

September 9, 1982

*Keep a  
copy in this  
office for  
reference*

ACADEMIC AND STAFF PERSONNEL

RE: UCI Academic Planning Statement

Attached is a copy of the July 1982 revision of the Academic Plan for the 1980s which recently was forwarded to Systemwide. It contains no fundamental changes from the earlier version, the Preliminary Planning Statement dated January 1980.

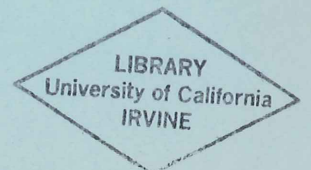
The UCI Academic Plan will be further expanded during 1982-83 in order to address the problems of underpreparation, both with regard to enrolled students (particularly entering students) and with regard to the improvement of curriculum and instruction in our feeder schools. It also will address how the campus views the purpose of EOP and Student Affirmative Action.

Although the planned expansion of the Academic Plan will not suggest a change in any of the fundamental statements of the present document, it will, however, bring activities such as academic support services into the basic framework of the campus.

*W. J. Lillyman*  
William J. Lillyman  
The Vice Chancellor

WJL:cgr

Attachment



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UNIVERSITY OF CALIFORNIA, IRVINE

ACADEMIC PLAN FOR THE 1980s

JULY 1982



## EXECUTIVE SUMMARY

The goals of the Irvine campus of the University of California are to provide excellent undergraduate and graduate education while making substantial contributions in research. These goals are appropriate for a leading research university. The UCI Academic Plan outlines the campus strategy for achieving these goals during the decade of the 1980s. UCI planning objectives are:

- o to maintain and further develop undergraduate, graduate, and professional programs that respond to the changing needs of society and that provide focus in specific disciplines while assuring an appropriately broad or liberal education for all students
- o to encourage and support scholarly and creative activity which distinguishes the University of California as a leading research university
- o to obtain a sufficient number of faculty positions to staff adequately the existing academic programs and to maintain excellence in education and research
- o to continue the recruitment, retention, and promotion of faculty who are creative scholars and stimulating teachers
- o to construct physical facilities required for UCI's educational and research activities
- o to maintain an academic planning process that ensures excellence in undergraduate and graduate education and research

- o to acquire extramural funds to support research and to enhance teaching at both graduate and undergraduate levels at a level appropriate for a major institution of higher education
- o to continue efforts to meet affirmative action goals in student and faculty recruitment and retention
- o to develop campus inclusion areas in order to create a residential academic community, to provide housing for faculty and staff, and to attract university-related research and educational organizations to the campus

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## I.

## INTRODUCTION

The UCI Academic Plan for the 1980s has been developed in order to articulate the educational and research goals of the campus and to indicate UCI's assumptions concerning future resources available to achieve these goals. The present document is a revision of the January 1980 preliminary planning statement. During 1982-83 the UCI Academic Plan will undergo further development. This expansion of the Plan will not suggest a change in any of the fundamental statements of the present document. Rather, it will amplify UCI plans with regard to undergraduate education and will permit the Plan to indicate how the campus intends during the next few years to address the problems of underpreparation. The latter will involve both activities designed to assist enrolled students and activities intended to improve instruction in the feeder schools. Campus approaches to these problems are now in the process of being formalized. In addition, expansion of the Plan will recognize administrative organizational changes resulting from the appointment of the Vice Chancellor, effective July 1, 1982.

The campus has been and continues to be engaged in a process of review and analysis of its academic objectives, its programs, and its organization. For the past several years the UCI academic planning process has focused on meeting the challenge of assuring growth in quality during a period of growth in enrollment and restricted resources.

Because the UCI planning process anticipated the concerns of UC planning activities as suggested by the Guidelines of June 18, 1979, no special planning process was initiated in order to prepare the present document. Present UCI academic planning procedures were developed during the years 1974 through 1978. These procedures involve, in an ongoing process, both the campus administration and the Irvine Division of the Academic Senate. This effort has led to systematic, objective evaluations and reviews of campus goals while assuring that there is full recognition of the goals

of the academic units and of the needs of UCI undergraduate and graduate students. This planning process is essential in order to motivate and guide academic development at UCI within the resources available, and to indicate what resources are necessary for the campus to achieve the goals that are determined.

The academic units will continue to serve the needs of Irvine's undergraduate and graduate students. UCI must continue to support firmly its educationally strong and internationally recognized departments in the sciences, social sciences, humanities, and the arts, and must at the same time assure appropriate support for disciplines or departments which are essential to the campus but should be made stronger than they are through thoughtful evaluation and creative action. Assuming appropriate resources, the campus will be able to provide during the 1980s a mix of disciplines which are of high quality and which will fulfill the obligations of the University with regard to excellence. It is important that academic units are supported in such a way that graduate educational programs and research programs will retain their standing in the international community of scholars. The UCI policy of making careful choices of disciplines to be represented on the Irvine campus will assist in the assurance of excellence.

The UCI Academic Planning Statement contains seven sections and several appendices. A statement of the campus mission for the 1980s is presented in Section II. The goals expressed there remain fundamentally unchanged from those declared in 1965, when UCI opened as a general campus of the University of California. Section III gives the context for the present planning process. It provides background information on the campus academic organization, on administrative organization, on distributions of faculty, undergraduate, and graduate students, and on academic workload among the academic units. Section IV describes the academic planning process at UCI and the principles that guide the process.

Resource requirements for the campus are described in Section V. Section VI discusses enrollment issues such as program capabilities and capacities, as well as demographic and access issues. Finally, Section VII contains brief descriptions of the educational and research programs of the academic units.

The University of California, Irvine has built outstanding research and scholarship programs. Because of the quality of these programs there has been continued attrition and declining teaching at both graduate and undergraduate levels. The integrated nature of these activities helps to maintain excellence both in education and in research. In the relatively short period of 17 years, UCI has become a nationally recognized center of research and education. In 1976, when the Carnegie Council identified 58 institutions of higher education as research universities in the United States, UCI was among the five California public universities identified. The primary objective of the planning effort of UCI is to evaluate and improve the quality and the breadth of educational opportunities and research programs that have contributed to the current stature of this institution.

It is UCI's aim to emerge from the 1980s as an institution of higher education that continues to be recognized for the quality of both its research and its research advancements. Even during a period of

the breadth of educational opportunities and research programs that have contributed to the current stature of this institution.



## II.

## CAMPUS MISSION

UCI has deliberately established and now reaffirms its goals of (1) excellence in education and research and (2) balance among programs in the liberal arts and sciences and in selected professional schools. Both are essential to a major public research university serving the needs of the State and one of the nation's fastest growing metropolitan areas. The specific mission of UCI at this time is to continue the final stages of becoming a major public research university. In order to accomplish these goals UCI will continue to (1) contribute to the growth of knowledge in general, (2) educate at the undergraduate and graduate levels, and (3) seek solutions to local, regional, and national problems through the utilization of the unique talents of the Irvine faculty and staff.

The University of California, Irvine has built outstanding research and scholarly programs. Because of the quality of these programs there has been continued effective and stimulating teaching at both graduate and undergraduate levels. The integrated nature of these activities helps to maintain excellence both in education and in research. In the relatively short period of 17 years, UCI has become a nationally recognized center of research and education. In 1976, when the Carnegie Council identified 98 institutions of higher education as research universities in the United States, UCI was among the five California public institutions identified. The primary objective of the total planning effort of UCI is to maintain and improve the quality and the breadth of educational opportunities and research programs that have contributed to the current stature of this institution.

It is UCI's aim to emerge from the 1980s as an institution of higher education that continues to be respected for the quality of both its graduates and its research advancements. Even during a period of



financial uncertainty, the Irvine campus has continued to expand its research scope in the areas of social science, humanities, and natural and physical sciences, as well as in engineering and computer science. Further, regardless of field or aim, graduates of this institution will be informed by and have their lives enriched by our educational process, so that they can assume their rightful role in the community. In this manner, Irvine continues to reaffirm the University's goals of education, research, and public service.

UCI also reiterates its commitment to general, liberal education at the undergraduate level. The curriculum and graduation requirements, recently modified to strengthen basic education in the primary areas of writing, natural sciences, social and behavioral sciences, humanistic inquiry, language, and analytical thought will assist in developing informed, articulate, and humane individuals. To assure this objective, undergraduate education is continually reviewed by the Irvine Division of the Academic Senate. Additional procedures are being established on the campus to consider the relationships among liberal education, "specialized" or major education, the needs of entering students with regard to preparation for advanced work, and academic counseling and academic support services.

In addition to its goals of creating and disseminating knowledge (research and teaching), as a State-supported public institution UCI also reaffirms its responsibilities for public service. Public service is rendered at UCI through many of its official organizations such as the Library, the College of Medicine's Clinical Services System, the University Speakers Bureau, Summer Sports Camps, and the Arboretum. Faculty consulting and student services such as the Cooperative Outdoor Program and the Student Speakers Forum continue to benefit the community. UCI enriches community arts with dance and symphony concerts, as well as dramatic presentations. UCI has the added distinction of having many faculty in several academic units whose research activities directly address particular contemporary societal issues. Last, UCI provides community

service through University Extension, and through campus research units: the Public Policy Research Organization, the Institute of Transportation Studies, and the Cancer Research Institute. These units serve both short- and long-term needs of society.

The achievement of these goals within the context either of constant or declining State resources for the University of California will be difficult. It will require the dedication of UCI faculty, staff, students, the administration, and The Regents, as well as the State of California, to enable UCI to meet its commitments. UCI has almost realized its ambition to become one of the nation's top 50 leading public research universities. The realization of this particular goal, as well as UCI's fulfillment of its educational goals, will present a challenge for all involved. However, the basis on which these next steps will be taken has been firmly established.

