## Preliminary Announcement UNIVERSITY of CALIFORNIA, IRVINE

ACADEMIC PROGRAM 1965-1966



Construction of Social Sciences-Humanities unit.


EJVEN While the permanent buildings were still on the drawing boards, a group of experienced scholars, representing many fields of learning and drawn from many institutions, began to meet in the interim headquarters of the University of California, Irvine. These men had and have an exciting responsibility-to guarantee that when the University begins its first day of instruction in September of 1965, there will be available to the students a program of the quality and comprehensiveness long the hallmark of the University of California. They are building on nearly a century of accumulated wisdom in the University, and they are profiting as well from the experiences of universities throughout the world.
As part of the University of California, the Irvine campus will have the same standards of admission and performance for its students, the same standards for teaching, research, and creative activity for its faculty, as the other campuses of the University. But faculty and students will have an unusual opportunity to develop new programs, to explore new organizational arrangements, and to participate in new approaches to and techniques for learning.
Much remains to be decided and more to be done before opening day. There will be many more hours, many more days, of discussion and decision-making. But already the general outlines of the program of the University of California, Irvine, can be discerned. This is a preliminary outline of that program, which will be revised and refined and published in an announcement in Spring of 1965.

Daniel G. Aldrich, Jr.
Chancellor


President Lyndon B. Johnson and President Clark Kerr at campus site dedication.

ON June 20, 1964, dedication ceremonies were held on the site of a completely new campus of the University of California-the University of California at Irvine. The event was distinguished by the participation of the President of the United States and the Governor of California, whose presence and words demonstrated the importance attached to higher education today by our society.

Irvine will enroll its first students in September, 1965. These "pioneers" will have an opportunity to share in the exciting beginning of a great new University campus, located in a part of the State that is growing rapidly in population and in economic importance. The Irvine campus will be the focus for this region, serving many of its needs, and influencing its development.

The University of California, Irvine, like the other campuses of the University, will be "a place where all the experience of past generations, so far as it is of record, and all that is known of the laws of nature, shall be at command for the benefit of this generation and those who come after us . . . here shall be heard the voices of the wisest thinkers . . . here shall be seen the example of the most diligent students in every department of science . . . here shall be brought together the books of every nation, and those who can read them; the collections from all the kingdoms of nature, and those who can interpret them; the instruments of research and analysis, and those who can employ them."

These words, taken from the inaugural address of an early President of the University, Daniel Coit Gilman, proved an accurate prophecy of a bright future for the infant University of California; I am sure they will prove equally prophetic for the new Irvine campus of the University.

Clark Kerr
President of the University

## CONTENTS

Goals and Guidelines of the Irvine Faculty
The College of Arts, Letters, and Science . . . 8
Requirements for the Baccalaureate . . . . . . . . . . . 10
Divisional Requirements . . . . . . . . . . . . . . 11
Departmental and Interdepartmental Requirements . . . . . 11
Number of Credits and Residence Requirements . . . . . . . 11
Proficiency Examinations . . . . . . . . . . . . . . . 11
Honors Programs . . . . . . . . . . . . . . . . . 11
Transfer Credit . . . . . . . . . . . . . . . . . 12
Divisional Programs of the College . . . . . . . . . . . . 12
Biological Sciences . . . . . . . . . . . . . . . . 12
Fine Arts . . . . . . . . . . . . . . . . . . . 14
Humanities . . . . . . . . . . . . . . . . . . 16
Physical Sciences . . . . . . . . . . . . . . . . 18
Social Sciences . . . . . . . . . . . . . . . . . 20
Institute of Environmental Planning . . . . . . . . . . 22
Physical Education. . . . . . . . . . . . . . 22
The Education of Teachers . . . . . . . . . . . . . 22
The School of Engineering . . . . . . . . . . . . . 24
Requirements for the B.S. in Engineering . . . . . . . . . . 24
Graduate Program in the School of Engineering . . . . . . . . 25
The Graduate Division . . . . . . . . . . . . . . . . . 25
The Graduate School of Administration . . . . . . . . . . . 26
The Library . . . . . . . . . . . . . . . . . . . . 26
Intramural Sports . . . . . . . . . . . . . . . . . . 26
Intercollegiate Athletics . . . . . . . . . . . . . . . . 26
The Campus . . . . . . . . . . . . . . . . . . . 27
UCI Physical Plan . . . . . . . . . . . . . . . 28
To Enter the University of California . . . . . . . . . . . 30
Admission to the Undergraduate Program . . . . . . . . 30
Admission to the Graduate Division . . . . . . . . . . . 30
Student Life . . . . . . . . . . . . . . . . . . . . 31
The University of California . . . . . . . . . . . . . . 32
University of California, Irvine-The Staff . . . . . . . . . . 33

## Calendar, 1965-1966

FALL QUARTER, 1965
Fall Quarter Begins Registration

Instruction Begins
Instruction Ends
Examinations Begin
Fall Quarter Ends
WINTER QUARTER, 1966 Winter Quarter Begins Registration

WINTER QUARTER, 1966 (Cont.)

| Instruction Begins | January 10 |
| :--- | ---: |
| Instruction Ends | March 19 |
| Examinations Begin | March 21 |
| Winter Quarter Ends | March 26 |
|  |  |
| SPRING QUARTER, 1966 |  |
| Spring Quarter Begins | April 1 |
| Registration | April 4 |
|  | April 5 |
| Instruction Begins | April 7 |
| Instruction Ends | June 15 |
| Examinations Begin | June 16 |
| Spring Quarter Ends | June 22 |



## Goals and Guidelines of the Irvine Faculty

In developing the educational program, the faculty has been guided by the following assumptions:

Education is a continuing process, not a product, and it is impossible to complete the process during the formal years of college. A university fulfills its purpose when its students learn how to learn.

The primary goal of the faculty is to help the student learn, but the primary responsibility for learning lies with the student.

A student's time is a precious commodity. The faculty will make certain that the time spent under its direction and supervision is not squandered. Anything that the student can learn better somewhere else or in some other manner than by attending a university should be stripped from the program.

Academic progress is a matter of acquiring competencies and knowledge, not of taking courses. Whenever a student achieves the level of competence specified by the faculty, regardless of where or by what means, he will be given credit. Opportunity to demonstrate academic progress will be provided throughout the calendar year, not merely at the end of prescribed quarters.

The student, assisted by advisors, will plan a coherent program to assist him in seeking a liberal education. In determining what a student should study the extremes of narrow specialization and superficial generalization will be avoided.

In accord with these assumptions the Irvine program is being designed to offer the student, assisted and guided by the faculty, maximum opportunity for independent study. The student will be encouraged to use whatever is the most efficient and stimulating means of instruction, whatever resource is best suited to the subject under study, and to his own ability.

In 1965-66 instruction will be provided in the basic disciplines by the College of Arts, Letters, and Science and by the Graduate Division. There will be two professional schools-a School of Engineering and a Graduate School of Administration.


Site dedication of the campus: left to right, Governor Edmund G. Brown, President Lyndon B. Johnson, Chancellor Daniel G. Aldrich, Jr., Regent Edward W. Carter, and President Clark Kerr.

## The College of Arts, Letters, and Science

Programs of the College are being designed to develop the qualities long associated with a liberally educated man. In keeping with the assumption that breadth as well as depth is to be emphasized and that penetration is to be achieved without fragmentation, the faculty will seek to direct students toward proficiency in basic skills of scholarship: effective use of English, of foreign languages, of the mathematics appropriate to the areas under study; knowledge of bibliographic and computer techniques sufficient for independent study. The faculty will help students use these skills to develop a knowledge of the nature of our own culture, science and technical achievements; to secure an understanding of various aspects of at least one non-Western culture; and to aid in the concentrated and continuing study of some specific area of human knowledge. Candidates for a degree in each division of the College will be expected to explore work in other divisions. A weekly lecture series, running on a four-year cycle, will address itself to important aspects of the human estate.
The nonprofessional nature of the College's basic concerns is consistent with the fact that for many students a liberal education is the best professional preparation, especially for those who anticipate careers requiring advanced, professional, or graduate study. Students entering
the College in 1965 will be able to undertake a program of studies that will prepare them for graduate work in biological sciences, physical sciences, fine arts, humanities, or social sciences. Students may also prepare for admission to professional schools such as law, medicine, dentistry, engineering, journalism, business administration, nursing, or veterinary medicine*; or for careers in many aspects of business, teaching, or public affairs.

