Supplementation of a fellowship by employment or any other means is possible only with the express consent of the Dean of the Graduate Division, and the amount of supplementation is strictly limited. Persons supplementing fellowships without such approval may lose the fellowship and be prevented from moving to the fellowship funds disbursed to them.

Honorary Traveling Fellowships. Honorary traveling fellowships may be awarded to distinguished graduate students in any department. Such awards do not carry any stipend, but entitle the holder to official credentials from the University which may be of assistance in pursuit of studies and special inquiries in other states and foreign lands. Applications for honorary traveling fellowships must be received by the December 1 deadline set for other fellowships.

National Defense Education Act Fellowships. A number of National Defense Foreign Language Graduate Fellowships may be available under Title IV of the National Defense Education Act to train designated modern foreign languages. Students who apply through the regular University fellowship program will be considered for these awards without making further application.

Waiver of the Nonresident Tuition Fee. A very limited number of waivers of the nonresident tuition fee is available each academic year. These are awarded to graduate students with distinguished academic records or to teaching assistants, by departmental recommendation. Individuals whose waiver quotas are filled. Applicants must enroll full-time in a program of study leading to a higher degree and cannot be the recipients of a fellowship, scholarship, grant-in-aid, or any other award from a foreign government, or from any other source that would make them ineligible for the waiver privilege. Applications can be obtained from the Office of the Dean of the Graduate Division and must be returned to that office or before June 1. Awards are usually made in mid-year, and applicants are notified of the action on their requests. There is no waiver privilege for summer session registrants since the nonresident tuition fee is not assessed during the summer.

For information regarding the establishment of legal residence in the state of California, see under the heading “Nonresident Tuition Fee” in this list.

There will also be a limited number of Earl C. Anthony Tuition Scholarships covering the nonresident tuition fee of students who plan to study in the physical and biological sciences, in mathematics, or in engineering.

Graduate Minority Program. The primary purpose of this program is to provide financial assistance to minority students who are United States citizens, predominantly Black, Chicano, Native Americans (American Indians), and Asian Americans. The amount of financial assistance to be provided is determined by evaluation of academic promise, financial need, and availability of funds. Applicants for Graduate Minority Program (GMP) support are, of course, eligible to apply for assistance from other sources and are urged to do so.

Applications are available for new graduate students in the Graduate Division’s Admission/Fellowship application packet; and in the Graduate Minority Program office (1 California Hall, University of California, Berkeley, CA 94720) for continuing and returning graduate students. The deadline for filing the application is December 1.

All Graduate Minority Program applicants are required to file a University Financial Aid application in addition to the Graduate Minority Program application. The Financial Aid application is available...
GRADUATE DEGREES OFFERED ON THE BERKELEY CAMPUS

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 legal degree (formerly the LL.B.). It is a graduate degree and, although application is made directly to the School of Law, it is under the jurisdiction of the Graduate Division. Applicants should specify both general field and emphasis, if any.

Agricultural Chemistry, Ph.D.  
Agricultural Economics, M.S., Ph.D.  
Anatomy, M.A., Ph.D.  
Ancient History and Archeology, 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.  
Bacteriology, M.A., Ph.D.  
Biochemistry, M.A., Ph.D.  
Biophysics, M.A., Ph.D.  
Biology, Biomed., Ph.D.  
Biostatistics, M.S., 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.A., Ph.D.  
Criminology, M.Crim.  
Demography, M.A., Ph.D.  
Design  
Dramatic Art, M.A., Ph.D.  
Economics, M.A., Ph.D.  
Education, M.A., M.T., Ph.D., Ed.D.  
Endocrinology, M.A., Ph.D.  
Energy and Resources, M.S.  
Engineering Science, M.S., Ph.D.  
Emphasis for Engineering, M.S.  
Civil Engineering, Electrical Engineering and Computer Sciences, Industrial Engineering and Operations Research, Marine Science and Engineering  
Mechanical Engineering, Naval Architecture, Nuclear Engineering  
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.  
Folklore, M.A.  
Food Science, M.S.  
Forestry, M.F.  
French, M.A., Ph.D.  
Genetics, M.S., Ph.D.  
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: Genetic Advising, Medical Option, Mental Health  
Hispanic 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.  
Journals, M.J.  
Landscape Architecture, M.L.A.  
Latin, M.A.  
Latin-American Studies, Ph.D.  
Law, J.D., LL.M., J.S.D.  
Law and Society, M.A.  
Librarianship, M.L.S., Ph.D., D.L.S.  
Linguistics, M.A., Ph.D.  
Logic and the Methodology of Science, Ph.D.  
Mathematics, M.A., Ph.D.  
Medical Physics, Ph.D.  
Microbiology, M.A., 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.  
Physics, M.A., Ph.D.  
Physiological Optics, M.S., Ph.D.  
Physiology, M.A., Ph.D.  
Plant Pathology, M.S., Ph.D.  
Plant Physiology, 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.  
M.A. program 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 emphasis: Sanskrit, Modern Indo-Aryan  
Hindi and Urdu, South Asian Civilization, Ph.D.  
M.A. program emphases: Sanskrit, Modern Indo-Aryan  
Hindi and Urdu  
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.  
Certificate in Russian and East European Studies. Students who have had substantial training in the Russian and East European Area in at least two departments and have had 16 quarter units (or equivalent knowledge) of an East European language can, by taking a required number of additional courses in the area, obtain a Certificate in Russian and East European Studies. The certificate course requirements can be fulfilled either as part of a program leading to a higher degree in the social sciences or humanities or after receipt of such a degree.

Certificate of Completion of Graduate Curricula in the School of Librarianship. Three certificate programs have been established which are designed to meet the need for a bachelor's degree beyond the professional degree (M.L.S.) and short of the doctoral degrees (Ph.D., D.L.S.). The programs will be in the following fields: Bibliography, Library Administration, and Information Science, and Library Management. Inquiries should be directed to the School of Librarianship.

Interdisciplinary Groups. See Index.

Master of Arts in Teaching. The degree of Master of Arts in Teaching is offered by the School of Education jointly with the Departments of Comparative Literature, English, French, and German. At the present time, it is planned to extend to the four academic fields of study named above. 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 four subject fields.
Services and Facilities

This section offers a general outline of the vast range of services and facilities available at the Berkeley campus. Services include the Student Health Service, Counseling Center, Career Planning and Placement Center, Housing and Child Care Services, Office of Financial Aid, and many others. Facilities, including libraries, Study Abroad Programs, language laboratories, research at the Berkeley campus, Lawrence Hall of Science, gymnasiums, dining facilities, student organizations, and activities, are available to the entire student body. Services are provided in the Optometry Clinic of the School of Optometry for students, faculty, University employees, and the general public to the extent possible. These services are a part of the teaching program in the School of Optometry and are not included as a part of the Health Service.

Counseling and Psychological Services

Counseling Center (T-5). As a regularly enrolled student, you may make use of the services of a professional staff member to talk about scholastic performance, career choice, personal adjustment, assessment of interests and aptitudes, or exploring long-range career opportunities. Group counseling in social skills, personal problems, test anxiety, vocational exploration and decision making, weight problems, and grades, oral and written anxiety problems is also available. Psychological and aptitude testing are provided as part of the counseling process. All communications between students and counselors are treated confidentially.

Student Health Service. Located in Cowell Memorial Hospital in the eastern area of the campus, the Student Health Service is financed by a portion of your registration fee. This service is offered to conserve your time for classwork and studies by preventing and treating acute illnesses. Outpatient visits are available by appointment, Monday to Friday, 9 a.m. to 4:30 p.m. Emergency service is available 24 hours every day. Service hours may change during the summer session. A complete description of services is included in a booklet which is available at the Student Health Service.

When you pay the full registration fee, you are eligible for health service from the first day of the quarter in which you register to the last day of the quarter, or to the date of official withdrawal if you withdraw prior to the end of a quarter or semester. Non-registered students may be eligible for care at the Health Service during the summer months on a fee-for-service basis, provided they have been fully registered students the previous quarter.

With certain exceptions, the Health Service does not provide continuing treatment or surgery for chronic physical defects or illnesses present at the time of entrance to the University; for injury or illness under treatment elsewhere; for conditions where medical or surgical treatment is not immediately necessary and may be postponed to avoid interruption of classwork. A charge is made for all dental services.

Student Health Insurance may be provided for students not already insured. Since rates and benefits vary each year, we advise you to continue any insurance you have and to check with the Student Assistance office of the Student Health Service for the most recent information.

Students injured in the course of employment may be treated by the staff of the Student Health Service or by a physician recommended under the terms of the employer's workmen's compensation insurance. The Student Health Service program does not cover the expenses resulting from injury in the course of employment or when it is the result of liability or negligence on the part of someone else.