### III. BACKGROUND

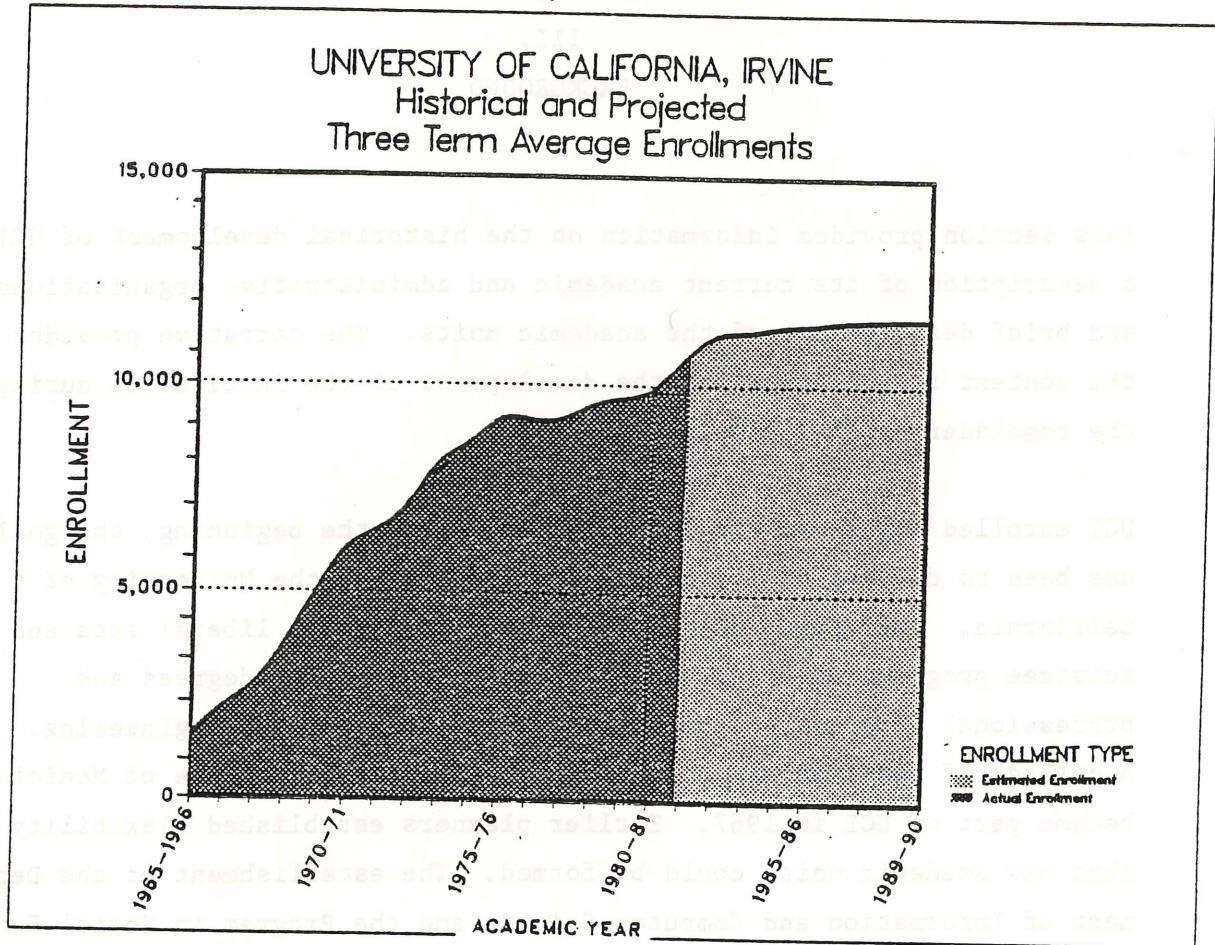
This section provides information on the historical development of UCI, a description of its current academic and administrative organizations, and brief descriptions of the academic units. The narrative provides the context for planning for the development of the institution during the remainder of the 1980s.

UCI enrolled its first students in 1965. From the beginning, the goal has been to develop at Irvine a general campus of the University of California. Therefore, UCI began with a spectrum of liberal arts and sciences programs offering undergraduate and graduate degrees and professional programs in administration, education, and engineering. A college of medicine was added when the California College of Medicine became part of UCI in 1967. Earlier planners established flexibility so that new academic units could be formed. The establishment of the Department of Information and Computer Science and the Program in Social Ecology, reflected the creative attitudes needed for their establishment. This exemplifies UCI's original and continuing objectives of being a land grant college for the citizens of the latter half of the twentieth century, and UCI's commitment to develop new approaches to education and research.

The development of the campus during its first decade was largely driven by academic goals, student demand, and enrollments. Thus, the increase in enrollment shown in Figure 1 provides a quantitative measure of the growth of UCI from its inception to its current status as a substantial institution of higher education with approximately 11,000 students. The past history of UCI may be characterized by quantitative growth. The next decade will be characterized by moderate quantitative and by qualitative growth, if the State continues to supply resources enabling all qualified students to attend the University of California as mandated in the Master Plan for Higher Education.



Figure 1.



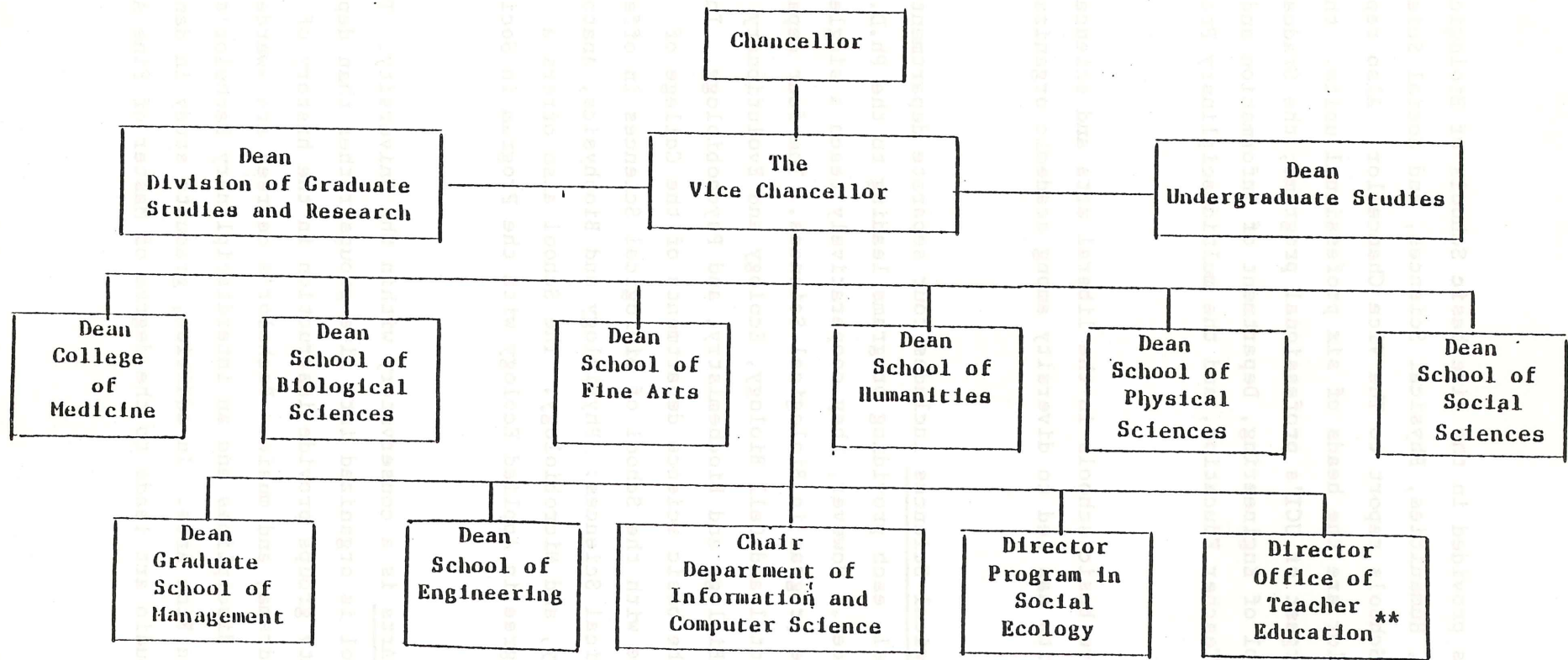
### Academic Organization

The academic organization of UCI encourages and promotes academic diversity while providing campuswide coordination of functions and attention to issues of common concern to the academic units. The organization (Fig. 2) is notable for the replacement of the traditional College of Arts, Letters, and Sciences with five basic schools and six professional units. This academic organization has resulted in significant diversity of organizational and educational perspectives among the traditional liberal arts and sciences.

Among those reporting to The Vice Chancellor are two deans with broad campus responsibilities--the Dean of Undergraduate Studies and the Dean of Graduate Studies and Research. In addition to certain administrative responsibilities, these individuals serve as advocates for their respective constituencies. Education in the traditional liberal



ACADEMIC ORGANIZATION\*



\* Degree granting units only; excludes Physical Education, Library, and University Extension.  
\*\* Educational programs of the Office of Teacher Education lead to credentials granted by the State of California.

arts and sciences is provided in the five basic Schools of Biological Sciences, Fine Arts, Humanities, Physical Sciences, and Social Sciences. The deans of these Schools report to The Vice Chancellor. Also reporting to The Vice Chancellor are the heads of six professional units: the College of Medicine, the largest of UCI's professional programs; the Graduate School of Management, School of Engineering, Department of Information and Computer Science, Office of Teacher Education, and the multidisciplinary Program in Social Ecology.

The existence of five basic schools in the liberal arts and sciences and six professional units has led to diversity among academic organizations at UCI.

The School of Biological Sciences includes four separate departments at the graduate level, each providing programs leading to the Ph.D. in Biological Sciences. However, they cooperatively teach a single undergraduate degree program in Biological Sciences. The four departments are Developmental and Cell Biology, Ecology and Evolutionary Biology, Molecular Biology and Biochemistry, and Psychobiology. In addition, four of the basic science departments of the College of Medicine participate with the School of Biological Sciences in offering the Ph.D. in Biological Sciences: Physiology and Biophysics, Anatomy, Biological Chemistry, and Microbiology. The School also offers a joint Bachelor's degree in Applied Ecology with the Program in Social Ecology.

The School of Fine Arts is a conservatory within the University. The faculty of the School is organized into five groups rather than departments. These faculty groups provide instruction in the history of art, studio art, dance, drama, and music. Bachelor's degrees are awarded in each of the five disciplines and an interdisciplinary Bachelor's degree is awarded in Fine Arts. In addition, graduate study in dance, drama, music, or studio art leads to the degree of Master of Fine Arts in Fine Arts.