## The Initial Instructional Program

In 1965-66 the College will provide instruction in:

| Anthropology | Music |
| :--- | :--- |
| Art | Organismic Biology |
| Biological Sciences | Philosophy |
| Chemistry | Physical Education |
| Classics | Physics |
| Comparative Literature | Political Science |
| Dance | Population and Environmental |
| Drama | Biology |
| Economics | Psychobiology |
| English Language and Literature | Psychology |
| French Language and Literature | Social Psychology |
| German Language and Literature | Social Sciences |
| History | Sociology |
| Mathematics | Spanish Language and Literature |
| Molecular and Cell Biology |  |

Freshmen, sophomores, and juniors entering in 1965-66 will have an opportunity to obtain baccalaureates with the following areas of concentration:

| Anthropology | History |
| :--- | :--- |
| Biological Sciences | Mathematics |
| Chemistry | Philosophy |
| Comparative Literature | Physics |
| Economics | Political Science |
| English | Psychology |
| Fine Arts | Social Sciences |
| French | Sociology |
| German | Spanish |

Seniors seeking transfer to the Irvine campus in 1965-66 are invited to write to the Vice-Chancellor-Student Affairs, to determine what areas of concentration will be available to complete their programs.
*These professional schools will not exist at the outset on the Irvine campus, with the exception of the Schools of Engineering and Administration.

## REQUIREMENTS FOR THE BACCALAUREATE

Translating the goals of a liberal education into requirements for the baccalaureate, the faculty will expect each student to demonstrate achievement by course work (a more precise description of courses meeting these requirements will be contained in the Spring 1965 announcement), by examination, or by other means established by the faculty.

The students will be expected to meet the requirements of the College and of the division and departmental or interdepartmental program to which he belongs.

## College Requirements

1. Proficiency in English (Subject A). Students who enter the University with credentials showing the completion elsewhere of acceptable college-level training in English composition or a score of at least 600 in the College Entrance Examination Board Achievement Test in English Composition taken after completion of the eleventh grade are considered to have met the Subject A requirement. All other students are required to take the examination given by the University. Although it is not a condition of admission, it must be taken at the opening of the quarter of first attendance if not taken previously. Students who neither pass the examination nor meet the requirement in one of the above ways will be required to complete successfully the noncredit course in English composition (Subject A), for which a fee of $\$ 35$ is charged.
2. Study toward the understanding of a Western and a non-Western culture.
3. Knowledge of the provisions and the principles of the United States Constitution and of American history and of the principles of state and local government established under the Constitution of the State of California.
4. Familiarity with materials in a division outside the area of his expected concentration. To satisfy this requirement, a student who anticipates upperclass study in the natural sciences should pursue work in

the humanities, fine arts, or social sciences, and a student who anticipates upperclass work in the humanities or fine arts or social sciences should undertake work in the natural sciences.

Students who have met these requirements in high school or elsewhere and who have achieved the knowledge and competencies specified will be given appropriate college credit.

## Divisional Requirements

The student should designate one of the five divisions of the College as the center of his undergraduate studies as soon as he determines the area of his concentration but not later than the beginning of his junior year. Each division sets its own graduation requirements. The student should make certain that he has met the prerequisites for upperclass work in the division of his choice. Additional details will be published in the Spring 1965 announcement.

## Departmental and Interdepartmental Requirements

Each departmental or interdepartmental program within each division will set certain requirements for the student who chooses that program as his area of concentration. Additional details will be published in the Spring 1965 announcement.

## Number of Credits and Residence Requirements

In addition to meeting the College and divisional requirements, each candidate for the baccalaureate must have earned by course work, by examination, or by other evaluation, at least 180 quarter units of credit with at least an average of C , of which at least 90 quarter units must be at the junior or senior level. Anyone who has been registered as a fulltime student on the Irvine campus for the year immediately preceding graduation will meet the residence requirement for a degree.

## PROFICIENCY EXAMINATIONS

Students may obtain credit for any course by special examination.

## HONORS PROGRAMS

Each division will have honors programs that will provide greater opportunities for independent study and individual acceleration in chosen fields.

[^0] Social Sciences-Humanities unit; and the Natural Sciences-Engineering unit.

## TRANSFER CREDIT

Students who upon transfer have met the general breadth requirements of any accredited four-year college of liberal arts and sciences will be considered to have met College requirements at UCI. It is anticipated that many of the students at Irvine will have begun their college work at one of the California junior colleges. Course credit received in any accredited institution of higher education or credit for courses marked with the prefix X in any University of California Extension program may be transferred without further validation, provided that the subject or field of study is equivalent to one offered in some division of the College of Arts, Letters, and Science at UCI. Knowledge acquired by any other means may be validated for credit by examination.

## DIVISIONAL PROGRAMS OF THE COLLEGE

## Biological Sciences

The program in biological sciences is designed to reflect the "new biology." The faculty, the methods of teaching, the content of courses, and the facilities will provide the student with the opportunity to avail himself of the ever-increasing knowledge of the facts and principles of biology. The curriculum will be structured for the greatest flexibility in meeting the changing needs of the biology major and of students in other disciplines who realize that a knowledge of the basic principles of the life sciences is necessary for a proper understanding of the world in which they live.

The undergraduate, a major or nonmajor in biological sciences, should consider biology as an integrated whole. The student will not be subjected to beginning courses in each of the numerous branches or subdivisions of biology but will gain a solid overview of the unifying concepts of biology. This is particularly important in the case of the biology major who intends later to specialize. To accomplish this, all biology majors, regardless of subsequent graduate specialization, will be required to pursue common core courses over a three-year period.

The biology major will begin with the same introductory year of courses as that taken by the nonmajor. Any one of the three quarters of this introductory year, or all three quarters, may be omitted if the student can pass an appropriate examination. Ordinarily, the first of these three years will be taken during the sophomore year, although the nonmajor may take it at any time. In the meantime, the major should begin fulfilling his prerequisites in the physical sciences: chemistry through organic chemistry and, when possible, through physical chemistry; physics; mathematics through calculus. He should carefully select and
pursue his course requirements in the social sciences, humanities, and fine arts.

The core will continue in the junior year in "spiral" fashion from molecular biology and biochemistry through cell biology; tissue, organ, and organismic biology; psychobiology; population, community, and environmental biology.

## Molecular and Cell Biology

In addition to covering the usual cytological aspects of biology (with regard to both morphology and function), the activities of the department include the disciplines of biochemistry, biophysics, microbiology, virology, cell physiology, certain areas of genetics, and molecular biology generally.

## Organismic Biology

Students specializing in organismic biology will be concerned with structure (morphology) and function (physiology) in the classical sense. The cutting edge of these disciplines includes such challenging problems as those associated with transport mechanisms, hormonal integration, immune mechanisms, electrophysiology, biological rhythms, light and temperature responses, parasitology, and many others.

## Psychobiology

Psychobiology will be concerned with those aspects of psychology strongly oriented toward problems of a biological character as distinguished from those of a sociological or clinical nature. (Sociology and clinical psychology are to be offered in the Division of Social Sciences; a strong liaison between the studies of psychology and psychobiology will be encouraged.) Emphasis will be given to problems concerning the biochemical, genetic, and neurophysiological systems underlying attention, perception, learning, memory, motivation, emotion, and instinctive behavior. It is recognized that a general understanding of these processes requires a comparative approach. In other words, psychobiology emphasizes areas that are conventionally referred to as experimental, comparative, and physiological psychology.