Treatment at the Health Service for injuries sustained in which someone other than the student is determined to be responsible is not a Health Service benefit under the registration fee. Students obtaining such care will be required to assign financial remuneration for medical expenses to Coehl Hospital to cover the cost of care received at the Health Service.

Optometry Clinic. Complete emergency and routine vision services are provided in the Optometry Clinic of the School of Optometry for students, faculty, University employees, and the general public to the extent possible. These services are a part of the teaching program in the School of Optometry and are not included as a part of the Health Service.

Pet Clinic. The Pet Clinic provides out-patient services, including all vaccinations, for students' pets. The Pet Clinic of the School of Optometry for students, faculty, University employees, and the general public to the extent possible. These services are a part of the teaching program in the School of Optometry and are not included as a part of the Health Service.

Counseling and Psychological Services

Counseling Center (T-5). As a regularly enrolled student, you may make use of the services of a professional staff member to talk about scholastic performance, career choice, personal adjustment, assessment of interests and aptitudes, or exploring long-range career opportunities. Group counseling in social skills, personal problems, test anxiety, vocational exploration and decision making, weight problems, and grades, oral and written anxiety problems is also available. Psychological and aptitude testing are provided as part of the counseling process. All communications between students and counselors are treated confidentially.

The Counseling Center maintains a library of reference materials on occupations, professions, and career opportunities for the use of students. The center also provides a comprehensive collection of college catalogs and directories of colleges, professional schools, and training programs. You may use these reference materials even if not seeking counseling services.

Special testing for admission to graduate or undergraduate programs (except ETS and Psych. Corp.) is administered without cost.

Psychiatric Clinic (Cowell). Students may have an appointment with a staff member of the clinic at any time to discuss matters of concern in any area of personal or campus life. Emphasis is on problems of living rather than "mental illness." An appointment can usually be arranged within a few days after a request, and students may utilize the service (once or twice or more) in either individual or group sessions. Information communicated during meetings in the Psychiatric Clinic is held in professional confidence.

Student Advising and Assistance (SAA). This office, located in 400 Eshleman Hall, has two basic functions. First, the staff provides counseling for students admitted to the Berkeley campus under the Educational Opportunity Program. Counselors are available to assist EOP students on a whole range of matters which might influence their success as students. The counselors make referrals to specialized services and resources as well as provide information on graduate and professional schools.

Second, the staff provides advising for students hoping to enter the various graduate and professional schools. Students interested in careers such as dentistry, law, medicine, nursing, pharmacy, or veterinary medicine find the office equipped to give comprehensive advising in these areas, as well as assistance with the important letters of recommendation to the schools of their choice.

Student Learning Center. Located in Building T-8, the Student Learning Center offers University of California, Berkeley undergraduate and graduate students academic skills help and tutoring in basic courses. (Hours: Monday - Friday 8 a.m. - 5 p.m.; Saturday 10 a.m. - 4 p.m.)

Learning specialists provide individual diagnosis and programs in reading, writing, exam preparation, test-taking skills in math, science, language arts, and social studies. Non-credit mini-courses are regularly offered in these skills as well as preparation for the GRE, LSAT, and MCAT.

Individual tutoring and group review seminars are offered in introductory mathematics, science, language (Spanish, French, and German), economics, business administration, statistics, and computer science courses. Priority for individual tutoring is given to students in academic difficulty. Others are seen on a first-come, first-served basis.

The Center's Library contains a self-help materials in reading, study skills, and various academic subjects. It is equipped with modern, electronic reading machines, tape-recorded tutoring devices, and a terminal for computer-assisted instruction.

Further inquiry or appointments may be made by seeing the receptionist in Building T-8 or calling 642-7332.

Office of the Ombudsperson. The Ombudsperson assists students and academic personnel with problems which seem insoluble by the usual procedures and agencies. If you have reached a procedural impasse or feel you have been treated unfairly in a matter affecting your academic status, there are two ombudspersons to help you. They are tenured faculty members who investigate the circumstances of complaints and make recommendations for their resolution.
The Ombudspersons Committee also makes general recommendations for changes of the policies that may enable or unfair or unfair regulations. Located in 328 Stephens Hall, they may also be reached by telephone at 642-5754.

Office of Student Activities. Located at 201 Sproul Hall, this office works closely with students and staff in their initiation, planning, and implementation of social and recreational activities, events, and programs that promote the desires and needs of students and the University community. Participation in student activities can assist in the development of leadership ability, responsibility, and personal growth and can give opportunities to make new friends and establish open communication on a large campus. Sponsored groups include honor societies, service organizations, sororities, fraternities, a health information program at Haste Street House, and Friendship International. Assistance is given in registering student groups for their use of facilities, in dissemination of information regarding campus rules and regulations, and in administering funding for student musical activities (i.e. Marching Band, Jazz Ensembles, Choral division).

Physically Disabled Students Program. Located at 2532 Durant, #2, Berkeley, telephone 642-0518, this office offers services to students with diverse disabilities, including but not limited to cerebral palsy, etc., either permanent or temporary. These services include assistance in locating housing, in pre-entrance, orientation to campus and community, supplying keys to elevators and to student staff, and informing readers and tutorial help, and in hiring and training attendants.

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 the Office of Student Activities, 201 Sproul Hall. This office will supply general information regarding program and costs.

Student Information Center. Located in 102 Sproul Hall, this center provides easy and informal access for students seeking information related to their status as members of the University community. Broadsheet, general counseling is also available, and referral for more specialized assistance is made. The Center maintains contact with a student unfamiliar with or having problems with the requirements and organization of the University. In addition to its full time staff, two attorneys are available on a part-time basis to answer questions for representation, as well as two staff for general information counseling on a student-to-student basis.

Of particular interest to new students are the Center's orientations programs during the summer and at the start of each quarter. Every effort is made to provide on-the-spot information and orientation to those entering the University for the first time to insure a quick and easy adjustment. During the pre-enrollment period and the first few weeks of the quarter, both new and continuing students make heavy use of assistance provided at the Help Center located in the Student Union. Operated by the Student Information Program, a staff is assigned to students from the Orientations Program with assistance and support from the Center's staff.

Among other services provided are: the Student Handbook, covering general information about student government, Selective Service, police information, and advice for those who may have difficulty to obtain information about the various types of student aid offered. Undergraduate students may apply to the Financial Aid Office for undergraduate scholarships (including Regents and Graduate Schools Scholarships stipend) and Supplemental Educational Opportunity Grants. Both undergraduate and graduate students may apply for University Grants-in-Aid, Educational Fee Grants, National Direct Student Loans, University Loans, Federally Insured Student Loans, Educational Fee Deferrment Loans, Work-Study Program, and other aid programs. Undergraduates may also apply for Educational Fee Grants and undergraduates transferring as juniors from non-University of California institutions are eligible to apply for improved Access Grants. Prizes are also offered.

All of these forms of financial aid except honorary scholarships and prizes are granted on the basis of financial need only. Prizes are awarded on the basis of the competition or outstanding ability in some area of creative or scholarly achievement. Undergraduate scholarship awards are made on the basis of academic achievement and except Regents and Alumni Honorary Scholarships which are awarded in recognition of outstanding achievement and promise. Complete information concerning all of these awards is contained in the "Financial Aid Information Program" which may be obtained from the Office of Financial Aid. A separate booklet describing the various prizes offered is also supplied on request by the Committee on Prizes, 224 Sproul Hall.

Application forms for these financial aids should be available about October 1 for the following year, and must be filed by the dates shown in the Calendar, 1975-76, in this catalog, except those for University loans and some other minor programs. Information about graduate application deadline dates for these latter is contained in the "Financial Aid Information" or "Prizes" booklets.

Information about graduate fellowships and graduate scholarships may be obtained separately from the Graduate Division, 1 California Hall. California State Scholarships are awarded by the State and are open for application to undergraduates and, in some years, to graduates. They range in value from $300 to $300 and apply toward the registration and educational expenses of students. More information about these forms of financial aid is also provided in the "Publications Financial Aid Information" and "Financial Aid Information Programs." These publications are available at the Office of Financial Aid, 222 Sproul Hall.

Aid to Veterans and Dependents of Veterans. If you are a veteran, or a veteran's dependent, you may contact the Veterans Affairs Office, 222 Sproul Hall or, from the Veterans Administration Regional Office, 211 Main Street, San Francisco, California, 94105, beginning about October 1 for the following year. The filing date is in mid-November.

Social Security Benefits. If you have questions regarding Social Security benefits, inquire at the Office of Financial Aid, 222 Sproul Hall.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.

Career Planning and Placement Center. The Center is composed of locations to service career planning needs and employment of students and alumni.