The School of Humanities contains both departments and programs. The School includes the Departments of Classics, English and Comparative Literature, French and Italian, German, History, Philosophy, Spanish and Portuguese, and the Programs in Linguistics and Russian, as well as a concentration in Film Studies. The departments offer graduate degrees; the programs do not. All units share responsibility for the Humanities Core Course, a major undergraduate educational program of the campus, as well as major responsibility for the newly constituted upper-division writing requirement. In addition to the undergraduate degrees offered by the departments and programs, the School offers an interdisciplinary Bachelor's degree in Humanities.

The School of Physical Sciences is divided into the Departments of Chemistry, Mathematics, and Physics. This is the clearest example on the campus of the traditional departmentalization within higher education. The Departments are responsible for the School's programs in undergraduate education through postgraduate research, leading to the B.S., M.S., and Ph.D. degrees in Chemistry, Mathematics and Physics.

The School of Social Sciences is organized into four groups for purposes of graduate instruction and research. These groups are Cognitive Sciences; Comparative Culture; Politics, Society, and Social Issues; and Social Relations. Ph.D. degrees are awarded in Comparative Culture, Political Science, Psychology, and Social Science. The School provides undergraduate programs leading to degrees in Anthropology, Comparative Culture, Economics, Geography, Linguistics, Political Science, Psychology, Social Science, and Sociology.

The Graduate School of Management awards the Master's degree in Business Administration, in Public Administration, in Public and Business Administration, and the Ph.D. in Administration. Undergraduate students may participate in the School through the 3-2 Program, which leads to a Bachelor's degree in another discipline and a Master's degree. In addition, a concentration in Management Studies is available to qualified upper-division students.



The School of Engineering is divided into groups according to three basic undergraduate curricular options: civil, electrical, and mechanical engineering. The School offers the B.S., M.S., and Ph.D. degrees in Engineering. A joint option in environmental engineering also is offered in conjunction with the civil and mechanical engineering options.

The Department of Information and Computer Science offers the B.S., M.S., and Ph.D. degrees in Information and Computer Science.

The Program in Social Ecology is a multidisciplinary unit which focuses on social and environmental influences on human behavior and health. There are three subareas of the Program: environmental analysis, criminal justice, and social behavior. The B.A., M.A., and Ph.D. degrees are awarded. Additionally, a joint Bachelor of Arts degree in Applied Ecology is awarded with the School of Biological Sciences.

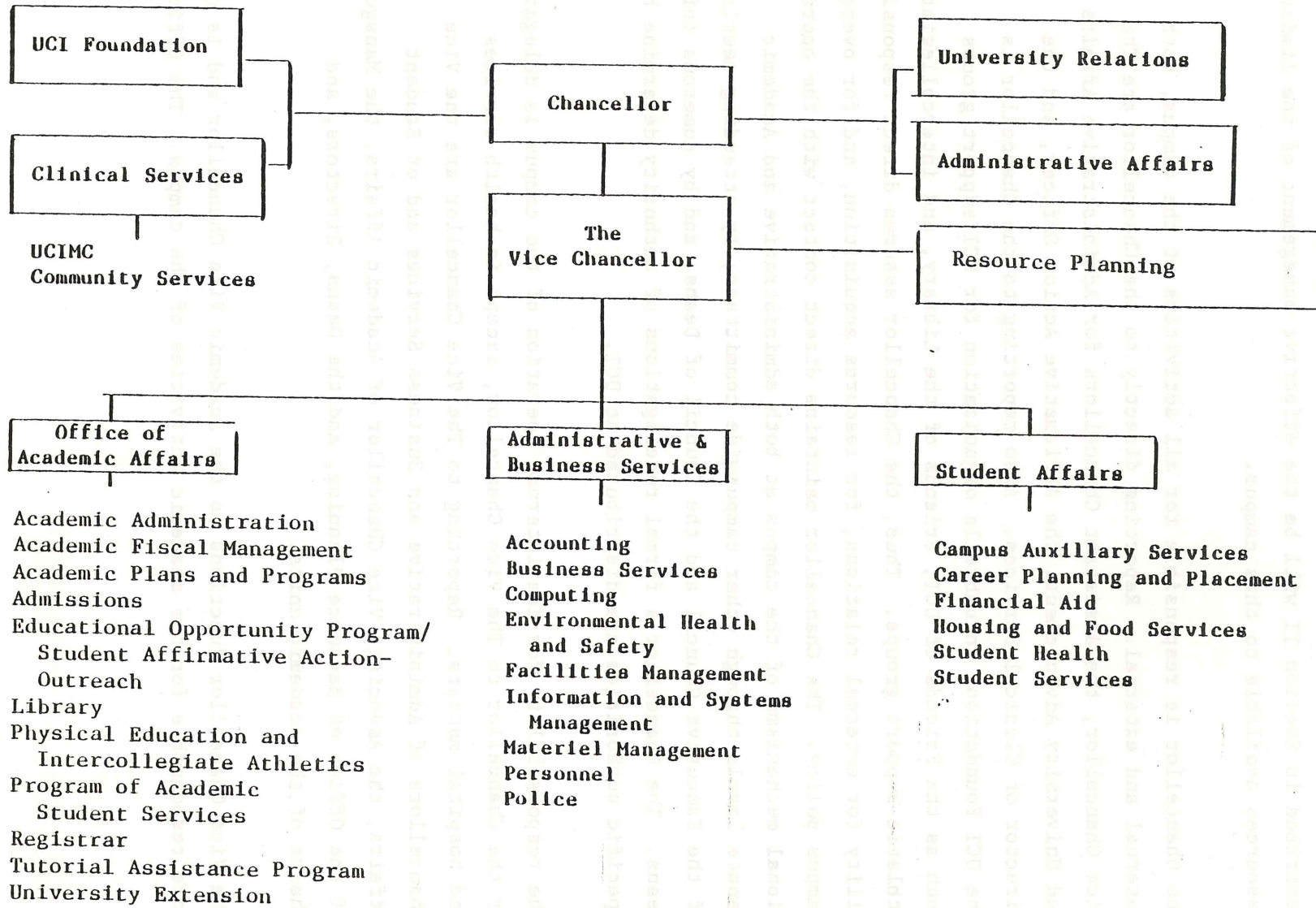
The Office of Teacher Education does not offer programs leading to academic degrees. Instead, the Office cooperates with other academic units to staff programs in education leading to credentials in nine different specialties.

#### Administrative Organization and Issues

It is customary to describe a campus administration by presenting an organization chart displaying the reporting relationships of various campus administrators and campus functions. Figure 3 presents a simplified organization chart; further details can be found in Appendix A. The organization chart provides some background or framework within which to discuss other issues. However, of more importance than the organization chart are the working relationships among academic administrators and campus managers, and the spirit and vision of leading



**ADMINISTRATIVE ORGANIZATION\***



\*Excludes degree granting academic units, Irvine Division of Academic Senate, ASUCI, and Associated Graduate Students

Figure 3.

administrators. A major component in the achievement of the goals described in Section II will be the effective management of the limited resources available to this campus.

The Chancellor is responsible for all activities of the campus, both internal and external. Reporting directly to the Chancellor are The Vice Chancellor, the Assistant Chancellors for Administrative Affairs and University Advancement, the Affirmative Action Officer, and the Director of Clinical Services. Also reporting to the Chancellor is the UCI Foundation, an umbrella organization for UCI support groups such as the Friends of UCI, Friends of the Library, and intercollegiate athletic support groups. Thus, the Chancellor assumes direct responsibility for external relations, for resource acquisition, and for overall campus policy. The Chancellor maintains direct contact with the operational mechanisms of the campus at both administrative and Academic Senate levels through other campuswide committees; by attending meetings of the Executive Council and the Council of Deans; and by numerous informal means. The Chancellor's formal redelegations of authority determine how specific authorities are distributed at UCI.

The responsibility for the internal operation of the campus is delegated by the Chancellor to The Vice Chancellor, except in health services and hospital matters. Reporting to The Vice Chancellor are the Vice Chancellors of Administrative and Business Services and of Student Affairs, the Associate Vice Chancellor of Academic Affairs, the Manager of the Office of Resource Planning, and the Deans, Directors, and Chairs of the academic units.

The Vice Chancellor functions as the Academic Vice Chancellor and is therefore responsible for the academic activities of the campus. The Office

of Academic Affairs provides The Vice Chancellor with the support necessary for the handling of these responsibilities and matters related to them. The Office maintains close contact with the Irvine Division of the Academic Senate and its committees in order to promote cooperation between the administration and the faculty. Since the early 1980s appear to be a time of increasing enrollments and higher retention rates (the declines in enrollments that were expected have not occurred), but of important limitations of resources, a number of issues of mutual concern to the faculty and the administration will make cooperation between them especially important. Prominent among these issues is a concern for the excellence of academic programs. The importance of this consideration, together with increases in research activities funded from extramural sources, will require UCI to assure that its administrative capability is sufficient to meet the conditions of this decade, and that mechanisms for faculty participation in governance function effectively. Cooperation between the campus and Systemwide Administration will also be extremely important.

Concurrent with efforts to obtain additional administrative resources to support the increased activities anticipated in the 1980s, the campus will make deliberate and concerted efforts to improve administrative effectiveness. Central to this effort will be the concentration of staff on issues and problems that are clearly established campus priorities, such as increasing access to underrepresented students, faculty and staff development, and enhanced use of information systems to support the campus goals.

Also needed are improvements in the level of management and staff competence through recruitment, retention, and training of individuals of high quality, and the continuous involvement of managers in campuswide issues to ensure that each manager is aware of campus objectives, goals, and priorities.



Another major administrative issue is the maintenance of UCI's commitment to affirmative action in a time of potentially declining resources. Affirmative action, if it is to remain successful, requires continued institutional commitment. This commitment exists within the campus administration. However, the pressures of declining resources and the demands of other administrative matters, such as possible collective bargaining, may detract from affirmative action efforts unless a conscious effort is made by the campus to maintain a strong affirmative action program.