## Population and Environmental Biology

Examples of problems that will be the concern of population and environmental biology are population dynamics as related generally to animals, plants and microorganisms, macroevolution, population genetics, fertility and reproduction, taxonomy and nomenclature (systematics), ecological regulation, homeostatic mechanisms, energy flow, biogeochemical cycles, and others. The term "environmental biology" is essentially synonymous with "ecology," which has been defined as "the
study of the structure and function of nature" or "the relations of an organism to its environment," and is concerned with those levels of biological organization known as populations, communities, ecosystems, and the biosphere.

## Graduate Programs in Biological Sciences

Graduate instruction will be presented by the Departments of Molecular and Cell Biology, Organismic Biology, Psychobiology, Population and Environmental Biology. The student will select one of the departments in which to major, but he may take courses in any one or all of the departments, and he is entitled to confer with and seek the help of any professor in any department. Work will be offered leading to the master's and doctor's degrees.

## Fine Arts

The program in fine arts will aim at providing an undergraduate education at a professional level of intensity for the creative and performing artist, an incisive course of study for the critic and historian, and studio experiences in the artistic process for students with a general interest in the arts. The program will be performance-centered, professionally committed, and integrated through its own interdisciplinary offerings in art, drama, music, and dance.

The objective is based on the belief that the ideal education for the artist today combines a liberal education, an integrated program in the arts, and a professional education in a specific art form.
Offerings in the fine arts will include a comprehensive study of literature, history, theory, and criticism-resources that are not only substantive materials in themselves but essential research sources for the creative act. The student of the arts comes to know the arts, not only by extensive reading and talking, but by the much more complicated act of creating and performing works of art.

## Product

The program aims at producing literate artists who are responsive to intellectual stimuli, capable of integrating knowledge into creative acts disciplined to the point of freedom, and committed to rigorous standards.

## Structure

The lack of a rigid departmental structure in fine arts will encourage students to capitalize fully on interdisciplinary pursuits in the arts, gaining proficiency in those areas that contribute to their own specialization. The director and designer can pursue with ease work in art, the dancer in music, the musician in theatre. These interrelationships will
lead to cooperative workshops and performances of students in drama, music, dance, and the visual arts.

## Major

The student will major in the fine arts with a specialization in one of the four areas: art, drama, music, or dance.

## Courses for the Nonspecialist

All courses in all areas of the arts at the underclass level, and certain upperclass courses, will not only provide the broad and fundamental experiences essential for majors but will also invite the intellectual and creative participation of the nonspecialist as a part of his general education. Although public performance and exhibits will aim at a professional level, all areas of the arts will provide workshop and studio experiences for the nonmajor.

## Course Offerings

The following areas of study will be offered in 1965-66:
Art: Drawing, painting, design, sculpture, history of art.
Drama: Acting, directing, scene design, costume design, theory and criticism, dramatic literature, history of drama and the theatre, and performance.
Music: Theory and composition, history and literature, and performance.
Dance: Choreography, history and criticism, workshops in ballet, jazz, and free-style, dance notation, and performance.

## Artists and Performers in Residence

Each year the Division of Fine Arts will engage, in addition to the regular staff, three or four professional artists to conduct workshops and seminars and to participate in performances.

## Performances and Exhibits

The Division of Fine Arts will produce plays, musicals, concerts, and dance programs in the Studio Theatre and will present art exhibits in the University Gallery.

## Facilities

Facilities immediately available will include practice rooms, rehearsal halls, a music listening laboratory, a design studio, a painting and drawing studio, a sculpture studio, a dance studio, an art gallery, and a studio theatre.

## Graduate Programs in Fine Arts

By 1969, the Division of Fine Arts will offer a two-year program of study leading to master's degrees in art, drama, music, and dance.

## Humanities

Humanities includes the Departments of English, History, Philosophy, and Foreign Languages, as well as such disciplines as classics and comparative literature. The humanities are concerned with fundamental problems of human thought and experience. Their role lies in contributing to an understanding and a constantly renewed critique of human civilization. The Division will encourage joint majors, majors with supporting work in related disciplines, and, wherever practicable, interdisciplinary programs and comparative studies. Baccalaureate degrees will be offered in comparative literature, English, history, philosophy, and in foreign languages and their literatures, including classics.
Apart from a minimal core program, the sole requirement in each department will be competence in clearly designated areas of the discipline, as measured, where possible, by a senior comprehensive examination. Each student will be expected to demonstrate a solid grasp, however obtained (through course work, independent study, or summer reading programs), of his chosen field.

## English

The baccalaureate programs in English attempt to bring curriculum abreast of the best recent speculation about the nature of literature, the problems of literary creation, and relationships among literatures of different languages and cultures. The first aims of the programs are to provide opportunities for the candidate to sharpen his abilities to read literary texts with interpretive and critical acumen, to develop responsible approaches to the literary object as a work of art and a creation of human culture, and to understand the values for society that art provides. The programs also seek to provide the candidate continuous opportunity to become adept at the writing of English prose. To achieve these aims, the candidate is encouraged to develop pursuits that will bring philosophy, history, languages, and the other arts to the support of his major. The departmental program should be chosen by the candidate in consultation with his advisor so that his program forms an intellectual unity.

At the outset the department will offer three basic programs of study:

1. Criticism and Literary History: The study of literary criticism and the development of English and American literature.
2. The Art of Writing: A certain amount of work in the writing of poetry, fiction, and/or drama along with a substantial portion of Program 1.
3. Comparative Literature (in cooperation with the Department of Foreign Languages): Achievement of competence in two foreign languages and the study of literature in one of these languages as well as English and American literature.

The three programs are related to each other by a series of prerequisite courses.

## Foreign Languages

The foreign language program is designed to be an integral part of a liberal arts education. Its main objective is twofold:

1. To develop competence in the ability to understand, speak, and write a foreign language and thereby to understand the problems of language itself.
2. To provide through the knowledge of foreign languages the valuable experience that is gained from deepened understanding and appreciation of the literature and culture of other peoples.

On the basis of foreign language placement tests, incoming students will be assigned to the appropriate course level. In the basic modern language courses, the use of language laboratory facilities will allow for emphasis on the development of the oral-aural language skills.
Initially, major programs will be offered in French, German, and Spanish. Instruction will be offered in Latin and Greek. Instruction in Russian is planned for 1966-67. As soon as practicable, instruction in other languages will be initiated.

## History

History has a central role in liberal education. It is a key opening new doors to the mind and the imagination, and it illuminates other disciplines. It is, as the distinguished British historian, G. M. Trevelyan, has put it, "the house in which they all dwell." And further, the study of history should make one a far more intelligent citizen, in accordance with the Confucian injunction to "inquire of the past that you may know how to act in the present." We cannot even attempt to understand the world around us without a knowledge of the past, and the farther we delve into history, the deeper and broader will be our grasp of the present and insight into the future.

Instruction will be offered in all the main areas of history. Undergraduate courses will be as broadly gauged as the subject permitsconcerned, that is, with literature, art, and ideas, as well as with political, economic, social, and scientific developments. Where feasible, they will accommodate the interests of those who are planning to major, or are majoring, in another discipline.

## Philosophy

Philosophy addresses itself to questions whose recognition and critical appreciation are an essential ingredient in the lives of reflective and educated persons. In every area of human experience and in every inquiry and discipline represented within the University, distinctively philosophical problems insistently arise. In order to assist in their clear formulation and to promote the disciplined examination of alternative approaches and doctrines developed in response to these problems,
courses will be offered in all the main areas of philosophy: the history of philosophy, ethics, logic, metaphysics, the theory of knowledge, aesthetics or the philosophy of art, and, in addition, the philosophies of science, social and natural, of literature, religion, and history.

In addition to the introductory survey courses, specialized courses at different levels of intensity will be offered in each of the main areas so as to meet the varied needs of students from various departments of the University.