Student Employment Services. See Career Planning and Placement Center.
textbooks, uniforms, and supplies. The programs carry a tuition and fees charge of $100 per month, plus book expenses, registration fees, and an allowance for books, and $100 per month in nonpayable tax.

2. Two-Year Program: A two-year program is offered to undergraduate or graduate students. Selected applicants complete the program during a two-year period preceding the Commissioning Program. Two academic years are required to complete the program as described under Academic Preparation. The commissioning and active duty procedures are as described above. Cadets are paid $100 per month during the two academic years.

3. Three-Year Program: Awarded annually to outstanding cadets who are completing their first year of the four-year program as described above. Benefits and service obligations are identical to those described above for the four-year scholarships.

b. Three-Year: Awarded annually to outstanding cadets who are completing their first year of the four-year program as described above. Benefits and service obligations are identical to those described above for the four-year scholarships.

c. One-Year: Awarded annually to outstanding cadets who are completing their first year of the four-year program. Benefits and service obligations are identical to those described for four-year scholarships.

For additional information on any of the programs and their benefits please consult the Department of Military Science.

The University Library. The Berkeley campus library serves the needs of Berkeley's 20,000-plus undergraduate students. It provides research materials available for reading in most undergraduate courses as well as carefully selected materials in all subject fields.

Branch Libraries are located near the departments of the University. These include the Biochemistry, Biology, Optometry, and Public Health libraries; the Agriculture, Entomology, Forest Products, Forestry libraries; the Astronomy- Mathematics-Statistics-Computer Sciences, Chemistry, Earth Sciences, Engineering, and Physics libraries; the Anthropology, Graduate Social Science, Library School, and Social Welfare libraries; and the East Asian, Education/ Psychology, Environmental Design, and Music libraries.

Special Libraries are located on or near the campus. Among the most important are those of the Center for Chinese Studies, the Giannini Foundation of Agricultural Economics, the Institute of Governmental Studies, the Institute of International Relations, the Institute of International Studies, the Institute of Transportation and Traffic Engineering, the School of Law, and the Water Resources Center.

A student is entitled to use these libraries, upon presentation of his registration card. However, borrowing privileges and access to the collection vary from unit to unit. For more information about the campus library system, please inquire at the General Reference Desk in the Main Library or at the Reference Desk in the Moffitt Undergraduate Library.

Language Laboratory. The Language Laboratory is located in the basement of the southernmost wing of Dwinelle Hall. The Laboratory has listening positions for one or more than one thousand students. The tape library has more than 9,000 reels in sixty-five languages. Most are language lessons, but there are foreign literature readings as well. Facilities are designed to accommodate large enrollments, but random listening is encouraged to the extent that facilities permit. Some of the popular language lesson series are available in a lending collection for home study. Some of the Laboratory's materials may also be bought at cost. Assistance to students wishing to study certain exotic languages is available by application at the Laboratory office.

Sports and Recreation. Harmon Gymnasium and Hearst Gymnasium are equipped with swimming pools, as well as squash, handball, volleyball, and tennis courts, athletic fields, and a variety of indoor facilities. They are open throughout the year, free of charge, to students of the University, who may obtain, upon showing a current student registration card, a locker and free use of gym clothing and equipment. Hours during which facilities are available for recreational use are posted in the gymnasium.

A wide variety of instructional, intramural, extramural, intercollegiate, and recreational athletic programs and sports clubs are offered by the Department of Physical Education, Department of Intercollegiate Athletics, and the ASUC. Strawberry Canyon Recreational Area serves the entire University community with swimming pools, lounging, play, and picnic-barbeque areas. Further information may be obtained by visiting Hearst Gymnasium.

Dining. The Dining Commons is just north of the Student Union. On Sproul Plaza level: The Terrace

Documents Department, Art History/Classics, Humanities Graduate School, Morrison Library, Mary Room, Newspaper and Microscopy Room, Periodical Room, and the Bancroft Library, which houses major collections in the history of California, western America, Mexico, and colonial Latin America, as well as rare books of all countries and periods.

The James K. Moffitt Undergraduate Library is an open stack core collection of 146,000 volumes and 540 serial titles, designed to provide a convenient point of entry into the complex library system for Berkeley's 20,000-plus undergraduate students. It provides reserve materials assigned for reading in most undergraduate courses as well as carefully selected materials in all subject fields.

FACILITIES

Campus Libraries. The University maintains a network of reading and research libraries located on or near the campus. The holdings of the Main Library, the Moffitt Undergraduate Library, the universities, primarily for students of the University, and, during the two-month period between the end of the regular academic year and commencement, for selected graduate students. Other aspects of this program are identical to those of the four-year program.

3. Scholarship Program

a. Four-Year: Awarded annually, by nationwide competition to outstanding prospective college students. Those selected receive $100 monthly tax-free stipend, payment of tuition and incidental and laboratory fees, and allowance for books, and $100 per month in nonpayable tax.

b. Three-Year: Awarded annually to outstanding cadets who are completing their first year of the four-year program as described above. Benefits and service obligations are identical to those described above for the four-year scholarships.

c. Two-Year: Awarded annually to outstanding cadets who are completing their first year of the four-year program as described above. Benefits and service obligations are identical to those described above for the four-year scholarships.

d. One-Year: Awarded annually to outstanding cadets who are completing their first year of the four-year program. Benefits and service obligations are identical to those described for four-year scholarships.

For additional information on any of the programs and their benefits please consult the Department of Military Science.

The University Library. The Berkeley campus library system consists of the Main Library, the Moffitt Undergraduate Library, twenty branch libraries, and numerous special libraries.

The Main Library houses most of the humanities and social sciences materials, and the central services library, the University Library. The University Library is supported by a grant from the General Reference Service, special service or specialized reference assistance is given by the
through workshops and summer Institutes. A Dis
Science education research and curriculum develop-
ment in science education. In this cen-
table, a variety of snack foods. Also in the Cafeteria building is The Dell
featuring made-to-order sandwiches from a large
dispelates mes and cheeses; delici-
uses coffee beans freshly ground before your eyes. The Ice
Creamery, located in the southwest corner of the
Cafeteria (toward Zellerbach), serves many flavors of
ice cream cones, floats, malts, milkshakes and
sundaes. In addition, you can enjoy a variety of
snacks. The Commons also operates a catering
service for special functions and student activities
on campus; a Mobile Unit—The Oskimobile—
makes scheduled stops at various locations with
snack and beverage service; and there is an Office
Coffee plan. A snack area specializing in express
coffee is located in Wurster Hall. In addition coffee
service shop is available at 4119 Dwinelle Hall and
24 University Avenue for Catering or
Office Coffee Service call (64) 2-3620.

Student Union and Student Center. The Student
Union, located on Bancroft Way at Telegraph Avenue,
is a focal point of student activities and recreation.
It contains lounges, a television room, meeting
rooms, Pauley Ballroom, an art exhibit area, a
games room, a meditation room, a check-cashing
service, the ASUC Box Office, the ASUC Store (a
comprehensive book, stationery, and sundries
supermarket), Gourmet Carts (including an inter-
ter, a bowling alley, a barber shop, a garage, a
bicycle shop, a creative arts studio, the Bear’s Lair,
facilities for the ASUC musical organizations, and
headquarters for the Co-Bart, a free city bus service
operating between the BART Station and
various campus buildings). Operating costs of the
Student Union are largely financed by revenues
from ASUC enterprises.

Eshleman Hall, the student office building located
on Bancroft Way next to the Student Union,
houses the elected student officers, the Personnel
Office for employment with the A.S.U.C., Senate
Chambers, and many student activities.

Zellerbach Auditorium, the Dining Commons, Lud-
wig’s Fountain, and the Lower Sproul Plaza com-
plete the Student Center.

Computer Center. The Computer Center, located in
239 Evans Hall, serves the entire campus by (1)
providing and operating a Control Data 6400 sys-
tem to meet the instructional and research needs of
the campus, and (2) the development of both hardware and applications.

A program library and a consultation service are
maintained to provide information about the operat-
ing and programming systems to assist users. In
addition to programming consultation, the Center
has an applications programming group who will
undertake programming tasks for users. The Cen-
ter also provides a keypunching service for users of the
computer.