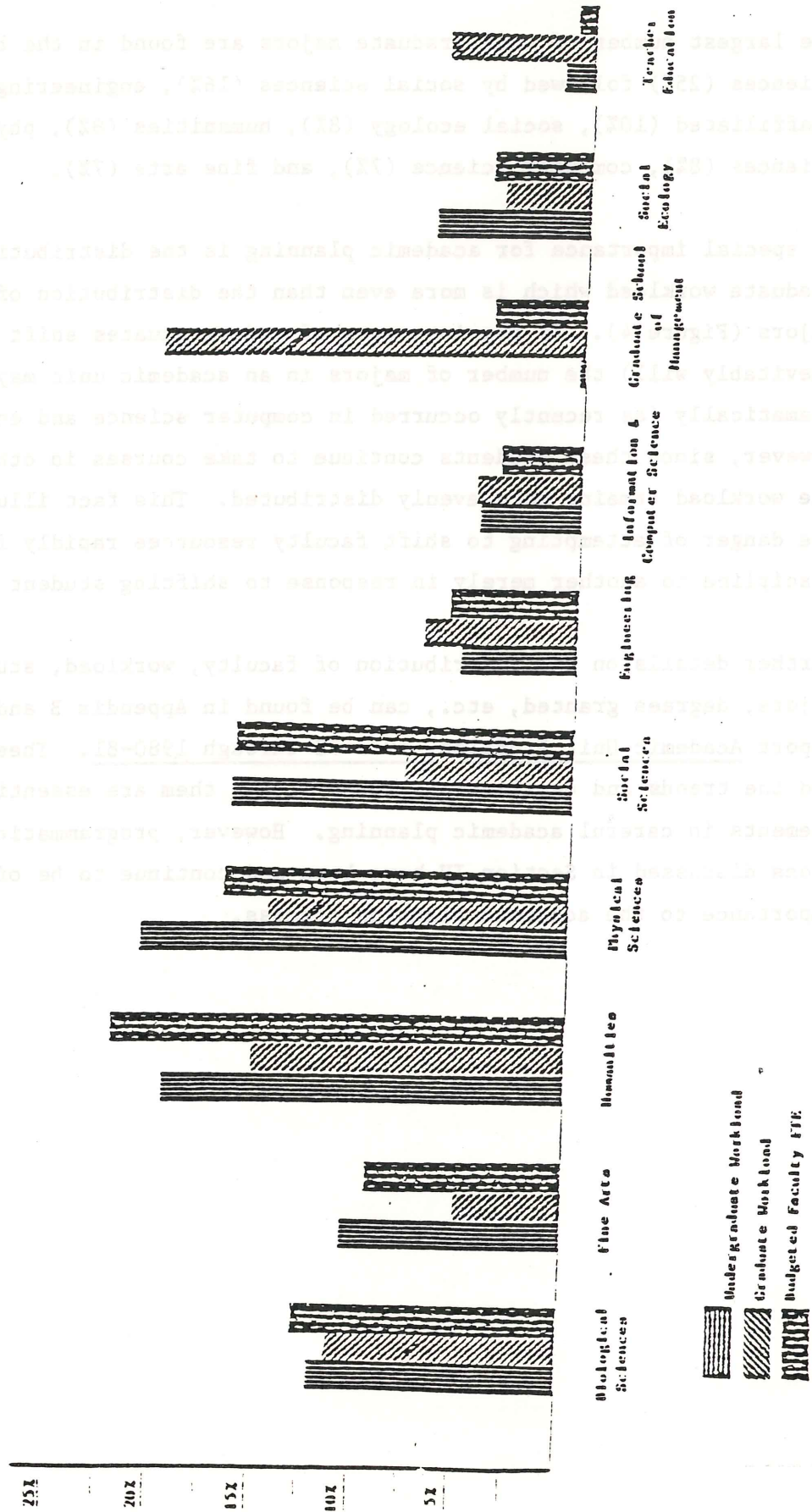
#### Workload and Faculty Distributions

An objective of campus academic planning is a balanced distribution of faculty, students, and workload among the broad academic areas of the natural sciences, social sciences, humanities, fine arts, and professional programs. Figure 4 shows the current distributions which indicate that the campus has essentially achieved this goal. The figure displays the percentage of State-funded faculty positions, graduate (including health science residents) and undergraduate workload measured by student credit-hours in each of the academic areas.

Approximately two-thirds of the graduate students at UCI are enrolled in the health sciences and other professional programs. The health sciences enroll approximately 1,000 graduate students consisting of approximately 400 M.D. candidates and 600 residents. In addition, there are approximately 650 graduate students in the professional programs of administration, computer science, engineering, and teacher education. Graduate students studying for the Ph.D. degree are evenly distributed among the humanities, natural sciences, and social sciences, and a small number of Ph.D. students are graduate academics in the health sciences.

Figure 4

University of California, Irvine  
 Instructional Indicators  
 1981-1982



Source: Information and Systems Management's Student Credit Hour Reports, F01, W02, S02; Academic Affairs Distribution of Faculty FTE Reports.

The largest number of undergraduate majors are found in the biological sciences (25%) followed by social sciences (16%), engineering (10%), unaffiliated (10%), social ecology (8%), humanities (8%), physical sciences (8%), computer science (7%), and fine arts (7%).

Of special importance for academic planning is the distribution of undergraduate workload which is more even than the distribution of undergraduate majors (Figure 4). As the interests of undergraduates shift (as they inevitably will) the number of majors in an academic unit may change dramatically (as recently occurred in computer science and engineering). However, since these students continue to take courses in other units, the workload remains more evenly distributed. This fact illustrates the danger of attempting to shift faculty resources rapidly from one discipline to another merely in response to shifting student interests.

Further details on the distribution of faculty, workload, student majors, degrees granted, etc., can be found in Appendix B and in the report Academic Unit Profiles, 1977-78 through 1980-81. These data and the trends and oscillations found within them are essential elements in careful academic planning. However, programmatic considerations discussed in Section IV have been and continue to be of greater importance to the academic planning process.



## IV.

## ACADEMIC PLANNING

Academic Planning Process

The campus accepts the principle that academic planning is done most effectively by faculty within the individual academic units. UCI faculty bear the responsibility for planning the educational and research programs of the academic units. Ultimately, the faculty determine the nature of each unit's academic programs and ensure the quality of those programs. The campus-level planning process is intended to encourage and strengthen the faculty planning activities and to ensure that the plans are compatible with campus objectives and policies. The College of Medicine has its own planning procedures and has its own academic plan.

Campus-level academic planning and analysis take place within two organizations reporting to The Vice Chancellor--the Academic Planning Council and the Council of Deans--and within the Irvine Division of the Academic Senate. These three groups which advise The Vice Chancellor are concerned primarily with academic issues.

The Academic Planning Council, an administrative committee, is concerned with campus-level academic planning and complements the Irvine planning process. The Council's role is significant in that the Council takes a campus-wide view and advises The Vice Chancellor about how to reach desired goals. The Academic Planning Council is responsible for making recommendations to The Vice Chancellor on the allocation of faculty resources that are most supportive of campus objectives. The Council deals with the realities of program needs in the context of available resources. It reviews all requests for new or replacement faculty positions. This review significantly influences the academic planning process at the unit level because it compels the faculty of the unit to develop coherent, objective programmatic arguments that justify the allocation of faculty positions.

The Academic Planning Council has access to the reviews of academic programs conducted by both internal and external committees of the Irvine Division of the Academic Senate. All the academic deans (except the Dean of the College of Medicine) present their needs to the Academic Planning Council and discuss with the Council the strengths and weaknesses of their respective units in the context of continued development of those units.

The Academic Planning Council consists of faculty, academic administrators, a staff coordinator, one undergraduate and one graduate student. It is chaired by the Assistant Vice Chancellor Academic Affairs-Plans and Programs. All Council members except the student representative and staff coordinator are members of the Irvine Division of the Academic Senate. The Dean of Undergraduate Studies and the Dean of Graduate Studies and Research also serve on the Council. The chairs of the Irvine Division Committees on Academic Personnel, Planning and Budget, and Educational Policy, and the Chair of the Graduate Council are ex-officio members of the Academic Planning Council. The two at-large Senate representatives are chosen by The Vice Vice Chancellor from a list of nominees presented by the Deans.

The second academic planning forum, the Council of Deans, is composed of all of the academic deans of the campus, the deans of Graduate Studies and Research and Undergraduate Studies, the University Librarian, and the Dean of University Extension. The Deans come to their Council as advocates for their units. As individual leaders and as a body, the Deans play vital roles in the academic planning process and are often asked to address a campuswide perspective. This group brings together those academic administrators with operational responsibilities to discuss matters of operational urgency, the impact of budgets on the academic units, and other matters affecting the administration of the academic units.



The Irvine Division of the Academic Senate is involved in campus-level planning at UCI in three essential ways. First, faculty develop recommendations and priorities independent of the administration and communicate them to the Chancellor and The Vice Chancellor through the Chair of the Division. Secondly, and perhaps most importantly, the Senate conducts regular program reviews of the academic units, coordinated at the undergraduate level by the Committee on Educational Policy and at the graduate level by the Graduate Council. These peer judgments of the quality and performance of academic units are indispensable aids to the academic planning process. Finally, representatives of the faculty work within the Academic Planning Council, to generate recommendations for The Vice Chancellor on academic priorities and allocation of academic resources.

Another planning body, not directly responsible for academic planning, is the Resources Planning Council. This Council is formally responsible for advising the Chancellor on financial and physical resources. It is chaired by the Chancellor and consists of ex-officio members representing all major constituencies of the campus--students, faculty, staff, and the administration.

The Chancellor is informed of all issues concerning campus planning through The Vice Chancellor and the committees the Chancellor meets with directly. Thus, the Chancellor is always apprised of both academic and administrative issues facing the campus, and is in the position to direct the goals and aims of the campus.



### Basic Principles

In order to achieve campus goals, the Campus administration in consultation with the Senate has recommended a number of general principles that guide the allocation of resources to the academic units:

- o Preservation of excellence within existing academic units. The extensive review process conducted by the committees of the Academic Senate has identified several programs on the campus which are of quality comparable to the best in the UC system and/or the nation. The campus will not reallocate resources in a manner to weaken these units. None of these programs is at present sufficiently above a critical size or has sufficiently low workload to justify the reallocation of faculty resources.
- o Development of proper breadth and balance appropriate for a major research university. Resources have recently been allocated to strengthen significantly the program in economics in the School of Social Sciences and to expand the School of Engineering. Comprehensive analyses were conducted to identify the minimum resource levels to establish effective programs in these areas. Careful planning was done to determine an appropriate focus for each of these two programs.
- o Identification and selection of well-defined foci for graduate education and research. UCI does not have the resources to offer an extensive spectrum of graduate academic programs and to develop high quality in each. Excellence can be achieved only by the concentration of available resources. The academic planning process recognizes that it is the faculty of the unit who are best able to determine the graduate education and research foci appropriate within the unit. The five-year external review programs ensure that quality is maintained and that problem areas are recognized and corrected.