## Graduate Programs in Humanities

Work leading to the master's and doctor's degrees will be offered by all departments. Departments will offer both research opportunities and course work in each of the several major subdivisions of each subject. Specific details concerning opportunities for graduate work may be obtained by writing to the appropriate department chairman.

## Physical Sciences

Someone has said that the business of the university lies in examining the differences between the real world and our current description of it. In the physical sciences, each of the last several decades has seen enormous changes in the prevailing "current description," and there is no sign of a letup in the explosive pace of this developing knowledge. The program of the physical sciences has been designed to provide a comprehensive introduction to present theories and known facts, while simultaneously providing the intellectual approach and attitude necessary for accommodation of future developments.

Physical sciences are taught in the Departments of Chemistry, Mathematics, and Physics. Each of these departments will offer complete programs of study for students whose interests are centered within its area. Since the interests of many students frequently lie in borderline areas, such as mathematical physics, chemical physics, biochemistry, mathematical aspects of the social sciences, etc., both interdepartmental and interdivisional programs of study will be available.

## Chemistry

The undergraduate program in chemistry fulfills the needs of the student preparing for a professional career in chemistry, for other careers in which a knowledge of chemistry is prerequisite, and for those with a noncareer interest. The sequence of courses has been arranged with the varying needs of these groups in mind. The initial year of the undergraduate program will cover the basic elements of modern chemistry, with strong emphasis on quantitative measurements in the accompanying laboratory work. The introductory year will be followed by one year each of organic and physical chemistry. During the senior year, the program will be oriented toward the individual student's main interests
and preferences, with opportunities for participation in the fundamental research of the department. Biochemical topics will be interwoven into the program of the first three years and will constitute one of the elective areas in the senior year.
An honors program will be carried out beginning with the first quarter of the freshman year for students of outstanding talent and interests in chernistry.

## Mathematics

In addition to offering courses for mathematicians, the Department of Mathematics will offer courses for students preparing for work in the natural sciences, in engineering, in the social sciences, and for students with a nonprofessional interest in the subject. Among the topics in which instruction will be provided are: calculus, analytic geometry, algebra, function theory, topology, probability statistics, differential equations, and ordinary and partial differential equations, Fourier and Laplace transforms, calculus of variations, numerical analysis, computer science, and advanced statistics.
The curriculum throughout-from lower division to graduate courses -is augmented by opportunities for supervised individual study and research, seminars, colloquia, and the mathematics programs at nearby branches of the University. Furthermore, the curricular structure is being designed to be compatible with the curricula at other collegiate institutions in California. In this way, students transferring to UCI will be able to continue their programs of mathematical study without difficulty or delay.

## Physics

The program of the Physics Department will provide the basic knowledge of quantum and classical mechanics, electromagnetic theory, solid state, nuclear and atomic structure, and relativity theory required for further professional work in physics or in related areas. There will be sufficient richness and variety in the department program to make physics an attractive major subject also for students with other professional goals such as medicine, law, or teaching. In underclass courses, designed for students with various backgrounds of training and aptitude in mathematics, the whole subject of physics will be developed as a coherent intellectual discipline. In upperclass courses, the main theories and phenomena of the physical world will be explored individually. Both underclass and upperclass laboratory work, using the most modern tools of research, will play an important independent instructional role, neither as mere adjunct to lectures nor as tedious mechanical technique. The advanced undergraduate will be able to pursue independent work in close contact with the fundamental research carried out within the department.

## Graduate Programs in Physical Sciences

Graduate work leading to the master's and doctor's degrees will be offered in the Departments of Chemistry, Mathematics, and Physics. Departments will offer both research opportunities and course work in each of the several major subdivisions of each subject. Specific details concerning opportunities for graduate work may be obtained by writing to the appropriate department chairman.

## Social Sciences

The educational programs in the Division of Social Sciences have a double emphasis: First, they are built upon the new social science of systematic observation, interpretation, and quantitative analysis of human behavior. The availability of high-speed electronic computers; the development of mathematics oriented toward the problems of social science; and the refinement of techniques for sampling, observing, and modifying human behavior are creating new methods in anthropology, economics, geography, political science, psychology, and sociology.

Second, the programs in social sciences confront major new problems. Demands for an effective social science are impressive. A rapidly changing technology, the pathologies of a population explosion, the thrust of formerly undeveloped societies, the creeping mastery of disease the strains of race relations, the tempestuous marriage of men and machines in the process of problem-solving, endemic crises in international affairs, lagging or explosive economic growth, political instability, and exploration of space provide the social scientist with an extraordinary list of unsolved problems and opportunities.

To facilitate education in the social sciences, the division will provide various educational resources-students, faculty, programmed instruction, courses, library, community, laboratories, research aids, and examinations. Although the division will provide suitable succor and advice, students, individually and collectively, are expected to play an active role in the learning process-by offering participation in student seminars, initiating proposals for new materials, developing new programs, and by systematic self-directed study.

The Division of Social Sciences will offer degrees in anthropology, economics, geography, political science, psychology, and sociology. The programs are designed to provide terminal training in the social sciences; preparation for graduate work in one of the disciplines; preparation for professional training in administration, education, law, planning, or social work; and (in conjunction with other disciplines) preparation for elementary and secondary school teaching in the social sciences.
To provide opportunities for student involvement in key areas of concern to social scientists, much of the upperclass work is organized around a few major areas of research. A student majoring in one of the social
sciences ordinarily will focus his work within one of these areas. Since he is to be directed toward new developments in the social sciences, his area frequently will extend across several disciplines. As a result, all the degree programs will emphasize core knowledge in the social sciences as well as intensive work in a specialty.
The faculty will normally expect a candidate for a baccalaureate to exhibit (through examination, written work, and oral performance):

1. An understanding of the structure, limits, and the uses of major models in the study of human behavior. In particular, the candidate should be able to use intelligently current theories of exchange, choice, adaptation, contagion, diffusion, and social structure.
2. A more extended knowledge of the institutions, research results, and language of the discipline (i.e., anthropology, economics, geography, political science, psychology, or sociology) in which the degree is sought.
3. The ability to use knowledge in the social and behavioral sciences to analyze a significant policy problem involving human behavior and to propose and justify a detailed approach to a solution
4. The ability to participate in significant research and to evaluate published research.
The faculty will expect certain proficiencies (beyond the general University requirements) as prerequisites for upperclass work. These expectations vary with the prior training of the candidate and the program and degree involved.

## Mathematics

The faculty will expect the candidate to have or acquire the mathematical competence necessary to sustain his program and to provide the subsequent growth. Although the specific requirements will depend upon the individual program of the student, most candidates will be expected to understand basic linear algebra, analytic geometry, and the rudiments of calculus before admission to upperclass work. Students in the social sciences are generally encouraged to become proficient in the mathematics of modern social science-particularly probability theory, matrix algebra, and calculus.

## Statistics

Prior to graduation, all candidates will be expected to exhibit familiarity with the basic principles of statistical inference and experimental design. They will be expected to understand published work involving sampling, hypothesis testing, and point estimation. The level of statistical competence expected will vary with the detailed program of the student.

## Computers

Most candidates will be expected to learn the fundamentals of computer programming and the general capabilities of computer technology.

Each candidate should understand at least one standard computer language well enough to program a simple problem in his own field. Students in programs involving the use of computer models or computerbased analysis will be expected to exhibit greater proficiency.

## Graduate Programs in Social Sciences

Graduate degrees will be offered in anthropology, economics, political science, psychology, (for psychobiology see "Biological Sciences"), and sociology. Graduate work, however, will be organized in major interdisciplinary clusters and will permit the student to combine basic grounding in the fundamentals of his discipline with intensive work in a specialized area of research. Further information on graduate programs may be obtained by writing to the Dean of the Division of Social Sciences.