Lawrence Hall of Science. The Lawrence Hall of
Science, located in the hills of the Berkeley cam-
pus, is a center for research and development in
science education. In this cen-
ter, the resources of the University and the
needs of the community interact to improve and stimu-
late investigation at all levels of instruction.
Science education research and curriculum
development projects are an important aspect of its
program. It provides in-service teacher training
through workshops and summer institutes. A Dis-
covery Van brings programs and instructional ma-
terials developed at the Hall to teachers and
students within a 150-mile radius of Berkeley. The
William K. Holt Laboratories feature a combina-
tion of theater-in-the-round and audience partici-
pation. Several programs are offered alternately in
which the audience becomes actively involved in
the astronomical displays. Courses and work-
shops are also offered in astronomy for adults and
children. A school visitation program brings over
8,000 children to the Hall during the academic
year, and after-school classes are offered in math-
ematics, astronomy, and computer instruction.
Instructional facilities include an auditorium, laboratories, shops, time-sharing
computer systems, and a science education li-
brary.

The public activity seeks to encourage individual
participants to enjoy first-hand the excitement of
solar system exploration. Computer terminals are available to the public for
a modest fee. A public program featuring films,
lectures, and audience participation demonstra-
tions are offered every weekend and daily during
the summer months. A Thursday Evening Lecture
Series offers a variety of topics from art history
and folklore to physical and life sciences. The Hall is
open daily from 10 a.m. to 4:30 p.m., and Thursday
evenings until 9 p.m.

STUDENT ORGANIZATIONS AND ACTIVITIES

The ASUC. The Associated Students of the University
of California is the official organization for
student government. The office of the Executive
Director is located in 207 Eshleman Hall. You au-
tomatically become a member upon completion of
the ASUC fee along with other registration fees.
This nonprofit organization, through its student-
elected Senate, is responsible for directing a large
variety of student activities and serves as official
student representatives on all University groups. You are urged to make use of your ASUC votes to secure
the representatives you feel will serve you capably
and articulately. Graduate students also elect de-
partmental representatives to the Graduate As-
sembly, which concerns itself with graduate af-
fairs. The ASUC also coordinates student partici-
pation in all Registration Fee Committees; it also
selects undergraduate and graduate students to
serve as interns in units receiving registration fee
funding for the purpose of reviewing and com-
menting upon the use of such funding. One of
the many student publications is Occident—the literary magazine, featuring poetry,
fiction, criticism, and commentary, by students,
faculty, and distinguished guest writers. Located
in Pelican Building.

California Engineer—a magazine of engineering
and scientific topics, for both technical and gener-
nal readers. Located in 1840 LeConte.

The Berkeleyan—a quarterly campus humor
magazine. Located in Pelican Building.

California Engineer—a magazine of engineering
and scientific topics, for both technical and gener-
nal readers. Located in 1840 LeConte.

The Berkeleyan—a quarterly campus humor
magazine. Located in Pelican Building.

Occident—a literary magazine, featuring poetry,
fiction, criticism, and commentary, by students,
faculty, and distinguished guest writers. Located
in Pelican Building.

Blue and Gold—the Campus newspaper. Located in Eshleman Hall.

Lectures, Music, Dance, Debate. The Univer-
sity offers a broad variety of extracurricular activi-
ties in the humanities. These include:

Committee for Arts and Lectures (CAL)—a year-
round program of drama, music, dance, films, and
lectures. Some events are open to students and
to the University community without admission
charge. For those events requiring tickets, a re-
duced price is usually available for registered
students. Brochures announcing Committee for
Arts and Lectures events are available at the ONC
Office, 104 Zellerbach Hall, or the Information Desk of
the Student Union. For information, or to make tele-
phone reservations, call 642-2581.

Music—a large selection of student groups, in-
cluding the Student Concert Chorale, Student
Chamber Singers, Octet, decibelles, Jazz Ensem-
bles, California Marching Band, and other groups
in the Music Department, such as University
Chorus, which students may join for academic

credit. There are also weekly noon concerts, open free of charge to the general public. San Francisco Symphony takes special students to their shows at special prices. For additional information, contact the Office of Student Activities, 201 Sproul Hall.

Theater and Dance — The Department of Dramatic Art offers a series of plays produced at all regis- tered student theatre venues. There are also dozen of choreographic workshops in modern dance tech- niques. An in-residence dance company gives concerts and demonstrations throughout the year in schools and community centers on the West Coast. Unit credit may be earned by work in play and dance production.

Debate — Varsity Debate and individual events, open to both veterans and novices, constitute the Forensic Program of the Berkeley campus. For additional information, contact the Office of Student Activities, 201 Sproul Hall.

For information about other campus events, please consult the Information Desk in the Student Union.

Special Interest Clubs. Besides regular ASUC-sponsored activities, there are more than 250 reg- istered clubs 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 organiza- tions and to give you an opportunity to join.

Academic and professional societies, including clubs organized by the schools’ de- partments, as well as national professional fran- chise, provide students with an opportunity for seminars, discussions, lectures, tutoring services (both giving and receiving), and communication with members of an academic or professional field. Honorary academic societies are open to students of outstanding scholastic ability. These groups include such Honors Societies; Theta Chi Kappa (a national society of historical renown, open by invitation to the top seniors in nonprofes- sional fields); Tau Beta Pi (a national society of upper division students in the College of Engineer- ing and in Chemical Engineering), and various other groups within the several disciplines. Most of these groups offer tutoring services.

Hobby and recreational groups abound. And while the University, as a State-supported institution, does not offer chapel services or religious activities 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, 201 Sproul Hall.

International House. International House is a co-educational residence and program center for American and foreign students, primarily at the graduate level. Cultural and social events, home hospitality, tours and visits around California are designed to promote better understanding and friendship among all nationalities. For application in- formation and further information, write or call International House, University of California, Berkeley, CA 94720; telephone number (area code 415) 642-9470 or 642-9490.

Women’s Center. The Center for Continuing Educa- tion of Women (known as the Women’s Center) is located in the north end of Building T-B. Hours are 9 a.m. to 5 p.m. (including the noon hour), Monday through Friday. The Center provides in- dividual counseling and group workshops for aca- demic and vocational planning, a library of re- sources for research about women, and several series of public programs for all interested persons from the community.

GENERAL

The University Press, the University of California Press, located at 2223 Fulton Street, is one of the largest university presses in the country. It pub- lishes scholarly books, books of general interest, about twenty monograph series, a line of quality paperbacks, and eleven scholarly journals. Books and paperbacks number about one hundred and fifty each year. The press serves all campuses of the University equally; its publishing program car- ries the work of the faculty beyond the campuses themselves.

The Alumni Association. More than 56,000 former students of the University find the California Alumni Assc. Association a means of working for the con- tinued welfare of the University and the student body. The Association sponsors the Alumni Scholar- ship program, which annually gives some 500 awards totalling over $100,000 to students. (The funds, donated by individual alumni, are chan- neled through the California Alumni Foundation.) The Association presents orientation programs for prospective and returning students, offers free-tax counseling for Cal students, sponsors an annual Career Fair, maintains a Career Representatives File, and promotes a Cal Jobs program. Associa- tion members have the right to attend all Association’s campus headquarters, Alumni House, where students and alumni are always wel- come.

Study Abroad for Undergraduate Students. You have a number of opportunities to earn University of California credit while studying abroad. The statewide Education Abroad Program has study centers at the following universities:

Africa
University of Ghana, Legon-Accra
University College, Nairobi
Asia
Chinese University of Hong Kong
International Christian University, Tokyo, Japan

Central America
Ibero-American University, Mexico City, Mexico
Europe
Universities in France: Bordeaux, Grenoble, Montpellier.
Paris (Film Program), Pau-Paris, Poitiers
Georg-August University, Gottingen, Germany
University of Zurich, Switzerland (a part of The United Kingdom and Ireland program)
University of Padua, Italy
University of Bergen, Norway
Universities in Spain: Barcelona, Madrid
University of Lund, Sweden
State University of Latvia, USSR
Universities in the United Kingdom: Birmingham, Edinburgh, Kent, Leeds, Reading, St. Andrews, Stirling, Sussex

Middle East
Universities in Israel: Haifa, Jerusalem (Hebrew University),
American University of Beirut, Lebanon
South America
University of Sao Paulo, Brazil
Requirements for participation are a grade-point average of 3.0 and sufficient language prepara- tion. Nine quarters of Russian are required for U.S.S.R. The equivalent of six quarters of the host language is required for the centers in France, Germany, Italy, Mexico, and Spain. Three quarters of the host language equivalent are required for Brazil, Tokyo, and Italy (if the student agrees to attend a required summer session in Italy im- mediately prior to the academic year program at additional cost). Three additional language require- ment are required for the centers in Scan- dinavia and Israel. The centers in Africa, Hong Kong, Lebanon, and the United Kingdom have no language requirements, but appropriate academic preparation is necessary.

Full credit is given for work taken overseas, but it is the student’s responsibility to obtain the approv- al of his department or college before departure. Undergraduate programs are inten- ded primarily for juniors, but seniors may also participate. However, seniors should inform themselves of residency requirements and unit limits of their respective University scholarships, loans, and grants may be used to finance the year abroad.