- o Selective allocation of limited resources. Limited academic resources will be allocated or reallocated to academic programs where it is felt small increments in resources can result in significant increases in quality. There have been examples where the allocation of a single faculty position has produced significant changes in a program because the new individual acted as a catalyst, promoting interaction among several existing faculty.
- o Flexibility. At least 10 percent of the total number of faculty positions is retained for temporary appointments. This permits flexibility to respond to shifting workloads and to unforeseen opportunities. Currently, the 10 percent pool consists of approximately 10 positions generated by yearly turnover, 33 designated by the campus strictly to temporary appointments, and 10 positions which can be released by academic administrators and which currently are being used for temporary appointments.

#### Selective Excellence

Any realistic analysis of the academic resources which will be available to UCI during the next decade precludes the possibility of developing UCI into a comprehensive university with a full range of educational programs from the undergraduate through graduate levels in all of the academic disciplines traditionally associated with a major university. In fact, realistic assumptions about resources preclude even the development of a comprehensive department or program within any academic discipline. The achievement of national and international stature by the research and educational programs of UCI requires the careful selection of the academic disciplines to be developed at UCI, and then the selection of appropriate foci within these disciplines.



Therefore, UCI has been engaged for several years in the process of determining the academic programs that constitute the core of a major research university, determining the minimum size of these programs appropriate for the achievement and maintenance of a high standard of excellence, and allocating academic resources in accordance with the results of these determinations. A current example of this process is the Graduate Enrollment Task Force which is determining minimum graduate enrollment needs to maintain the quality of research and education in the various degree-granting units.

As a consequence of the process of determining core programs, UCI has made certain adjustments in its academic organization and resource distributions during the past few years. It is now felt that all academic programs at UCI contribute to the basic goals and mission of the campus. The disestablishment of any academic program would have significant detrimental effect on the nature and goals of the campus.

The process of identifying essential programs has also resulted in the identification of programs that, while desirable, will not be developed at UCI unless significant new academic resources are obtained. A program as defined in this context means the provision of instruction in a discipline from lower-division undergraduate courses through advanced graduate courses. Examples of academic areas that will not be developed in the near future include earth sciences, Asian languages and culture, chemical engineering, and astronomy. However, attempts will be made to offer basic undergraduate courses in these and other areas using part-time lecturers or through cooperative programs with other campuses. Attempts will be made to allocate resources for basic instruction in other high-demand areas such as Asian languages and culture and religious studies.

UCI recognizes that the resources do not exist to develop comprehensive departments within the core academic programs. In practice, this means that in its graduate programs, especially the smaller ones, UCI cannot



attempt to develop in all subareas of the discipline, but must limit development to the selected subareas where excellence leading to national and international recognition can be achieved.

Some examples of this concentration of resources within disciplines include: the Department of Physics, which focuses on the three areas of condensed matter physics, elementary particle physics, and plasma physics; the Cognitive Science group within the School of Social Sciences, which concentrates on perception and mathematical linguistics; and the Program in Social Ecology with its three subareas (environmental analysis, criminal justice, and social behavior). The academic unit profiles in Section VII of this document note the concentrations and intellectual foci of each unit.

## v.

## ACADEMIC RESOURCE REQUIREMENTS

The successful accomplishment of the missions of the campus depends on the magnitude of academic resources available to the campus and on the quality of the management of those resources. The resources available to the campus include faculty positions, staff positions, State General Funds, University and extramural funds, income (especially in the health sciences), and physical facilities. The resources that now exist are inadequate for UCI to achieve the goals that are set forth in this document. New and increased sources of funding are required.

#### Faculty Requirements

The considerable planning efforts of the past few years have resulted in a realistic determination of the minimum number of general campus budgeted faculty positions required for UCI to achieve its goals: In brief outline, the steps that led to this determination were: (1) articulation of the missions of the campus, (2) identification of the academic programs which are considered core and thus indispensable for the nature of the institution defined by the mission statement, (3) determination of critical size of each major academic unit through the academic program review process and extensive self-analysis, and (4) determination of the resources that provide the campus some flexibility to respond to shifting student workloads, to opportunities for new interdisciplinary activities, and to selected opportunities for national and/or international excellence. The result of this analysis indicates that UCI currently has approximately 90 percent of the general campus budgeted faculty positions required to achieve its goal of excellence in education and research. The addition of 40 to 50 faculty positions to the general campus over the next five years and the proper management of the resulting total faculty resource of 535 positions are required to complete the development of UCI as a major research university.

Since the distribution of these faculty resources is under constant review, and occasional decisions to make modest reallocations are required, it is not possible to provide a precise list of the distribution of the proposed new faculty. However, some general comments are possible. These new positions would be used in the following three ways:

- o to continue the development of the professional programs at both the graduate and undergraduate levels in management, computer science, and engineering
- o to develop small interdisciplinary programs within existing departments and schools that will link together selected core programs
- o to develop a limited number of selected fields where the addition of a few faculty positions will lead to substantial improvement in program quality.

Faculty positions are just one component of the resources required if UCI is to achieve its goal of improving its stature as a research university. Non-State funds are of great significance, since State General Funds represent only a fraction of the total instruction and research expenditures of the Irvine campus.

#### Non-State Funds

The State of California provides resources for UCI to staff and operate the undergraduate instructional programs expected of a general university. However, the State does not provide sufficient funds for graduate education in the laboratory sciences and engineering, nor does the State provide UCI sufficient funds for the support of research and scholarship. In 1980-81 the State General Funds provided \$562,000 of UCI's \$26 million in research expenditures, or less than 3 percent of the research activity at UCI. In



1980-81 the State General Fund provided 59 percent of the total instruction and research expenditures of the general campus and 32 percent of the instruction and research expenditures of the health sciences.

One difference between an excellent research university and a good university is the level of non-state income obtained to support research, education, student services, and financial aid. UCI faculty have been successful in obtaining extramural funds at a rate comparable to many of the leading research universities in the nation. A major component of UCI's efforts to acquire the resources to accomplish the mission of the campus will be devoted to increasing non-State funds. Several efforts currently are underway:

o Allocation of "seed" money to promising new research opportunities.

The Irvine campus allocates modest sums of money (\$50,000-\$90,000) for a period of two or three years to groups of faculty who have proposed Focused Research Programs (FRPs) of outstanding merit.

University funds are provided to these FRPs during the early, formative stages of their new research efforts which are not mature enough for funding from extramural sources and beyond the scope of a particular academic unit. These research programs may later be continued through departmental or extramural research support, may be proposed to The Regents as new Organized Research Units, or may cease to exist.

Proper allocation of this "seed money" should return many times its value in long-term extramural support of research, advances in scholarship, and recognition of UCI as a major research university.

o Increased attention to organized research. UCI is aware that greater effort in organized research is necessary to improve its stature as a research university. Organized Research Units (ORUs) provide greater visibility to significant research efforts and, in doing so, assist faculty in their efforts to obtain extramural funds. ORUs provide effective focal points for the interest of individual faculty and

catalyze interdisciplinary cooperative efforts which often result in new areas of research and increased extramural funds. During the next few years UCI expects to propose the establishment of several new ORUs.

- o Special academic activities. The Mexico/Chicano research program was established in early 1981 to support faculty and graduate student activities in the areas of Mexican studies, Chicano studies, U.S.-Mexico relations, and collaborations with Mexican scholars. The program has made awards to faculty to coordinate ongoing research activities, initiate research programs, and formalize existing ties with Mexican researchers and institutions. Graduate student awards support research and travel costs related to activities in the above areas.
- o Southern Occupational Health Center. Funds have been appropriated by the State Legislature to develop occupational health centers in Northern and Southern California. The purposes of the Centers are (1) to train occupational health professionals, (2) to conduct research on occupational health issues, (3) to provide patient service through consultation, education, and examination and evaluation, and (4) to be linked to a hazardous chemicals alert system. The centers also have strong ties to the University's Schools of Medicine and Public Health.

The University's Northern and Southern Occupational Health Centers constitute the first centralized, state-supported institution to provide occupational health care in the United States. UCI is the lead campus in southern California and benefits from involvement of health care professionals from the campus. The Los Angeles campus (UCLA) has primary responsibility in the areas of occupational health education, occupational epidemiology, industrial hygiene, an occupational medicine clinic, and occupational health nursing. The primary responsibilities at Irvine are in occupational medicine, toxicology, and occupational health engineering.



o Private fund-raising. The Irvine campus has exceptional opportunities to develop significant community and corporate support for its instruction and research activities. These opportunities originate from the financial resources of the community; the magnitude of the commercial, industrial, and financial activities within the immediate vicinity of the campus; and the professional programs of UCI (as exemplified by the health sciences) which form an intellectual and professional bridge between the campus and the community. Recently, administrative changes have been made to strengthen the institutional efforts in private fund-raising. These changes should result in significant improvements in private, corporate, and foundation giving to UCI during the decade of the 1980s.

o Inclusion area development. A major undeveloped resource of the Irvine campus is the more than 510 acres of land in the inclusion area. Proper development of this resource will contribute substantially to the resolution of problems concerning faculty and staff housing and will assist in the resolution of the need for on-campus health science clinical facilities. Careful development of the inclusion area may also serve as a source of funds for other needed facilities. During the next few years the Irvine campus expects to forward to Systemwide Administration several major proposals for development of this inclusion area.

#### Physical Facilities

The physical facilities available at UCI are inadequate for the instruction and research activities of the campus, and unless additional facilities are constructed, lack of space will remain one of the most significant obstacles preventing UCI from becoming a major research university.

For instance, in the natural sciences the lack of adequate space for research laboratories is the most significant factor limiting continued development of research and graduate education programs in these disciplines. The professional programs of engineering and computer science and the multidisciplinary Program in Social Ecology are severely



constrained in their development by inadequate facilities. The inadequate instruction and research facilities at the UCI Medical Center and the lack of on-campus health science clinical facilities are major problems of the College of Medicine.