## Institute of Environmental Planning

Closely related to the Division of Social Sciences, an interdisciplinary program for research and training in the social, economic, and political problems of environmental planning will be established. The development of the University of California, Irvine, as part of a planned community expected to grow to over 100,000 people, provides a unique laboratory for teaching and research in this field. The Institute's program will be based on the social sciences, but will involve faculty members from all the divisions and colleges of the University.
Further information about possible offerings will be available in the spring 1965 announcement.

## Physical Education

## Class Program

Instruction in physical education activities will be available for all students. Emphasis will be on sports having lifetime values and those of particular interest in southern California, such as golf, tennis, and swimming. No major course program is planned in physical education.

## Recreational Use of Facilities

Indoor and outdoor sports facilities will be open for recreational use of students and staff when not occupied by classes or athletic teams. Lockers, towels, certain wearing apparel, and sports equipment will be provided.

## The Education of Teachers

The faculty assumes as one of its responsibilities the education of teachers for elementary and secondary schools and junior colleges. Those responsibilities are to be met through curricula combining subject-matter concentration in teaching fields, studies seeking to relate theory and prac-
tice, and supervised internships designed to test educational theory in teaching and to develop professional attitudes.
Faculty members in every division of the College and the School of Engineering will participate in teacher education, apprising themselves of the needs of elementary and secondary schools, planning curricula, and lending support to young men and women interested in teaching careers. They will offer no "special content" courses for teachers. Consequently, future teachers will be part of the entire intellectual climate of UCI, studying side by side with colleagues of like academic bent who may or may not be planning to become teachers.
Students who intend to teach in elementary or secondary schools will plan appropriate teaching majors and minors with their subject-matter advisors. In their senior year, or following graduation, they will enroll in studies combining educational theory with observation and preinternship in selected cooperating schools.
The University is fortunate to be surrounded by excellent schools that can provide an array of opportunities for students to observe and participate in educational affairs and gifted personnel who will work side by side with University personnel. Master teachers in these schools will provide a clinical orientation through their supervision of interns and participation in accompanying lectures, seminars, field trips, and workshops.
After graduating and completing preinternship work, prospective teachers will be employed as paid, part-time teaching interns in cooperating public schools. Lectures, seminars, and clinics designed to relate theory and practice accompany internships. The student will be recommended for a teaching credential when he has demonstrated a satisfactory level of insight into educational problems and issues, the ability to apply pertinent knowledge in the analysis of learning, and the ability to guide the learning of others.
Students planning to teach in junior colleges will complete a master's degree, concentrating in appropriate teaching fields. They may combine professional studies and a paid teaching internship in a postmaster's year.
Preinternship professional studies and internships will be available in 1966-67.
The programs will satisfy the requirements for certification in most states. Normally it will be possible to meet the special requirements of a given state if a student determines the nature of these requirements early in his program.

## The School of Engineering

Students expecting to pursue careers in engineering will enroll in the College of Arts, Letters, and Science for the first two years but with engineering faculty assigned as advisors. The underclass program will emphasize mathematics, physics, and chemistry, with elective programs in the arts and humanities.

The School of Engineering curriculum begins at the junior level and in 1965-66 will offer programs in systems and electronics. Subsequently, programs will be created in such fields as aerospace, chemical, biological, structure, and environmental engineering. The purpose of these programs is to provide graduates with a broad education in technology and its interaction with society so as to equip them to practice engineering in the most meaningful sense of the word.

In the systems and electronics programs, work in mathematics, physics, and the arts and humanities, begun in the underclass years, will continue on the upperclass level. Engineering studies will involve the general fields of signal theory, mass and energy flow, thermodynamics, continuum mechanics, discrete system theory, and materials offering the opportunity to specialize in either electronics or system theory by means of elective courses.

## REQUIREMENTS FOR THE B.S. IN ENGINEERING

Students must complete the required courses and electives of one of the engineering programs. They must meet the general University requirements in American History and Institutions and in English (Subject A) as well as minimum scholastic standing and senior residence.

## GRADUATE PROGRAM IN THE SCHOOL OF ENGINEERING

The school will offer programs leading to the master's and doctor's degrees in the areas of engineering with which faculty members of the school are particularly concerned. Those interested in graduate study should write for information to the School of Engineering.

## The Graduate Division

From the outset of instruction graduate study will be an important part of the University of California, Irvine. Besides opportunity for further development in his chosen discipline, the graduate student will find it possible to continue his broader growth-to pursue excellence in such disciplines as English, foreign languages, mathematics, bibliography, and computer techniques. Further he will be invited to develop his knowledge of the history of his broad area of interest and to gain an understanding of the problems of higher education in this country. Appropriate graduate degrees at the master's and doctor's levels, both those emphasizing the creative arts and creative scholarship and those emphasizing technical proficiency, will be offered.

Through cooperative arrangements with sister campuses, graduate work will be possible in some of those areas for which there will not yet be full programs at UCI. As a general guide to initial offerings, see the graduate programs listed under the several divisions and schools.

## The Graduate School of Administration

The Graduate School of Administration will be a professional school providing advanced instruction for students interested in pursuing careers in business or in public or educational administration. Its programs will be based on and closely related to the work of the Social Science Division of the College of Arts, Letters, and Science and the School of Engineering. By 1965 there will be limited programs tailored to meet the needs of individual students.

Students are invited to correspond with the Dean of the Division of Social Sciences about the details of their program.

## The Library

A library to support the teaching and research programs has been in the process of selection and organization since 1962. In September 1965, about 90,000 volumes will be ready for use. Plans are in motion to expand the collection to 250,000 volumes by 1971 .

The collection will be "open-stack," accessible to all, with a serviceminded staff on hand to assist students in its use.

The Library will be strong in bibliographical works, so that book resources beyond those immediately available at Irvine can be tapped. The catalogs of the great scholarly collections at the Berkeley and UCLA campuses, as well as the Library of Congress, will be available to faculty and students.

## Intramural Sports

The intramural sports program will provide opportunities for all men and women students to participate in a wide variety of individual and team sports.

Competition will be organized on the basis of individuals and teams representing various campus student organizations and residence hall units.

Recognition awards will be given for outstanding individual and team performance.

## Intercollegiate Athletics

In 1965-66 UCI will have representative teams in basketball, golf, tennis, swimming, water polo, and, possibly, crew. The latter will depend upon the availability of equipment and a rowing facility. The intercollegiate athletics program will be expanded as rapidly as facilities and finances permit. Already appointed to positions in athletics at UCI are

Dan Rogers, former USC All Pacific Coast Conference basketball player and assistant coach, as head basketball coach; Dick Skeen, well-known and successful tennis professional, as tennis coach; and Duvall Hecht, former Olympic gold medalist, as coordinator of crew. When sufficient student interest is demonstrated, a program of intercollegiate athletics for women will be promoted in such sports as golf, tennis, and swimming.


Interim office compound on new campus: front left, office building, now housing faculty and staff; rear left, the Faculty Research Center; and right, corporation yard unit.

## The Campus

The UCI campus is located on 1,510 acres of gently rolling hills above the head of Newport Bay, three miles inland from Corona del Mar and the Pacific Ocean. The original 1,000-acre site was donated by The Irvine Company, holders of the 88,000-acre Irvine Ranch in Orange County. Under a campus-community plan outlined by William L. Pereira and Associates, The Irvine Company will develop some 10,000 acres surrounding the campus into a university-focused community of over 100,000 persons by 1990. Already rising in this part of the fast-growing county of over one million population are homes, schools, industries, shopping centers, hotels, parks, golf courses, and boat clubs. The University's growth will be integrated with the cultural, industrial, and recreational life around it.


## UCI PHYSICAL PLAN

The central campus, when classes first open, will include:

1. Natural Sciences-Engineering unit consisting of a five-story classroom and laboratory section, and a one-story lecture hall seating 350 persons.
2. Multipurpose building, including a gymnasium that can be converted into a 3,000-seat auditorium with a stage, a pool, and facilities for student health and University Extension.
3. Central plant for heating and cooling facilities, communication equipment, and electrical distribution.
4. Social Sciences-Humanities unit consisting of a five-story and a three-story building for classrooms and offices.
5. Residence cottages for single students.
6. Cafeteria consisting of a kitchen, a main dining room seating 410 , and a separate dining room seating 40 . The Cafeteria is designed to be expanded into a student union.
7. Library, a five-story building eventually to be doubled in size.