Berkeley also participates in several intercollegi- ate consortia for advanced language studies: Rome Classics Program (requiring Latin fluency), Japanese language study in Tokyo, Mandarin Chi- nese study in Taipei, and Arabic study in Cairo.

Graduate students may study in most of the pro- grams subject to the approval of their adviser 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 advis- ers and the study abroad counselor in the Interna- tional Education Office, 2537 Haste Street, Build- ing D, Room 104-A.

University Police. Police service is available twenty- four hours a day at the University Police Dep- artment, Room 2, Sproul Hall.

Emergency (64)2-3333. Business (64)2-6760. The emergency number should be utilized to report any occurrence requiring immediate response, in- cluding fires or ambulance service. Other services are also available from the Police Department, such as providing assistance and counseling in crime prevention and personal protection; Opera- tion Identification, engraving of personal property to protect against theft; Bicycle Bureau, located in the Old Art Museum at the end of Barrows Lane, issuing Berkeley bicycle licenses and advice on bike security; (10 a.m. to 5 p.m., Tuesday through Saturday); Lost and Found service located across from Room 2, Sproul Hall (10 a.m. to 4 p.m., Mon- day through Friday, telephone (64)2-4936). There are employment programs in the Department for U.C. students to work as Police Aides as well as Federally funded Police Apprentice positions for members of the community. For all emergency services including police, fire, or ambulance, call (64)2-3333.

FEES 9 AND EXPENSES

It is extremely important that students carefully consider the total financing of their education, from the entering quarter to the completion of the degree objective. If financial help will be needed, beyond those funds which the student or the family are 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 deadline dates of ap- plication for grants, scholarships, Work-Study and National Direct Student Loans. While the needs and resources of each student differ, the Universi- ty can provide a general list of fees and expenses normally encountered.

Part of the fees may be refunded to students who cancel their registration prior to the first day of classes or who withdraw before the beginning of the sixth week of classes of any quarter. A separate circular, Student Fees and Deposits, gives infor- mation on refunds. This circular is available from the Office of Admissions and Records.

TABLE OF FEES AND EXPENSES

At the time of registration, by mail or in person, the following fees are paid by each student (explanation of components of these fees appear in the next section, entitled “Explanations of Fees and Expenses”):

9 Fees are subject to change without notice.
Student Fall, Winter, or Spring Category Quarter 1975-76
Resident Undergraduate .......................... $212.50
Nonresident Undergraduate ......................... 715.50
Foreign Undergraduate ............................... 725.50
Resident Graduate .................................... $232.50
Nonresident Graduate ................................. 732.50
Foreign Graduate ..................................... 749.75
School of Law Term 1975-76
Resident Graduate ................................. $353.75
Nonresident Graduate ............................... 1,103.75
Foreign Graduate ................................ 1,129.75

EXPLANATION OF FEES AND EXPENSES

Required Fees
University Registration Fee — $100 per quarter;
$150 per term for students in the School of Law.
Paid by all students. Covers normal expected usage
of such facilities as laboratories, gymnasium,
counseling and placement services, health serv;
etc.
Educational Fee — Paid by all undergraduates at
$100 per quarter, by students in the School of Law at
$180 per term, and by all other graduate students at
$120 per quarter. Used to support a portion of the
educational program. The Educational Fee may be
reduced to $25 for undergraduate students who have received prior
approval from the Dean of their College or School
to enroll in a program of less than 9 units.
Berkeley Campus Fee — Paid by all students in the
amount of $12.50 per quarter and by students in the
School of Law in the amount of $16.75 per
quarter. Provides support for a wide range of activi-
ties sponsored by the ASUC, including work with
academic and administrative units of the campus,
covers use of the Student Union, helps pay costs
for construction of the Union building, and assists
with the provision of ethnic studies on the Berkeley
campus.
Nonresident Tuition — $500 per quarter; $750 per
term, School of Law.
Foreign Student Health Insurance — $17.25 per
quarter; $26.00 per term, School of Law. Required
of all students on nonimmigrant visas. Payment of
the fee for three consecutive quarters (two terms in the School of Law) covers the student for the full
academic year, including summer.

Additional Fees and Expenses

Late Registration — $25. Students who register
during the late registration period (see Calendar
for dates) are liable for this fee.
Late Study List Filing — $10. Students who file their
Study Lists late (see Calendar for dates) are liable
for this fee.
Re-enstatement — $10.
Subject A Fee — $45. Applies to those who are re-
quired to enroll in the Subject A course.
free admission or reduced rates to most University
athletic events.
Student Health and Life Insurance: Optional, avail-
able through ASUC. Provides coverage, beyond
normal service of the Student Health Service, in
any of several standard health and hospitalization
plans. Optional insurance. All additional advantage of
including student’s spouse. Rates lower than normal adult
rates.
Books and Supplies. Normally about $200 — $300
a year on the average.
Living Expenses: Room and board in living groups
will range from $1,200 to $2,000, for the academic
year, with an average of around $1,600. Apartment
housing (rent, utilities, and food) if shared with
others for nine months, would have the same
range. If leased for twelve months the cost of,
course, would be higher.

Entertainment and Miscellaneous Costs. A student
will need to take into account laundry, cleaning,
transportation, and other personal expenses
which will average from $500 to $700 per academic
year.

Total Estimated Expenses Per Year:
The following approximates the total budget for three
quarters. This estimate is based on fees and ex-
enses for single undergraduate students:

- Resident Students ............................. $3,500.00
- Nonresident Students ......................... 5,000.00
For additional information, contact the Office of
Admissions and Records.

RESEARCH AT BERKELEY

The Berkeley campus is renowned for its programs
of faculty and graduate student research, which are
conducted within teaching departments and organized research units. In some instances, spe-
cial departmental laboratories have been established
to provide essential services to instruction
and research projects.

Organized research units are established and ad-
ministered separately from the teaching depart-
ments. The units are designed to be interdisci-
plinary in nature and organized around the work
of a group of faculty and graduate students whose
research interests are more general in nature than
can be encompassed in a single discipline.

While the organized research unit aims primarily
to support the research faculty and to assist in
graduate student training, public service and in
some instances a degree of mission orientation
may be appropriate.

Organized research units may bear the designa-
tion of Institute, Center, Laboratory, Museum, or
Station, depending on the nature of the activity supported
and the organization visualized when a
particular unit was established. These units are
granted administratively according to the breadth of
interest they represent. The grouping may be
within the Graduate Division, a School, or a Col-
lege. Specific administrative groupings are as fol-
loves:

School of Business Administration
Center for Research in Management Science

College of Engineering
Earthquake Engineering Research Center
Electronics Research Laboratory
Operations Research Center
Sanitary Engineering Research Laboratory
Sea Water Conversion Laboratory
Institute of Transportation and Traffic Engineering

College of Environmental Design
Center for Planning and Development Research

Graduate Division
Biological Marine Laboratory
Institute of Business and Economic Research
Center for Research and Development in Higher
Education
Institute of Human Development
Institute of Industrial Relations
Institute of International Studies
Center for Chinese Studies
Center for Japanese and Korean Studies
Center for Latin American Studies
Center for South and East European Studies
Center for South and Southeast Asia Studies
Lawrence Hall of Science
Institute of Race and Community Relations
Space Sciences Laboratory
Survey Research Center
Institute of Urban and Regional Development
Center for Real Estate and Urban Economics
White Mountain Research Station

School of Law
Earl Warren Legal Institute
Center for the Study of Law and Society

College of Letters and Science
Archaeological Research Facility
Field Station for Behavioral Research
Cancer Research Laboratory
Institute of Governmental Studies
Institute of Human Learning
Law School
Lowie Museum of Anthropology
Center for Pure and Applied Mathematics
Museum of Paleontology
Institute of Personality Assessment and Research
Laboratory of Radio Astronomy
Seismographic Stations

Institute of Vertebrate Zoology

School of Librarianship
Institute of Library Research

School of Natural Resources
Agricultural Experiment Station
Giannini Foundation
Forest Products Laboratory
Wildland Research Center
International Center of Biological Control

School of Public Health
Naval Biomedical Research Laboratory

Lawrence Berkeley Laboratory
Laboratory of Chemical Biodynamics
Donner Laboratory

Energy and Environment Division
Inorganic Materials Research Division
Nuclear Chemistry Division
Physics Division
Accelerator Division

In addition to the officially established organized
research units, there are numerous special facili-
ties for the support of faculty and student pro-
grams.
A college accepts students directly from high school or as transfers from another institution and offers undergraduate instruction, normally as a four-year major leading to the bachelor's degree; however, departments in all the colleges offer programs of study beyond the bachelor's degree, in conjunction with the Graduate Division. The colleges are designed to provide the students with a thorough preparation in a vital area of study, and to give them some acquaintance both with allied fields and with general fields of knowledge. Although students may take some courses in another college or school, their degree requirements are determined by the dean and faculty of the college in which they are enrolled. The College of Letters and Science emphasizes the study of the general academic areas for their own sake, whereas the other colleges emphasize the study of these areas in relation to applied arts and sciences. A school normally begins instruction at the upper division or graduate level and is designed to provide a student with training preparatory to a specific profession. The school assumes its students to have acquired before entrance some background in general academic areas. The degrees offered by the schools are accredited by statewide and national boards and associations for the various professions, and normally allow the graduating student a direct entry into the field. Each of the colleges and schools has its own administrative officials and its own regulations for earning a degree. All undergraduate students at the University belong either to a college or a school they are expected to satisfy requirements for the degree on three levels: University, college or school, and field of concentration. This section provides a broad survey of the colleges and schools and their degree programs. For further information, see the individual school or college announcements.