The UCI Space Plan (updated October 1979) summarizes current space utilization and plans for new construction. The building program outlined in that document represents a significant step toward resolving the major space problems of the general campus. However, during the next 5 to 10 years, considerable effort will be required to provide additional clinical and research facilities not listed in that Space Plan if UCI is to achieve the stature of a major research university. A comprehensive list of needed capital projects has been developed as part of the UC capital planning effort.

Several small projects such as a library renovation, a Fine Arts addition, and a laboratory facility for mechanical and civil engineering may qualify for State funding. Other projects will require private funding.

A successful research university needs adequate facilities for a variety of activities in addition to instruction and research. UCI has identified and is actively seeking solutions to facility needs related to health science on-campus clinical activities, faculty and staff housing, student housing, student support services, and student life.

A major objective of the College of Medicine by 1985 is the establishment of a comprehensive, free-standing ambulatory care clinical facility on the main campus and adjacent to the medical sciences buildings. The on-campus facility will provide critically needed clinical teaching space and will partially resolve the serious separation of clinical and basic science faculty that currently exists between the main campus and UCI Medical Center. An affiliation between the University and an independent health care provider is under active discussion.

Affordable housing for faculty and staff within a convenient distance of campus is one of the highest priority needs. The solution to this problem is the construction of affordable housing on part of the 510 acres of inclusion area. The first phase of faculty and staff housing is a 100-unit rental apartment project scheduled for occupancy in summer 1982 and financed as part of the University's Group A housing system. The next housing phase will be a 150-unit for-sale housing project scheduled for presentation to The Regents for approval in summer 1982. The objectives of these housing projects are (1) to create an academic community within walking distance of the educational and research activities of the University, and (2) to provide attractive housing at an affordable price for faculty and staff.

The campus and Systemwide Administration are working together to resolve the problem of student housing by the construction of 300 apartments by early 1983. These apartments should improve what has been a significant barrier to student enrollment at UCI. Future student housing needs are currently under study.

Student services such as tutoring, learning skills, special services, student affirmative action outreach, and child care will remain inadequately housed after the currently approved building program is completed. An additional structure for student services is needed before the campus will be able to house all the existing student services adequately.

## VI.

## ACCESS AND ENROLLMENT ISSUES

Undergraduate Enrollment Trends

The campus has developed three-term average enrollment projections based on historical student participation and retention rates as applied to February 1982 Department of Finance high school student graduation forecasts (column a in Table 1). The campus has made an additional set of three-term average enrollment prognostications based on known and anticipated programmatic changes and increased recruitment/retention efforts at UCI (column b in Table). Both sets of projections are shown in Table 1.

Table 1.  
Projected UC Irvine Undergraduate Three-Term Average Enrollments

Year	Moderate Projection (a)	High Projection (b)	Average (a+b)/2
1982-83	8350	8788	8569
1983-84	8650	8895	8772
1984-85	8877	8991	8934
1985-86	8804	9040	8922
1986-87	8714	9097	8906
1987-88	8707	9135	8921
1988-89	8769	9135	8952
1989-90	8754	9135	8945

The demographics-based estimates represent Irvine's traditionally conservative approach to enrollment forecasting and do not account for such enrollment-impacting factors as:



- o the availability of nearby, affordable housing for UCI students
- o the perceived value of a university education
- o increases in fees or the imposition of tuition
- o participation by nontraditional students including older persons
- o retention
- o economic conditions
- o the availability of well-paying jobs for high school graduates
- o introduction of new undergraduate programs responsive to student interests

The high enrollment projections include not only demographic factors, but also estimated impacts from recruitment/retention efforts and new academic programs. Thus, the high enrollment forecasts through 1989-90 are probably the most realistic.

#### Graduate Enrollment Trends

The Division of Graduate Studies and Research and the academic units have together carefully reviewed graduate enrollment trends and graduate educational program capacities, and with this information have projected graduate enrollments throughout the decade of the 1980s. The projected graduate enrollments (shown in Table 2) will increase from 1,375 in 1982-83 to 1,550 in 1989-90. Increases are expected in all areas of the campus. Modest increases are expected in the humanities and the natural sciences, and substantial increases are expected in the graduate professional programs of administration, engineering, and information and computer science.

Table 2.

## Projected Total General Campus Enrollments

Year	Undergraduates (Headcount) <sup>1</sup>	Graduates (Headcount) <sup>2</sup>	Unweighted Student FTE <sup>3</sup>	Weighted Student FTE <sup>3,4</sup> (Old Def.)	Weighted Student FTE <sup>5</sup> (New Def.)	Proposed Faculty FTE <sup>6</sup>
1982-83	8,788	1,375	10,111	13,976	14,410	491
1983-84	8,895	1,400	10,244	14,611	14,170	505
1984-85	8,991	1,450	10,390	14,871	14,415	515
1985-86	9,040	1,500	10,489	15,072	14,604	520
1986-87	9,097	1,525	10,570	15,213	14,737	525
1987-88	9,135	1,525	10,608	15,259	14,782	530
1988-89	9,135	1,550	10,633	15,331	14,848	533
1989-90	9,135	1,550	10,633	15,331	14,848	535

Sources: Division of Graduate Studies and Research; Office of Academic Affairs

Notes: 1

Adjusted demographic projection beyond 1981-82

2

Result of programmatic analyses by Division of Graduate Studies and Research

3

Headcount converted to FTE using an overall conversion factor of 0.99 for undergraduate students and 1.0 for graduate students

4

1.0 x Lower Division; 1.5 x Upper Division; 2.5 x Graduate 1; 3.5 x Graduate 2.

5

New FTE definitions were effective as of fall 1981, per University of California Systemwide Academic Planning specifications.

6

Programmatically required faculty

During the past several years, UCI has experienced slow but steady growth in graduate enrollments in all academic areas including the humanities and social sciences where decreases have occurred nationally. The campus believes that the humanities and social sciences at UCI will continue to defy national trends because of the growing quality of these graduate programs and the development of specialties within disciplines that will continue to attract students with specific educational goals. Examples include: the Department of English and Comparative Literature, which will sustain its enrollment because of the emphases in writing and critical theory, and the Social Sciences program in cognitive sciences, which will attract students who wish to study perception and other higher mental processes. The campus believes that during the 1980s strong, focused graduate programs will survive; broad, ill-defined programs will suffer.

The review of graduate enrollments and programs has suggested several trends on which planning is based:

- o Enrollments in the natural sciences will increase somewhat as laboratory facilities improve and the capacity to provide research opportunities increases.
  
- o Enrollments in the professional areas of administration, computer science, engineering, and medicine will be limited by program capacity rather than the number of qualified applicants. The continued growth of high-technology industries, financial institutions, consulting services, and other companies in Orange County ensures a strong demand for graduates with advanced educational training in professional fields. In addition, a demand for continuing education is generated by the existing employees in these professions. A significant fraction of this enrollment increase will occur in Master's level programs, but increases are also expected in the Ph.D. enrollments of these professional areas.



- o Enrollments in the Social Sciences will remain stable in three of the graduate groups but should increase somewhat in the economics and political science groups. These two groups are in the process of developing their graduate programs, and as recently allocated faculty positions are filled and the programs mature, modest increases in graduate enrollments are anticipated.
- o Enrollments in the Fine Arts are expected to remain constant or experience modest increases.

### Enrollment-Driven Resources

The Guidelines state that faculty positions will be tied largely to enrollments. Faculty positions are to be allocated so as to move towards a common weighted student/faculty ratio for all campuses with allowance for some flexibility to meet local needs. (Weighted student FTE projected for the next decade are displayed in Table 2.)

This projected 1982-83 enrollment generates approximately 500 faculty using the average University weighted student FTE/faculty ratio of 28.0. The unweighted FTE enrollment in 1982-83 generates approximately 577 faculty using the average University unweighted student FTE/faculty ratio of 17.5. Thus, the faculty resources generated by the projected enrollments and the programmatically generated faculty requirements of 535 FTE are not incompatible if modest flexibility is assumed.

### Retention

The campus recognizes that retention is an essential component of enrollment planning in the 1980s. During the past year, the campus has identified a number of issues impacting the retention of students at UCI.

Identifying these issues is the first step in the process of adapting the institution to the new realities of the 1980s. Throughout the next

few years, these issues will be responded to by a variety of programs, some of which will be found to be ineffective and others very successful. Therefore, it is not possible to predict in this document precisely the new or modified programs, services, and attitudes which will improve the retention of students. However, it is realized that retention will have an impact on undergraduate enrollments at least as large as, and perhaps larger than, identifying and recruiting from a new pool of students.

Some issues identified as having an impact on retention are:

- o Student preparation. It has become more and more apparent that retention of admitted students is largely based upon the elementary and secondary school academic preparation of these students. UCI recognizes this concern and has begun a series of program to assist in the academic preparation of students, through direct student assistance efforts, teacher training enhancement, and parent awareness efforts.

While some of these efforts have been in existence on the campus for some time, for the most part they have not been clearly integrated with the academic focus of the campus. Recently, a reorganization has been made to bring together student outreach activities with ways to assess and modes to correct preparation problems. These newly initiated efforts are seen as essential both to the preparation and to the recruiting of eligible students, as well as assisting in ensuring their success at UCI.

- o Program of Academic Support Services. The goal of the recently formed Program of Academic Support Services (PASS) is to help enrolled students in progressing toward degrees and to assist them in acquiring certain academic skills and competencies which they will be expected to have in whatever professions they choose after graduation. PASS is intended to provide a suitable range of academic support services including diagnostic testing, writing assistance, tutoring, and learning and study skills techniques. A comprehensive system of



diagnostic and placement testing is being developed; implementation of this system will begin in the fall of 1982. Radius, a subprogram within PASS, will be concerned with curricular outreach and will have the aim of improving curriculum and instruction in UCI's largest feeder schools. It is expected that PASS will provide the framework for these activities at UCI.