The Library and Cafeteria are the first units of a quadrangle that will link the campus to the Town Center planned by The Irvine Company. Reinforced concrete buildings on the central campus will be consistent in design with emphasis on sun control, platformed structures, and textured surfaces. Rooftops will be used to provide space in the form of seminar and conference rooms, and open-air laboratories. The first group of buildings, the athletic and recreation areas, and ample parking space are designed for a total of 2,000 students. The central campus will be restricted to pedestrian and bicycle traffic.

## To Enter the University of California



## ADMISSION TO THE UNDERGRADUATE PROGRAM

Detailed information on undergraduate admission to the University of California, including the Irvine campus, is contained in the Undergraduate Admissions Circular, which may be obtained upon request from the Office of Admissions of any campus of the University. Applications for September 1965 admission should be addressed to the Office of Admissions, University of California, Irvine, and must be received by March 1, 1965.

## ADMISSION TO THE GRADUATE DIVISION

Successful graduate work depends on possession by the student of an adequate foundation in his chosen field and of the abilities and attitudes that will enable him to utilize the opportunities offered for further growth. Since performance in college is one indicator of training and capacity, attainment of a bachelor's degree at an institution of standing, with an academic performance and subject-matter distribution comparable to those expected at the University of California, is a normal requirement. If some graduate work has also been done, a high-level performance will be expected. Other evidence of graduate school calibre will also be helpful in obtaining acceptance, and some departments will have specific aca-
demic or other requirements. Assistantships and fellowships will be available. Informal inquiries may be addressed to a department, but any formal papers should be sent in duplicate to the Graduate Dean.

## Student Life

The young men and women who come to UCI in 1965 will gain the distinction of being "charter" students on a new campus of one of the world's great universities. These first students, like the "charter" members of the staff, will help determine the character of UCI as the campus grows to its projected 27,500 enrollment.
Students of the University of California share a common heritage, even though the nine campuses are scattered over the state. At UCI, students will combine University tradition with new patterns in keeping with the unique circumstances in which the campus will develop.
Opportunity to organize a student government, student newspaper, and intramural and intercollegiate athletic programs will be immediately available. Formation of clubs and living groups will depend largely upon students' wishes, consistent with University policy.
For the first single resident students enrolling at Irvine there will be a cluster of eight cottages attractively designed for living, study, and social functions. Each cottage will be a home for fifty men or women and a resident assistant. In addition to double student rooms, each cottage will contain a formal lounge, a study-lounge, a library, a recreation room, and a laundry. The resident advisor's suite will include a sitting roomstudy for informal discussions with students. There will be a head resident's home for a senior faculty member and his family associated with each cluster of cottages.
For married students, 100 apartment units are expected to be completed early in 1966.

A variety of cultural and social programs and activities will be available on campus and in the surrounding communities. Orange County's temperate climate and topography including flatland, rolling hills, mountains, and forty miles of seashore make possible an exciting array of recreational opportunities.


## The University of California

The Irvine campus is one of nine campuses of the University of California, which, in addition, consists of six major research stations, nine agricultural field stations, fifty-three agricultural extension offices, and a number of other components located throughout the state. The University is governed by twenty-four Regents, sixteen appointed by the Governor for sixteen-year terms and eight who are members because of the offices they hold. These ex officio members are the Governor, the Lieutenant-Governor, the Speaker of the Assembly, the President of the State Board of Agriculture, the President of the Mechanics' Institute, the President of the Alumni Association, the State Superintendent of Public Instruction, and the President of the University.
The President of the University is the executive head of the University. He is appointed by the Regents and is directly responsible to them. The President and his staff and the other University-wide officers have headquarters in University Hall at Berkeley.
The Chancellor is the chief administrative officer on the Irvine campus. The Chancellor and his staff and the Irvine faculty, consistent with Uni-versity-wide standards, are responsible for the development and operation of the instructional, research, and service functions of the Irvine campus.



Faculty presently in residence on the Irvine campus and developing its initial program:

DANIEL G. ALDRICH, JR., Professor of Soils and Chancellor, is responsible for leading the development of the campus from bare ground to a fully operating institution by September 1965. He received the B.S. from the University of Rhode Island, the M.S. from the University of Arizona, and the Ph.D. from the University of Wisconsin. He has devoted his entire career to the University of California and came to Irvine from his former position as University Dean of Agriculture.

HAZARD ADAMS, Professor of English and Chairman of the Department of English, comes from Michigan State University and earlier taught at Cornell University, the University of Texas, and as a visiting professor at Washington University, St. Louis. In 1962-63 he was a Fulbright Research Scholar at Trinity College, Dublin. He is the author of Blake and Yeats: The Contrary Vision, The Contexts of Poetry, and William Blake: A Reading of the Shorter Poems. He received the A.B. at Princeton and the M.A. and Ph.D. from the University of Washington.

RICHARD L. BALCH, Vice-Chancellor-Student Affairs, is responsible for organizing and supervising student life on the Irvine campus, including admissions, registration, counseling, housing, health, and special services. He received the A.B. degree from Union College, Schenectady, N.Y., and did graduate work at Union College and Stanford University. He comes to UCI after serving on the faculty of MIT and most recently from Stanford University where he served as Dean of Men.

ARTHUR S. BOUGHEY, Professor of Biological Sciences and Chairman of the Department of Population and Environmental Biology, comes to UCI from the University College of Rhodesia and Nyasaland, where he was Professor of Botany and head of the department. He received the B.S. from Leicester University and the Ph.D. from Edinburgh University. He has taught at Edinburgh University, Exeter University, and the University of Accra, and was plant pathologist for the Sudan government. He has been recipient of a Carnegie Travel Fellowship and a Rockefeller Study Grant.


WAYNE H. CRAWFORD, Associate Professor of Physical Education and Chairman of the Department of Physical Education, comes from the University of California, Riverside, where he was Associate Professor of Physical Education. He earned the B.A. at the University of Illinois and the M.A. and doctorate at Columbia University. An authority on the planning of facilities, he is helping to design the multipurpose building and will supervise the teaching program in physical education and intramural and intercollegiate athletics.

JULIAN FELDMAN, Associate Professor of Psychology and Economics, is an expert in simulation of human thought by computers and in organizational decision-making. He transferred from the University of California, Berkeley, where he was Associate Professor of Business Administration. He is a consultant for Systems Development Corporation in Santa Monica. He received the M.A. in political science from the University of Chicago and the Ph.D. in industrial administration from Carnegie Institute of Technology. He is coeditor of Computers and Thought.
KENNETH W. FORD, Professor of Physics and Chairman of the Department of Physics, comes from Brandeis University. He received the A.B. in physics from Harvard and the Ph.D. from Princeton. He began his academic career as a research assistant at the University of California Los Alamos Scientific Laboratory, and has held posts at Princeton and Indiana Universities. His academic honors include a Fulbright Fellowship to the Max Planck Institute, Germany; a National Science Foundation Fellowship to the Imperial College, London; and appointment as a Fellow of the American Physical Society.

CLAYTON GARRISON, Associate Professor of Drama and Dean of Fine Arts, has been Chairman of the Department of Drama and Vice-Chairman of the Division of Humanities at the University of California, Riverside. He received the B.A. and M.A. from the University of Southern California and the Ph.D. from Stanford University. He has taught drama, art, music, and English at Palos Verdes College, Long Beach State College, and the University of California, Berkeley. He is the author of numerous articles in the field of drama and has been a highly successful choreographer and director.