**College of Chemistry**

The College of Chemistry comprises two departments, the Department of Chemistry and the Department of Chemical Engineering. The College offers programs leading to the B.S., M.S., and Ph.D. degrees in chemistry or chemical engineering. The College of Letters and Science offers a chemistry major leading to an A.B. degree through a curriculum with a greater proportion of courses in the humanities and social sciences than is included in the B.S. chemistry program. Recommended high school preparation for Chemistry or Chemical Engineering should include: biology (1 year), physics (1 year), mathematics (4 years) including trigonometry, intermediate algebra, analytic geometry. Where the choice is available, the preferred foreign language is German.

For more specific description of the programs for the various degrees, as well as options of specialization, see the Announcement of the College of Chemistry.

**College of Engineering**

The College of Engineering offers programs in a wide variety of engineering fields, based on the concept that students will be well grounded in the sciences and in social and humane studies, with a full command of the principles and practices of the profession.

Four-year undergraduate curricula are offered in the following professional fields: civil engineering, electrical engineering and computer sciences, industrial engineering and operations research, mechanical engineering, and materials science and engineering. Each of these curricula is administered by a separate department within the College and each emphasizes a core program of science and engineering subjects related to the particular engineering discipline. In addition, Engineering Science programs with bioengineering, engineering geoscience, engineering mathematics or mathematical statistics, and engineering physics. In engineering degree programs leading to a B.S. degree in two fields are offered through most departments in conjunction with either Materials Science and Engineering or Nuclear Engineering.

High school preparation for study in engineering includes the following: algebra (2 units); plane geometry (1 unit); trigonometry (1 or 2 units); physics or chemistry, preferably both (1 or 2 units). Advanced mathematics courses are acceptable if they include the mathematics topics listed above. It is suggested, however, that students also include a minimum of 1 unit of high school mechanical drawing as part of their preparation since graphic communication is an essential part of engineering.

Students may refer to the Announcement of the College of Engineering for a detailed presentation of the curricula available. Specific courses are listed in the Announcement and in the course section of this catalog.

Graduate programs are offered leading to the Master of Science and Doctor of Philosophy degrees for study emphasizing engineering applied sciences, and Master of Engineering and Doctor of Engineering degrees for advanced professional studies of design and development. Fields of study include civil engineering, electrical engineering and computer sciences, industrial engineering and operations research, mechanical engineering, nuclear engineering, materials science and engineering, geoscience, fluid mechanics, and semiconductor science. Also, interdisciplinary graduate programs are available in air pollution engineering, bioengineering, energetics, ocean engineering, and urban and public systems. Specific graduate programs may also be found in the Announcement of the College of Engineering.

**College of Environmental Design**

The College of Environmental Design is composed of the departments of Architecture, City and Regional Planning, and Landscape Architecture.

Undergraduates entering the College will enroll in a four-year curriculum leading to the academic degree Bachelor of Arts with a major in either architecture or landscape architecture. Individual majors and a limited program in visual design are available for continuing students. On the graduate level the College presently offers curricula leading to the Master of Architecture, Master of Landscape Architecture, Master of City Planning, and Master of Arts in Design; and the Doctor of Philosophy in Architecture, Landscape Architecture, and in City and Regional Planning. The Architecture degree fulfills the first professional degree applicable to requirement for state registration in architecture. The Master of Landscape Architecture degree is similarly applicable to the registration of landscape architects.

It is recommended that high school preparation for the College include mathematics through trigonometry, one year of freehand drawing, and one year each in two of the physical or natural sciences.

The A.B. degree programs in the College require the completion of 180 units. A minimum of 40 units in the major must be completed at Berkeley as well as 24 units of environmental studies in the College.

Breath requirements consist of completing 60 units in breadth in courses other than Environmental Design. The remaining 56 units are elective. No more than 60 units may be completed in upper division courses in any one department for degree credit.

 Procedures for undergraduate admission, registration, and enrollment are identical to those of the University in general. However, students who have credit for more than 150 quarter units of university level work are encouraged to complete the A.B. degree in their current major and apply for admission to the professional program of engineering.

An undergraduate major in architecture or landscape architecture is not prerequisite for admission to graduate study in these fields. Enrollment in the College beyond 195 quarter units is subject to approval of the Dean. Consequently, a transfer student who has credit for more than 130 quarter units, is not normally admitted to the undergraduate program. Students who are interested in graduate study should obtain from the Dean of the Graduate Division the circular Information to Graduate Study, which outlines general University requirements for admission. Application is made directly to the Graduate Division of the University.

For specific undergraduate and graduate programs and degree requirements in the environmental design fields, refer to the course section of this catalog and the Announcement of the College of Environmental Design.

**College of Letters and Science**

The College of Letters and Science offers the undergraduate student a variety of programs leading to the Bachelor of Arts degree in four academic years of full-time study. The basic concern of the College is with the whole of human knowledge, a theme which is present in all of our various programs. Although no single program can by itself introduce the undergraduate student to the entire range of human knowledge, each of the many programs is designed to aid the student in establishing a structured awareness of the present condition of knowledge and how it has developed. Each program endeavors to cultivate an appreciation for past and present ideas and a capacity for generating new ones. Each strives to foster keen observation, critical analysis, and an awareness of the relation between perceived reality and theoretical abstractions derived from it.

For the student, the first two years are a time of exploration, experimentation, and decision. The last two years are a period of confirmation and of the acquisition and refinement of special knowledge, usually in connection with a department. The College's departments are devoted to instruction and research in the many fields and subfields of knowledge. Each department represents a style of study and communication and a refined development of a set of structured ideas. The subjects of the departments overlap and complement each other.

**Requirements for Admission in Advanced Standing**

Students applying for admission in the fall quarter 1975 or later will not be considered if they have completed more than 120 quarter units. Only in unusual circumstances will exceptions to this policy be made by the Dean of the College. In computing the number of units, those who have completed 84 or more units, students should be aware that the College of Letters and Science does not grant unit credit for courses completed in a two-year college after a total of 105 quarter units has been completed in all institutions attended. Subject credit toward completion of College requirements is granted for these courses, however.

Students who have completed 84 or more units are required to have satisfied the reading and composition requirement as well as the foreign language requirement of the College. If they plan to declare a major in a biological science, they must in addition have completed the minimum subject preparation in the major indicated below with a grade point average of C or higher.

![Image](https://via.placeholder.com/150)
Students Who Have Completed 84 to 105 Quarter Units
1. General chemistry with laboratory (8 quarter or 6 semester units)
2. General biology with laboratory or a course in botany plus a course in zoology (12 quarter or 6 semester units)

Students Who Have Completed 106 to 120 Quarter Units
1. and 2. above plus
3. Introductory organic chemistry with laboratory (9 quarter or 6 semester units)

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

The student must complete a minimum of 180 units, distributed according to regulations which appear in the Announcement of the College of Letters and Science. There are also scholarship, residence, breadth, and major requirements; these are described in the Announcements as well. Requirements of the breadth and major requirements appear below, and major programs appear in this publication under the department or group heading.

Broadth Requirements. Each student in the College is required to include in his or her program a study of the use and appreciation of the English language, literature, and the humanities as an element in the freshman or sophomore year in order that the student may develop skill in the communication of ideas and a sensibility for language which will facilitate and enrich further studies. There is also a minimal foreign language requirement, which most all of the students admitted to the College will have satisfied in high school. If not satisfied at the time of admission, the requirement must be completed within the first two years of study. The third breadth requirement involves exploration in several broad areas of knowledge, the humanities, the natural sciences, and the social sciences. This exploration by the student is intended to deepen appreciation for language, literature, and the arts, to develop comprehension of the structure of living and non-living matter and the environment of man, and to facilitate the acquisition of the individual and social behavior of human beings. Completion of this requirement may be spread over the four years of college study.