- o Student expectations. Retention starts with the first inquiry a student makes about the campus. The recruitment and admissions processes result in student expectations that play a major role in the student's adjustment to and satisfaction with the University. The campus must continue to ensure the essential integrity of its publications and its oral and written communications with prospective students to the end that they develop realistic expectations of what UCI offers for their individual educational needs.
- o High achievers. There is some concern that not all of UCI's academic units are attending to the special needs of exceptionally bright students. UCI is exploring various ways in which the campus community might better understand and respond to these students, e.g., more challenging courses and more opportunities for involvement in research.
- o Returning and older student needs. Until the time when returning and older students are no longer considered "nontraditional," the campus must continually reevaluate ways in which to sensitize faculty and staff to the special needs of these students and to implement programs that increase the institution's responsiveness to those needs.
- o Academic advising. At UCI each School, Department, and Program is responsible for advising its undergraduate majors, including its share of those undecided students who are "unaffiliated" with a major. As might be expected, the quality of these advising programs is uneven. It is recognized that one factor that would contribute to more effective academic advising is improved career development



opportunities for academic counselors. This and other related problems are currently being examined. In fall 1979 a new registration procedure was adopted which ensured that each new student meets with an academic counselor in their chosen school or program prior to the beginning of the academic year. Some schools have moved to generalize this procedure to cover all students in all three quarters of the academic year. Also, faculty advising is available during this registration procedure.

o Social environment. UCI suffers the adverse effects of not having a large resident student population. Students commute from homes and apartments from all over Orange County, and those students who live on campus do so in an environment relatively isolated from the sort of community amenities that most Californians take for granted, e.g., restaurants, movie theaters, and shopping areas. However, the two new student activities buildings that comprise the University Center have greatly improved the situation. It is hoped that the development by The Irvine Company of the University Town Center will lessen the isolation of the campus community.

o Faculty interactions. UCI student opinion surveys are critical of student experiences with faculty. The campus is exploring ways to enhance faculty interactions with students. An appropriate way for a research university to improve student-faculty interactions is to involve undergraduates in the research activities of the faculty. Although UCI has extensive programs encouraging, and in some cases requiring, undergraduate research, additional efforts to strengthen this form of interaction are being considered. As another step to improve faculty-student interactions, the campus has recently inaugurated a new agency, the Instructional Development Service, which has among its functions the tasks of consulting with individuals and departments concerning the effectiveness of their teaching methods, advising academic units on the training of their teaching assistants, and providing advice or information concerning

the most effective means of evaluating teachers and instruction. The hope is that the Instructional Development Service will be one means of raising the overall quality of faculty-student contact.

- o Course offerings. UCI academic programs experience difficulty in offering a desirable range of courses. Further, the campus needs to develop some innovative solutions to this problem, such as additional cooperative programs with other campuses.
- o Scheduling classes. Many UCI students experience difficulties in enrolling in the classes of their first choice due to scheduling conflicts. The campus is exploring ways to improve the class scheduling process and to coordinate the scheduling of classes among the academic units. However, a shortage of classrooms will continue to be a major obstacle in this area.
- o Staff interactions. Academic support staff are a highly necessary resource on a university campus. Student interactions with administrative staff frequently occur at times when students are experiencing personal stress. The campus needs to provide front-line staff with proper training to deal effectively with these difficult and stressful interactions.
- o Orientation programs. The campus has experienced considerable success with its summer and fall freshman orientation programs, and the staff who are responsible for these programs are continually evaluating and improving them.
- o Five-year programs. There is a need for the campus to consider implementing programs to enable and encourage certain students to spend more than four years to earn their degrees. Examples of student populations which might benefit from such a program include those with heavy personal or financial responsibilities and those whose cultural or educational backgrounds seriously hinder their

adaptation to the University environment. One major aspect of a lengthened time frame for achieving the baccalaureate would be the possibility of having to modify regulations governing the granting of financial aid.

- o Needs of international students. International students have specific needs that must be met if they are to succeed at the University. Among other things, these students must adjust to the University environment, the culture of the United States, and the English language. UCI is currently considering ways to meet these needs more effectively, and has established an English as a Second Language Program.

#### New Mix of Students

The campus is identifying and analyzing issues that will result from the increasing numbers of students who bring with them diverse cultural and educational backgrounds. The campus realizes that it must modify programs and attitudes in ways that are not yet completely defined in order to increase the probability of these students completing a University education. The following are some concerns that have arisen during discussions with representatives of minority students, faculty, and staff:

- o Each culture includes unique characteristics among its values, traditions, and interpersonal relationships. It will be important for the campus to educate faculty and staff about these characteristics if they are to be effective in understanding, educating, and communicating with students from different cultural backgrounds. The most effective methods for increasing the sensitivity of faculty and staff to these cultural and educational differences are not known at this time, but methods must be found if UCI is to respond effectively to the anticipated changing ethnic composition of the student population in the 1980s.



- o UCI should consider carefully its effectiveness in communicating with parents of students from environments where higher education is not a priority or tradition. Efforts to strengthen parental support of students from such families may be appropriate. Components of the campus' Student Affirmative Action efforts focus on the parents of junior and senior high school students. UCI's present Student-Parent Orientation Program (SPOP) is an effort to involve parents in the education of their children and to diminish some of the parent's anxieties.
- o The campus will need to be cognizant that on occasion the content and expectations of course work may be culturally biased. Certain assignments in some courses may be more difficult for some minority students than for majority students because of differences in cultural and educational backgrounds.
- o Continuing efforts should be made to increase the participation of minority students in the graduate academic and professional programs of the University. Through the Graduate and Professional Opportunity Program, part of the Division of Graduate Studies and Research, positive steps are being taken to effect increased participation of ethnic minorities and women in certain fields. Appropriate assistance is offered during the admission process, and every effort is made through GPOP advising and support to ensure that all students will have a reasonable chance to attain their academic objectives.
- o Educationally disadvantaged students frequently are among those who have difficulty making the transition from high school to college. UCI currently provides a variety of services to assist students in this transition. Tutoring, learning skills instruction, and other aids are available, as is a summer science program that allows students to master the information presented in lower-division courses before attempting upper-division courses. It is anticipated that these services will need to be expanded in the future.

- o Additional sections of English as a Second Language (ESL) courses are needed to increase the bilingual capabilities of some American minority students, as well as international students.

### University Extension

University Extension at UCI offers over 1,200 courses and special programs each year, intended mainly for adults who wish to continue their education on a part-time basis. Regular courses given in degree-granting programs are available to part-time students through University Extension by the mechanism of "concurrent enrollment" with regular courses if the appropriate approvals are obtained. Because Extension is self-supporting and does not contain budgeted faculty positions, and because most of its courses do not carry University credit, Extension has not been included in the UCI academic planning process. The campus will consider whether it should be included in the future.

Several programs of note have been established through close cooperation between Extension and the general campus. One is the summer writing program for teachers. It is modeled on the Bay Area writing program and is intended to improve the teaching of composition in the schools. In addition to addressing a problem of Statewide importance, the program has been of benefit both to the campus and to the community. Another is the recently created English as a Second Language Program. There appear to be further possibilities for programs which utilize special strengths at UCI and can be funded and operated through Extension's capabilities.

Summer Session programs offer a wide variety of courses, some of which can be used to accelerate progress toward a degree. Courses are also given in the summer which can be used to complete work necessary to qualify for admission to UCI. Some programs, such as the Program in Russian, offer concentrated study in special Summer Session programs. Summer Session enrollments have increased during the past several years.



## VII.

## ACADEMIC AND RESEARCH UNIT PROFILES

School of Biological Sciences

Introduction. It is the philosophy of the School of Biological Sciences that contemporary and future problems of biology can most successfully be examined by combining a broad perspective with expertise in specialized areas. The School's curriculum and structure are therefore based on several levels of biological organization and on themes which give biology its unifying concepts. The levels include molecules, subcellular organelles, cells, tissues, organs, organ systems, organisms, populations, communities, ecosystems, and the biosphere. The themes passing through these levels include evolution and genetic continuity, regulation and homeostatic adaptations, complementarity of structure and function, and complementarity of organism and environment. These themes unify areas of biology that in the past were too rigidly separated and grouped according to whether their subject matter was animal, plant or microbe. The levels of biological organization and the related themes are reflected in the School's departmental organization: Molecular Biology and Biochemistry, Developmental and Cell Biology, Ecology and Evolutionary Biology, and Psychobiology.

The School offers the B.S., M.S., and Ph.D. degrees in Biological Sciences. It also offers a B.A. in Applied Ecology jointly with the Program in Social Ecology. A distinctive feature of the School is its approach to instruction: unity at the undergraduate level, diversity at the graduate level. At the undergraduate level, the faculty of the School provides a unified curriculum. There is a single baccalaureate degree in Biological Sciences with a core curriculum in biology, physical sciences, and mathematics. A concentration in ecology and evolutionary biology is available with minor modifications in the basic curriculum. At the graduate level, there are several programs which, for the most part, correspond to the departmental divisions.



The basic science departments of the College of Medicine (Physiology and Biophysics, Microbiology, Biological Chemistry, and Anatomy) and the departments in the School of Biological Sciences provide doctoral programs in Biological Sciences which are coordinated by a graduate cabinet composed of the chairs of the participating departments. The cabinet is advisory to the Dean of the School of Biological Sciences.

Undergraduate Programs. The undergraduate curriculum includes a seven-quarter core program of classes and laboratories. In 1980 a new basic course was added to the freshman program to serve as a broad introduction to biology. It satisfies the growing need for and desire of majors to undertake the formal study of biology during the initial year of University education.

The School attracts more undergraduate majors than any other academic unit on the Irvine campus. Considerable resources are required to teach the Biological Sciences core sequence which includes six laboratory courses. Additional resources are required for the laboratories associated with a number of upper-division satellite courses. Because these courses are large, a relatively small number of faculty can teach a large number of undergraduates. Faculty resources are therefore available for other teaching activities in both the undergraduate and graduate programs.

Undergraduate teaching activities include: (1) an extensive number of courses for nonmajors, (2) the seminar program for new students, and (3) the undergraduate research program. The seminar program and the undergraduate research program provide close student-faculty contact, ameliorating some of the problems that arise from large lecture courses.

The special seminars for new students ensure that all freshman and transfer students meet weekly during the fall quarter with a faculty

advisor and an advanced student who serves as a peer advisor. Discussions range from academic advising to public policy and research frontiers in the biological sciences.