BERNARD GELBAUM, Professor of Mathematics and Chairman of the Department of Mathematics, received the B.A. from Columbia University, the M.A. and Ph.D. from Princeton University. He has been .serving as Consultant for the Institute for Defense Analysis in Washington, D.C. and came to UCI from the University of Minnesota. He has also taught at the University of Newark and Princeton University. He has published numerous articles on mathematics and has done extensive research in functional analysis, topological groups, differentiable manifolds and measure theory.

RALPH W. GERARD, Professor of Biological Sciences, Director of Special Studies, and Dean of the Graduate Division, has been conducting special studies on computer systems and related problems of organization. For 37 years he was with the University of Chicago where he earned the B.S., Ph.D., and M.D. and was Professor of Physiology. His research on the nervous system and behavior is internationally recognized. He has served as Director of Laboratories at the Mental Health Research Institute, University of Michigan, and earlier at the Neuropsychiatric Institute.

JOHN GOODLAD, Professor of Education and Assistant to the Chancellor for Education, is also serving, in addition to his duties on the Irvine campus, as Director of the University Elementary School at UCLA. He received the B.A. and M.A. from the University of British Columbia and the doctorate from the University of Chicago. He has served as Consultant in Curriculum for the Atlanta Area Teacher Education Service, as Director of the Division of Teacher Education at Emory. University and at Agnes Scott College, and as Director of the Center for Teacher Education at the University of Chicago.

JOHN J. HOLLAND, Professor of Microbiology and Chairman of the Department of Molecular and Cell Biology, comes from the University of Washington. His record as a microbiologist and virologist includes the winning of the coveted Eli Lilly Award in Microbiology. He received the doctorate at UCLA and has taught at the University of Minnesota. He is particularly known for his contributions in virology and immunology, and the synthesis of DNA during the infection of tissue cells by such viruses as that of poliomyelitis.


SAMUEL C. McCULLOCH, Professor of History and Dean of Humanities, comes from San Francisco State College where he was Professor of History and Dean of the College. He has also taught at Oberlin College, Amherst College, the University of Michigan, and Rutgers University. He was born in Australia and studied at the University of Melbourne. He received the Ph.D. at UCLA. He has been recipient of a Fulbright Research Fellowship to the University of Sydney, Australia. His field is eighteenth- and nineteenthcentury British Empire history, and he is an associate editor of the Journal of British Studies.

JAMES L. McGAUGH, Associate Professor of Psychobiology and Chairman of the Department of Psychobiology, was formerly Associate Professor of Psychobiology at the University of Oregon. He earned the B.A. in Psychology at San Jose State College and received the Ph.D. from the University of California, Berkeley. He has taught at San Jose State College and recently spent a year in Rome on a postdoctoral fellowship awarded by the National Research Council of the National Academy of Sciences. In the summer of 1964 he taught at the Institute of Behavioral Genetics at Berkeley. He is coauthor of Integrating Principles of Social Psychology.
JAMES G. MARCH, Professor of Psychology and Sociology and Dean of Social Sciences, comes from Carnegie Institute of Technology, where he was Professor of Industrial Administration and Psychology. He earned the B.A. at the University of Wisconsin and the Ph.D. in political science at Yale. He spent one year as a Fellow at the Center for Advanced Studies in the Behavioral Sciences at Palo Alto. His books include Organizations with Herbert A. Simon, and A Behavioral Theory of the Firm with Richard A. Cyert. He is the editor of the Handbook of Organizations, to be published this year.

ARTHUR J. MARDER, Professor of History, comes from the University of Hawaii where he held the unique rank of senior professor. He was educated at Harvard University, where he received the Ph.D. and later served as visiting professor. He has also taught at the University of Oregon and Hamilton College. He has won the American Historical Association's George Louis Beer prize. He is the author of The Anatomy of British Sea Power, Portrait of an Admiral, Fear God and Dread Nought, and From the Dreadnought to Scapa Flow.

A. I. MELDEN, Professor of Philosophy and Chairman of the Department of Philosophy, comes from the University of Washington. He earned the B.A. at UCLA, the M.A. at Brown University, and the Ph.D. at the University of California, Berkeley. He is a teacher and scholar in the field of ethics and the philosophy of human action. He has held a Ford Foundation Fellowship, a Guggenheim Fellowship, and has been President of the Pacific Division of the American Philosophy Association. Two of his recent books are Rights and Right Conduct and Free Action.
J. W. PELTASON, Professor of Political Science and Vice-Chancellor-Academic Affairs, served on the faculty of the University of Illinois from 1951 to 1964 and was Dean of its College of Liberal Arts and Sciences from 1960 to 1964. He received the B.A. from the University of Missouri, the M.A. from Missouri and Princeton Universities, and the doctorate from Princeton. He is the author of several books on the American judicial system and is active in the American Political Science Association.

CONWAY PIERCE, Professor Emeritus at the University of California, Riverside, and Assistant to the Chancellor for Physical Sciences, received the B.S. from Georgetown College, and the M.S. and Ph.D. from the University of Chicago. He has been Professor of Chemistry at the University of California, Riverside, and has also taught at Pomona College, the University of Chicago, the University of South Dakota, and the University of Kentucky. He has been a Petroleum Research Fellow and also recipient of an Honor Scroll from the American Chemical Society.

DAN S. ROGERS, Associate Supervisor and Basketball Coach in the Department of Physical Education, comes from USC where he was assistant varsity basketball coach. He was an outstanding member of the USC basketball team from 1955 to 1957 and was named to the All-Pacific Coast Team for the 1957 season. He coached basketball for two years at Newport Harbor High School. Until classes begin in 1965, he will be helping to develop a school relations program in the Office of Student Affairs.

F. SHERWOOD ROWLAND, Professor of Chemistry and Chairman of the Department of Chemistry, comes from the University of Kansas. He received the B.A. from Ohio Wesleyan and the M.S. and Ph.D. from the University of Chicago. He is an authority on the effects of radioactive decay in chemical systems. He worked at the Max Planck Institute in Mainz, Germany, and at Cambridge University on a Guggenheim Fellowship, and has held an Atomic Energy Commission Fellowship. He has also taught at Princeton University.
ROBERT M. SAUNDERS, Professor of Engineering and Assistant to the Chancellor for Engineering, assumes his duties at UCI while on leave from his position of Professor at the University of California, Berkeley. He obtained his degrees in Electrical Engineering from the University of Minnesota. He has worked as a consulting engineer for private industry and as a U. S. Navy Reserve Officer at Oak Ridge, Tennessee. He has taught at MIT and the University of Minnesota, and has been Simon Fellow at Manchester University, England. A registered professional engineer with the State of California, he is coauthor of Analysis of Feedback Control Systems.
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JOHN E. SMITH, University Librarian A has $^{\text {L }}$ reeently served in Pakistan as advisor on Library Resources and Training to the University of Soritherm California's School of Public Administration Pakistan Project. In 1957-58 he was advisor to USC's Iran Project. He has served as Chief Librarian of the City of Santa Barbara and as head of the Acquisitions Department of the UCLA Library. A graduate of UCLA, he completed advanced training in librarianship at the University of fouthern California.
EDWARD A. STEINHAUS, Professor of Biological Sciences and Dean of Biological Sciences, comes from the University of California, Berkeley, where he was Professor of Invertebrate Pathology and Chairman of the Division. He received the B.S. from North Dakota State University, and the Ph.D. from Ohio State University. He has authored three books relating to insect microbiology and pathology and serves as editor of several scientific journals. He is past president of the Entomological Society of America, a fellow of several scientific societies and foundations, and consultant to a number of federal agencies.


GROVER C. STEPHENS, Professor of Biological Sciences and Chairman of the Depart ment of Organismic Biology, has been Professor of Zoology at the University of Minnesota. He majored in mathematics as an undergraduate and obtained the M.A. in philosophy before turning to biology and obtaining the Ph.D. at Northwestern University. He was a National Science Foundation senior postdoctoral fellow in 1959-60. His major research interest involves marine invertebrate physiology.