Major Programs. Each student must pursue and complete a major program, the object of which is to provide him or her with a limited experience in specialization. There are fifty departmental and major programs, ranging from art to zoology. In addition, there are group majors in biophysics, Dutch studies, environmental studies, genetics, neurobiology, religious studies, and social welfare. There are also field majors in humanities, biological sciences, physical sciences, and social sciences. Moreover, a student in good academic standing may pursue an option of the Dean and support of a College faculty member, pursuant to the specific major designed to satisfy special academic goals.

SPECIAL PROGRAMS

The Division of Interdisciplinary and General Studies (DISG) and the High School to College Program in History and Literature are included in the College and are described in the Announcement of the College of Letters and Science. Both of these programs permit the student to spend a considerable portion of time in the exploration of a unified area of interest. Both of the programs also allow for free electives and are designed to qualify the student, on completion, for entrance into one or a range of major programs. The student in the College of Letters and Science normally constructs his or her own program for the freshman and sophomore years by making a choice of individual courses. Selection is guided by the advisor, within limits set by College requirements and by the demands of the student's anticipated subject. These specialized integrated programs are offered as optional alternatives to this procedure. The present program in DISG will not be accepting freshmen students in fall, 1975.

LETTERS AND SCIENCE LIST OF COURSES

The regulations governing the List are to be found in the Announcement of the College of Letters and Science.

College of Natural Resources

The College of Natural Resources, formed on July 1, 1974, brings together in a single academic and professional College strongly complementary programs of teaching and research formerly offered at Berkeley in the College of Agricultural Sciences and the School of Forestry and Conservation. In its philosophy and structure the College is committed to the belief that the professional program in each discipline must be responsive to the needs of the individual student and the profession. The College responds to many concerns among students and faculty and in the society generally. Prominent among these concerns is the belief that, in meeting the accelerating pace of the discovery and comprehension of living systems, agriculture must be productive, conservative of those resources, and protective of environmental quality.

The College of Natural Resources offers a variety of academic programs which focus on renewable natural resources. These embrace most of the physical, biological, technical, and social processes that man uses to produce and utilize the food, fiber, and other materials that he requires. The undergraduate programs of the College place particular emphasis on two aspects of natural resources: (1) the individual and social relationships that have major environmental, material, and amenity values; and (2) the relationships between the natural environment and man, whether through his needs, the demands of his desires, or his actions.

The College offers undergraduate programs which provide different approaches to the study of natural resources. Some of these programs serve the needs of students interested in careers in the biological sciences. Others are designed for students in the preparation and other-oriented fields. Majors in (1) the Biology of Natural Resources and (2) Food, Nutrition, and Dietsetics stress those biological sciences and related disciplines that are basic to the formation, utilization, nutritional values, and conservation of renewable natural resources. Within these majors students may emphasize Bioenergetics, Bioresource Sciences, Entomology, Genetics, Plant Pathology, Soil and Plant Resources, Food, Nutrition, and Dietsetics.

Other majors, (3) Conservation of Natural Resources, and (4) Political Economy of Natural Resources, offer broadly based and flexible programs for students who are motivated and concerned by issues in the fields of population and renewable resources, resource economics, and environment and who prefer an approach less specialized than the specific majors listed above.

Still other majors offer undergraduate preparation for professional careers that require extensive and specific academic qualifications as conditions for entry into the practice of renewable natural resource management. They include (5) Forestry, (6) Pest Management, (7) Resource Management, (8) Wood Science and Technology, and (9) a professional program in Dietsetics. A Preveterinary program offers basic training in preparation for subsequent work in a School of Veterinary Medicine.

Graduate programs with academic or professional emphasis are available in agricultural chemistry, agricultural economics, biochemistry, entomology, food science, forestry, genetics, nutrition, parasitology, plant pathology, plant physiology, range management, soil science, and wood science and technology. In addition, an advanced interdisciplinary doctoral program is offered.

For further information concerning course requirements and areas of specialization, consult the Announcement of the College of Natural Resources, available free of charge from the Dean's Office, Student Affairs, 101 Giannini Hall.

Schools of Business Administration

SCHOOL OF BUSINESS ADMINISTRATION

The School of Business Administration admits students at the junior level and offers a curriculum leading to the undergraduate degree of Bachelor of Science in Business Administration. The primary function of the School is to prepare students for professional and executive positions in business, non-profit and governmental organizations, and for business ownership. You may specialize in such fields as accounting, applied economics, finance, marketing, management science, organizational behavior, and real estate and urban economics.

Prior to admission to the School, you should obtain an Announcement of the School of Business Administration, available in 310 Barrows Hall. This contains complete information concerning academic qualifications for admission as well as details about important prerequisites and degree requirements. Because there are many more applications than spaces available, completion of the prerequisites does not guarantee admission to the School. As a professional school, we expect students to come to us with strong academic records in their lower division work either at Berkeley or elsewhere, particularly in the courses specified as prerequisites. Requests for advice on programs of study and general information should be addressed to the Office of the Associate Dean, 310 Barrows Hall.

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

The Master of Business Administration degree and to the more specialized Master of Science degree. These curricula afford opportunity for advanced and specialized training based either upon the fundamental undergraduate curriculum in Business Administration or upon undergraduate study in other fields.

The core courses for the master's degree include basic work in economic analysis, quantitative decisions, models and techniques; accounting, political economy; financial, marketing, and organizational behavior. All graduate students must maintain a B average in all courses and must pass a comprehensive examination.

You may pursue a program leading to the Ph.D. in Business Administration if you wish to prepare for university and college teaching and research or for high-level research positions in business or government.

For detailed information, consult the Announcement of the Graduate School of Business Administration.

As part of the Extended University, the Graduate School also offers an evening program in San Francisco leading to the Master of Business Ad-
School of Criminology

Two distinct curricula are offered by the School of Criminology. Different prerequisites and courses of study exist for the two programs. While course work continues to be offered in the general criminology program, students are being admitted to the major only in the criminalistics-forensic science program.

The General Criminology program is intended to provide broad knowledge of the causes, prevention, control, and treatment of criminality. Special attention is given to historical development and to contexts of crime and efforts to cope with crime, as well as to the social problems associated with each. On the graduate level the program is designed to prepare students for careers in college and university teaching and for administrative and research positions in agencies of criminal justice and social policy planning.

The Criminalistics-Forensic Science program emphasizes the role of the natural and physical sciences in the administration of justice; its underlying concern is the utilization of science to improve the quality of justice. The curriculum is designed to prepare students for careers in professional service, education, and research.

The first program leads to the Bachelor of Arts degree and the second to the Bachelor of Science degree. Both lead to the Master of Criminality and Doctor of Criminology.

Undergraduate students are admitted to the School of their junior year, after completion of a 90-unit lower division curriculum. A 2.0 or better grade-point average is required for admission. Prerequisite courses for undergraduate admission and specific requirements for all degrees may be obtained from the School of Criminology.

Students are generally admitted during the fall quarter only for study leading to the B.A., B.S., M.Crim., or D.Crim. Completion of the requirements for the M.Crim. degree ordinarily takes four to six quarters in graduate study. The work of the first year is prescribed; students should enroll in courses demanding analytical skills; the second and third years' courses are elective. No single "pre-law" major is required or even recommended. However, these suggestions are made: students should learn to write by taking courses in English, French, and German. This program provides preparation for positions of leadership in government, business, and the professions.

School of Education

The School of Education offers three principal areas of study: a teaching credential program for those preparing for positions in public schools; programs leading toward credentials for administrative, and pupil personnel services in the public schools; and degree programs, both academic (A.A. and Ph.D.) and professional (M.A.T. and Ed.D.). The M.A.T. (Master of Arts in Teaching) program is available in Comparative Literature, English, French, and German. This program combines a major emphasis in an academic field with professional training in education.

As an applicant to any degree program in the School of Education, you must be admitted to the Graduate Division. If you plan to enter teacher education programs, you should confer with an advisor in the Student Personnel Office, 1615 Tolman Hall, early in your university career. Although most of the students in the teacher education professional preparation program will be graduate students, it is possible for students to complete this program as undergraduates.

The State teaching credential qualifies you for service in the public schools of California. To qualify for this credential you must complete a bachelor's degree with a major in a field other than education as well as the professional preparation program in your area of specialization. Students applying for teaching credential or M.A.T. programs for the academic year 1975-1976 should obtain additional information from the Student Personnel Office, 1615 Tolman Hall.

School of Journalism

The School of Journalism offers programs leading to the degrees of Bachelor of Arts (B.A.) in Journalism and Master of Journalism (M.J.). The M.J. program seeks to provide training in the skills and techniques of journalism and a knowledge of the traditional traditions of the news press closely combined with the study of other academic disciplines that constitute the subject matter of journalism.

Candidates for the M.J. degree shall have completed four to six quarters in graduate study in journalism and related disciplines. They shall have completed 42 units of approved upper division or graduate courses, including not less than 21 units in graduate courses in journalism, and shall have presented an acceptable thesis or reporting project. Students generally take about two-thirds of their courses in journalism and one-third in a related field of specialization.

An applicant for graduate study should hold a bachelor's degree comparable to that given by the University of California. Requirements and procedures are outlined in the Undergraduate Admissions in Graduate Study, available at the office of the Dean of the Graduate Division, and in the Announcement of the School of Journalism.

The A.B. program is less specifically profession-oriented than the M.J. Rather, it uses the problems and techniques of the trade as the basis for a broad liberal arts education in the methods and materials of public communication.

School of Law

The School of Law (Boalt Hall) has a broad three-year curriculum leading to the Juris Doctor (J.D.) degree. In addition to preparing its students to practice law, the School devotes considerable study of law and to foster legal research. The School is a member of the Association of American Law Schools and is approved by the American Bar Association. Its graduates are qualified to become applicants for admission to practice in any state of the United States.

No single "pre-law" major is required or even recommended. However, these suggestions are made: students should learn to write by taking courses in English, French, and German. This program provides preparation for positions of leadership in government, business, and the professions.

School of Librarianship

The School of Librarianship offers an undergraduate program leading to the Master of Library Science degree, which qualifies the holder for professional service in libraries and other information agencies. It offers a post-master's program leading to one of three Certificates of Specialized Study: the Library Administration degree, leading to the Ph.D. degree for students interested in advanced research and teaching in librarianship and the information sciences, and a design-oriented program, aimed at giving preparation for administrative and planning positions, leading to the professional doctorate, the Doctor of Library Science. Admission to the degree programs is contingent upon admission to the graduate level. The School also offers undergraduate courses in Bibliography for non-majors in Librarianship.

School of Optometry

The School of Optometry provides training in the practice of optometry, drawing upon the principles of anatomy, physiology, psychology, and sociology and includes the study of both environmental and personal factors influencing visual performance.

The four-year program qualifies you for the degree of Doctor of Optometry, which qualifies you to take the state board examinations in all states. The first year is devoted to more advanced study of basic sciences which form the background for optometry; the second and third years are devoted to the science of optometry and the acquisition of technical skills; the fourth year is devoted to the practice of optometry and the detailed study of specialized areas.

School of Public Health

Graduate curricula in the School of Public Health provide preparation for positions of leadership in health agencies, and for research and teaching in the health sciences.

The professional degree Master of Public Health (M.P.H.) and Doctor of Public Health (Dr.P.H.) are offered in the area of biomedical and environmental health sciences, including epidemiology and biostatistics, and in the area of social and administrative health sciences, including family health, public health education, health behavior sciences and public health nutrition. Particular attention also may be given to special areas of concern such as population, environmental pollution, disease control and prevention, medical care delivery, and community health.

Programs of study leading to the following academic degrees are administered by groups of
faculty from the School of Public Health and other departments:
- Biostatistics, M.A., Ph.D.
- Epidermolgia, M.S., Ph.D.
- Immunology, M.A., Ph.D.
- Microbiology, M.A., Ph.D.
- Nutrition, Ph.D.
- Parasitology, M.S., Ph.D.
- Comparative Pathology.
- Environmental Health Sciences, M.S., Ph.D.

Students are encouraged, and in most programs are required, to begin studies in the fall quarter because of the order in which courses are scheduled. Separate applications for admission must be submitted to the Graduate Division of the University and to the School of Public Health no later than January 1 for admission the following fall quarter.

For further information consult the Announcement, School of Public Health, University of California, Berkeley, CA 94720.

Graduate School of Public Policy

The School offers two programs of graduate study. The professional degree, the Master of Public Policy, is designed to provide students with the knowledge and skills required to conduct policy studies. The Ph.D. program is oriented toward the generation of new knowledge, theories, and methodologies for the analysis of public policy.

The two-year Master’s degree program consists of a first-year core curriculum, a summer internship, and a second year devoted largely to elective courses. The first-year core includes courses in political and organizational analysis, applications of economic analysis, modeling and quantitative approaches, legal analysis, and a workshop which provides opportunities to perform policy studies on selected issues. The primary focus is on analysis of American domestic policy.

Students from diverse disciplinary backgrounds are accepted into this program so long as they wish to prepare themselves to perform systematic work in public policy. Graduates from the Master’s degree program will be qualified to take positions with government agencies, foundations, and research corporations. Many will become analysts while others may take administrative and political positions in which they will initiate and utilize policy studies.

The Ph.D. program is primarily designed to prepare students for careers in policy research in academic institutions, research institutes, or with government agencies. The program is small and admission into it is highly selective. The educational program will include advanced methodological training, extensive research experience in one or more substantive policy areas chosen by the student, and theoretical work in the disciplines most directly related to the individual’s central policy concerns.

Brochures and information on admission procedures and program content are available at the Graduate School of Public Policy, 2607 Hearst Avenue, Berkeley, CA 94720.

School of Social Welfare

The School of Social Welfare is a graduate professional school which offers:
1. A program of studies which leads to the degree of Doctor of Social Welfare and which prepares students for careers in teaching, research, policy development and administration in the field of social welfare and in the profession of social work. It is open to applicants who already have completed the Master’s degree in an accredited school of social work and who give evidence of intellectual and other qualifications essential to successful doctoral study.

Also offered is a combined program of master’s doctoral studies which begins in the first graduate year, leads to both Master of Social Welfare and Doctor of Social Welfare degrees, and prepares for the same careers. Applicants must evidence ability to successfully complete doctoral study and must have undergraduate preparation as outlined below.

2. A two-year program of studies for the Master of Social Welfare degree in preparation for the professional practice of social work. Applicants must have completed the group major in social welfare in the College of Letters and Science, or an equivalent major, or undergraduate study in other social and behavioral sciences judged by the faculty as an adequate preparation for graduate study in the School.

3. An advanced post-master’s School Social Work Internship program which allows a limited number of graduate social workers to qualify for the California Pupil Personnel Services Credential. This program may be completed in two quarters of full-time attendance or in three quarters of part-time attendance by special arrangement.

Applications for admission to any of these programs should be submitted as early as possible beginning in September and no later than February 1 for admission the following fall quarter.

For further information consult the Announcement, School of Public Health, University of California, Berkeley, CA 94720.

Field Studies Program

Field Studies courses involve up to twenty students per course in a coordinated program of internships in community agencies and weekly small-group seminars directly related to a topical area.

Courses currently offered are: Child Care, Praclices, Policies, and Theories, Community Mental Health, Urban Dilemmas, Consumer Protection, Criminal Justice, Public Advocacy, The Economic Crisis, and Women as a Force for Change.

Students are placed as staff members of such service-oriented environments as ASUC Child Care Centers, Alameda County Legal Aid, and Contra Costa Social Services.

Field Studies courses require a two-quarter commitment of ten hours of field work plus a two-hour seminar weekly for six units per quarter or ten units per course. All are approved for College of Letters and Science credit.

Emphasis in both class and field is on responsible individual and peer-group involvement in the educational experience, designed to help students make more realistic career choices, test their personal competencies and aptitudes in practice situations, and find relevance in their academic learning.

See interdepartmental Studies for the complete description of these courses.

Graduate Program in Health and Medical Sciences

The Graduate Program in Health and Medical Sciences is built on a network of relationships—one of California, Berkeley, CA 94720. For more specific description of the Program, as well as the options of specialization, contact the Program Office, Room 106, Building T-7, University of California, Berkeley, CA 94720.

See Interdepartmental Studies for the complete description of these courses.

Special Summer Program for Teachers

(June 23—July 25, 1975)

The Summer Program is an in-service education program in several fields of specializatin, is planned and administered by the School of Education in cooperation with other departments of the University. Each course offered carries nine quarter units, the equivalent of six semester units, and each course constitutes a full academic load. Credit earned may be applied toward California teaching credentials. Admission to the program is a separate and different procedure from admission to a regular quarter or to a summer session at the University. Fees for the five-week session in 1975 include a $10 application fee, a $163 tuition fee, and a $2 student union fee—a total of $175. Auditors who are not enrolled for units do not pay Program fees. You may obtain information about courses offered and an application form by writing to Education Admissions Office, 1665 Tolman Hall, University of California, Berkeley, CA 94720. The telephone number is (415) 642-0641.

General Interest Courses for Upper Division Students