FRED M. TONGE, Associate Professor of Administration, will assist in development of computer facilities and programs. He comes from Carnegie Institute of Technology where he was Associate Professor of Industrial Administration He earned the B.S. in Industrial Administration and the Ph.D. at Carnegie Tech. His doctoral dissertation, A Heuristic Program for Assembly Line Balancing, won a National Ford Foundation Award. He is the author of numerous articles on management and computer sciences.

The faculty has been advised and assisted by a distinguished group of scholars from sister campuses. The Academic Advisory Committee consists of:

John S. Galbraith—Department of History, Los Angeles, until July 1, 1964; Chairman of the Committee until July 1, 1964; Vice ChancéllorAcademic Affairs, San Diego, effective July 1, 1964.
H. T. Swedenberg-Department of English, Los Angeles; Chairman of the Committee effective July 1, 1964.

Carl H. Eckart—Department of Physics, San Diego.
James S. Gillies—Department of Business Administration, Los Angeles.

Robert F. Gleckner-Department of English, Riverside.
William F. Kennedy-Department of Economics, Santa Barbara.
Ivan Hinderaker served as Professor of Political Science and Vice-Chancellor-Academic Affairs, until September 1, 1964, at which time he was named Chancellor at the University of California, Riverside. He came to Irvine from UCLA where he was Professor of Political Science and Chairman of the Department.

## The Regents of the University

## REGENTS EX OFFICIO

His Excellency EDMUND G. BROWN, LL.B.
Governor of California and President of The Regents
State Capitol

Sacramento, Calif 9581
THEODORE R. MEYER, A.B., J.D. President of the Mechanics' institute 111 Sutter St., San Francisco, Calif. 94104

GLENN M. ANDERSON, A.B. Lieutenant-Governor of California
State Capitol, Sacramento, Calif. 95814 JESSE M. UNRUH, A.B.
SSE M. UNRUH, A.B.
State of Capitol, Assembly Sacramento, Calif. 95814
MAX RAFFERTY, A.B., M.A., Ed.D. State Superintendent of Public Instruction
721 Capitol Ave., Sacramento, Calif. 95814
JSSSE W. TAPP, B.S., M.S., LL.D.
SSE Wident of the State Board of Agriculture Bank of America
650 S . Spring St., Los Angeles, Calif. 9005
W. THOMAS DAVIS, A.B., LL.B.

President of the Al.unin Association of the
University of California
9944 Santa Monica Blvd., Beverly Hills, Calif.
90212 90212
CLARK KERR, Ph.D., LL.D.
President of the University
714 University Hall, Berkeley, Calif. 94720, 714 University Hall, Berkeley, Calif. 94720,
2147 Administration Building, Los Angeles, Calif. 90024

## APPOINTED REGENTS

The term of the appointed Regents is sixteen years, and terms expire March 1 of the years indicated in parentheses.

EDWIN W. PAULEY, B.S., LL.D. (1970) Ten Thousand Santa Monica Blvd.,
Los Angeles, Calif. 90025

ORNELIUS J. HAGGERTY (1966)
ORNELIUS J. HAGGERTY (1966)
AFL-ClO BIdg., 815 Sixteenth St., NW
Washington, D.C. 20006
DONALD H. McLAUGHLIN, B.S., M.S., Ph.D., D.Eng. 100 Bush St., San Francisco, Calif. 94104 EDWARD W. CARTER, A.B., M.B.A., LL.D. (1968) 14th Floor,
600 S. Spring St., Los Angeles, Calif.' 90014
MRS. DOROTHY B. CHANDLER, LL.D. (1970)
202 W. First St. Los Angeles, Calif. 90053 MRS. RANDOLPH A. HEARST (1974)
MRS. RANDOLPH A. HEARST (1974)
233 W. Santa Inez Ave., Hillsborough, Calif. 94010
PHILIP L. BoYD, A.B. (1972)
3900 Market St., Riverside, Calif. 92501 NORTON SIMON (1976) 1645 W. Valencia Dr., Fullerton, Calif. 92633 WILLIAM E. FORBES. A.B. (1978) 637 S. Hill St., Los Angeles, Calif. 90014 WILLIAM M. ROTH. A.B. (1980)
Deputy Special Representative for Trade $\begin{aligned} & \text { Negotiations } \\ & \text { Executive Office BIdg., Room }\end{aligned} 178$ Executive Office Bldg., Room 178
Washington, D.C. 20025
MRS. EDWARD H. HELLER, A.B., LL.D. (1976)
99 Faxon Rd.. Atherton, Calif., 94025
FREDERICK G. DUTTON, A.B. LL.B. (1978) U.S. State Department,
Washington, D.C. 20020

SAMUEL B. MOSHER, B.S. (1972)
1010 Wilshire BIvd., Los Angeles, Calif. 90017
OHN E. CANADAY. A.B. (1974)
Burbank, Calif. 91502
WILLIAM K. COBLENTZ, A.B., LL.B. (1980) 333 Montgomery St., San Francisco,
Calif. 94111

LAURENCE J. KENNEDY. LL.B. (1968) P.0. Box 1819, Redding, Calif. 96002

OFFICERS OF THE REGENTS
His Excellency Edmund G. Brown, LL.B. Governor of California
State Capitol, Sacramento, Calif. 95814
Edward W. Carter, A.B., M.B.A., LL.D.
Chairman
14th Floor, United California Bank Bldg
14th Floor, United California Bank Bldg.
600 S. Spring St., Los Angeles, Calif. 90014
Donald H. McLaughlin, B.S., M.S., Ph.D., D.Eng.
Vice Chairman
100 Bush St., San Francisco, Calif. 94104
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590 University Hall, Berkeley, Calif. 94720

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590 University Hall, Berkeley, Calif. 94720
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590 University Hall, Berkeley, Calif. 94720

Donald L. Reidhaar, A.B.. LL.B.
Assistant Counsel
590 University Hall, Berkeley, Calif. 94720

Thomas J. Cunningham, A.B., LL.B., LL.D. General Counsel
590 University Hall, Berkeley, Calif. 94720

John E. Landon, A.B., LL.B.
Associate Counsel
590 University Hall, Berkeley. Calif. 94720
John P. Sparrow, A.B., LL.B.
Associate Counsel
590 University Hall, Berkeley, Calif. 94720

George L. Marchand, A.B., LL.B.
Assistant Counsel and Attorney for Residence
Matters
590 University Hall, Berkeley, Calif. 94720
Romulus B. Portwood, A.B., M.A., LL.B.
Assistant Counsel
590 University Hall, Berkeley, Calif. 94720
Miss Marjorie J. Woolman
Secretary
689 University Hall, Berkeley, Calif. 94720
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689 University Hall, Berkeley, Calif. 94720

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## FACTS ABOUT UCI

## Opening-September 1965

ACADEMIC OBJECTIVES-A general campus of the University of California to provide undergraduate instruction leading to baccalaureate degrees, graduate instruction leading to master's and doctor's degrees, instruction in professional fields, postdoctoral programs, and teacher education; also to conduct basic and applied research.

CAMPUS-A 1,510-acre site on rolling hills three miles inland from Newport Beach-Balboa in Orange County.

BUILDINGS at OPENING-Natural Sciences-Engineering, Social SciencesHumanities, Library, Cafeteria, Multipurpose Auditorium-Gymnasium, Central Plant, Faculty Research Center, Residence Cottages for 400 single students.

ADMISSION-Requirements are uniform on all campuses of the University of California. Deadline is March 1, 1965, for application to UCI for the 1965 fall quarter.

ENROLLMENT ESTIMATES—1,000 in 1965; 2,000 in 1967; 7,500 in 1975; 13,000 in 1980; 27,500 in 1990.

FACULTY-105 at opening.
LIBRARY—Basic 90,000 volumes in 1965; estimated 250,000 volumes by 1970 , 500,000 volurnes by 1975.

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SANTA CRUZ $\hat{\text { * }}$


[^0]:    Model of campus: in the foreground is the Library; counter-clockwise are the Cafeteria,