Undergraduate research is promoted and valued as an adjunct to classwork. In the undergraduate research program, more than 20 percent of upper-division students perform research under the guidance of faculty from the School and from the College of Medicine. Many students present their research at a special symposium late in May. Their work is published in the Journal of Undergraduate Research in the Biological Sciences. Prizes are awarded to the students whose research is judged to be most outstanding by a faculty committee. Honors for research may also be awarded at the time of graduation. A few students are admitted annually into the Research Enrichment Program which provides them with the opportunity to study selected conceptual and empirical problems under the guidance of two faculty members.

The Student Affairs Office in the School functions as an important source of academic and career counseling for majors in the Biological Sciences. The Student Affairs Office coordinates the School's advising program, including peer advising. Counseling is provided for students who desire careers in the health sciences.

Graduate Departments and Research Programs. The graduate programs emphasize research training and are, therefore, geared mainly toward the Ph.D. degree. The presence of a number of postdoctoral fellows and visiting scholars further enhances the School's research environment. Extramural funding is provided mainly by several Federal agencies: the National Institutes of Health, the National Institute of Mental Health, and the National Science Foundation. Funding is supplied for faculty research and for postdoctoral, graduate and undergraduate research and training programs.



Faculty in the School participate in two Organized Research Units (ORUs). The Developmental Biology Center provides a focal point for the study of developmental biology, in particular, for the areas of pattern formation and the application of genetic and biochemical techniques to normal and pathological development. Approved by The Regents as an Organized Research Unit in 1980, the Cancer Research Institute grew partially from the Focused Research Program (FRP) Oncology, providing leadership and support for the development of cancer research projects.

Faculty also participate in two current Focused Research Programs (FRPs): Brain Function and Alternate Sources of Hydrocarbons. By applying recent advances in the study of cooperative phenomena in physical systems, the FRP in Brain Function seeks to develop an understanding of the role of small groups of neurons in brain function. The focus of the FRP in Hydrocarbons is the development of new sources of alternative and renewable petrochemicals from plant biomass.

Department of Molecular Biology and Biochemistry. The Department of Molecular Biology and Biochemistry has major responsibility for the School's research and educational needs within the area of the molecular sciences. Graduate student training in the Department focuses mainly on the general areas of gene structure, organization, and regulation. Due to shared research and educational interests, the Department works closely with the Departments of Biological Chemistry and Microbiology in the College of Medicine, and the Department of Developmental and Cell Biology in the School of Biological Sciences.

At present the Department has very strong research programs in nucleic acid metabolism and in the regulation of gene expression. These two aspects of molecular biology are complemented by excellent programs in biochemical genetics, immunology, and membrane biology. The Department plans to develop these programs further by appointing new faculty members with expertise in these areas.



Department of Developmental and Cell Biology. The Department of Developmental and Cell Biology operates two programs: comparative physiology and developmental and cell biology. Research in the comparative physiology program focuses on energetics and transport. Anticipated faculty appointments will strengthen this program in the areas of ion transport and respiratory physiology and endocrinology. The Department has excellent research programs in the areas of pattern formation, nuclear-cytoplasmic interactions, and cancer-cell biology. Future appointments in the areas of cell surface and cell cytoskeleton biology will bridge the pattern formation and cell biology programs.

Department of Ecology and Evolutionary Biology. The Department of Ecology and Evolutionary Biology focuses on evolution which is the integrative thread of biology. Together with the analysis of the environment, it explains molecular, cellular, developmental, and behavioral processes. The Department focuses on problems at the population and community levels, with particular emphasis placed on evolutionary processes. Major research areas include plant-animal interactions, phytochemistry, physiological ecology, behavioral ecology, population ecology, and community ecology. It is anticipated that new appointments will add strength in the important areas of theoretical ecology, population biology, and plant physioecology.

Department of Psychobiology. The Department of Psychobiology is an interdisciplinary group concerned with the biological bases of behavior. Its central focus is plasticity, or systematic changes in behavior and in the neural and hormonal mechanisms underlying behavioral change. The major problem areas represented are learning and memory, development of the nervous system, recovery of neural and behavioral function following brain damage, the pharmacology and chemistry of behavioral and neural plasticity, and hormonal mediation of sexual and social behavior. The Department approaches these problems at several levels of biological organization. The disciplines represented as a result

are neurochemistry, neuropharmacology, neuroanatomy, neurophysiology, neuroendocrinology, experimental psychobiology, and animal behavior.

The theme of plasticity and the interdisciplinary nature of the faculty promote collaboration among departmental research laboratories. The programs in psychobiology complement programs in the College of Medicine in pharmacology, psychiatry, physiology, biophysics, and anatomy. Future recruiting will concentrate on rapidly synaptic developing areas such as transmitter neurochemistry, synaptic physiology, and psychoneuroendocrinology.

Some faculty are members of an interdisciplinary biophysics and biophysical chemistry group. These faculty are from the Department of Chemistry in the School of Physical Sciences; the Departments of Developmental and Cell Biology and Molecular Biology and Biochemistry in the School of Biological Sciences; and the Department of Physiology and Biophysics in the College of Medicine. This program provides an opportunity for interaction among graduate students and faculty who share common interests in biophysics and biophysical chemistry. Participating graduate students pursue a degree in the department best suited to their own background and research interests. A program of seminars brings the group together monthly to discuss research problems of mutual interest, and a regular series of interdisciplinary courses is offered by the participating faculty to provide formal instruction in areas encompassed by biophysics and biophysical chemistry.



## School of Engineering

Introduction. The School of Engineering provides undergraduate and graduate programs for students interested in pursuing the professional practice of engineering as it relates to design, development, research, and teaching in industry, government, or higher education. Although the faculty is not formally divided into separate departments, it is divided informally, but distinctly, according to the three basic curricular options: civil, electrical, and mechanical engineering. A transition to departmental status for these three groups is under consideration.

Undergraduate Program. The undergraduate program is designed to prepare students either to enter the engineering profession or to continue on to graduate education. Students learn analytical problem-solving skills that are useful as they pursue careers in engineering, law, medicine, or administration.

The School offers three distinct accredited undergraduate options leading to the B.S. in Engineering: civil, electrical, and mechanical engineering. A double option of environmental engineering in conjunction with either the civil or mechanical engineering option is available also. Each of the options offers the student a solid background in the basic sciences and a fundamental understanding of the engineering sciences. Training in civil engineering includes subjects such as structures, sanitary engineering, transportation, hydraulics, water supply, soil mechanics, and foundations. The electrical engineering option provides training in the engineering aspects of electrical circuits and materials, computers, communication and control systems, electromagnetics, probability, instrumentation, and design. The mechanical engineering option course offerings include dynamics, thermodynamics, heat transfer, fluid mechanics, instrumentation, and design. Environmental engineering incorporates the principles of mechanical, civil, and chemical engineering, emphasizing the application of engineering principles to the elements of the environment.



Qualified undergraduates may participate in the 3-2 Program offered by the Graduate School of Management, leading to a B.S. in Engineering after four years and a Master's degree in Public Administration, Business Administration, or a combination of both after five years.

Graduate Programs. The School offers both the M.S. and Ph.D. degrees in Engineering. The goal of graduate education in the School at either level is to provide learning experiences which contribute to mastery of a specialized subject area and which also serve to develop the student's overall perspective in the field.

The graduate program offers specializations in civil engineering, electrical engineering, environmental engineering, and mechanical engineering. Graduate-level study in operations research can be undertaken through existing faculty resources from the Graduate School of Management, the School of Engineering, the School of Social Sciences, the Department of Information and Computer Science, and the Department of Mathematics.

The School plans to increase the proportion of graduate students in its student body. Fifteen percent of the current population of engineering students are enrolled at the graduate level. By improving its relationship with local industry, the School hopes to develop a source of graduate students who are already employed in the field. These students may enroll in a part-time program leading toward the M.S. degree. Many senior electives and graduate courses in electrical and mechanical engineering already are offered in the evening to accommodate students who are employed full-time.

Faculty Research. Research activities are carried out by faculty members in each of the option areas. Special areas of interest include computer engineering and digital systems, electronics and acoustic wave devices, telecommunications and control, water quality, transportation, structures, turbulence, materials, soils, and combustion.

Informal research efforts with other campus units have developed during recent years. Several faculty members are working on joint research efforts with faculty from the College of Medicine. One such project involves faculty from the College's Department of Community and Environmental Medicine in the area of combustion research; another project is with the Department of Radiological Sciences in the area of medical imaging; a third joint research project, combining resources from the School of Engineering and the School of Biological Sciences, is concerned with water quality.

Faculty and students from the School of Engineering have participated in research projects with the Institute of Transportation Studies (ITS), a Multi-campus Research Unit (MRU) that focuses on transportation systems planning and evaluation and related energy and environmental issues.

The Focused Research Program (FRP) in Vulnerable Populations involves not only Engineering faculty but also faculty from the Program in Social Ecology, the School of Social Sciences, the Graduate School of Management, and the College of Medicine. The FRP concentrates on advancing the knowledge about "vulnerable groups" in the population.

Engineering faculty are also involved in the University's Southern Occupational Health Center. Support is provided by the National Institute for Occupational Safety and Health and the State of California.

Relations with the Community. The School of Engineering is working to develop a closer affiliation with local business and industry. During the last two years the School's continuing education program has developed significantly. Two very popular certificate programs--one in microcomputer engineering and one in signal processing--and a number of short courses have been introduced.

The Irvine campus is located in an area that has a large concentration of high-technology industries. The mutual benefits resulting from

increased cooperation are numerous and include shared access to large and expensive pieces of equipment, additional graduate students, and lecturers who can provide added breadth to the course offerings within the School. These efforts have been realized to a great extent through the Engineering Affiliates Program.

Most of the School's faculty members consult for local industry, and many of the part-time lecturers for the School are from local industry. These relationships with the engineering community serve to strengthen the professional dimension of UCI's engineering program.

Anticipated Plans. Excellent employment opportunities for graduates from the School of Engineering are expected to continue, and the School expects to increase enrollment if additional faculty resources become available. Faculty recruiting is being directed toward developing a limited number of focused research efforts with complementary graduate programs which simultaneously would provide solid undergraduate programs.



## School of Fine Arts

Introduction. The School of Fine Arts provides a conservatory in which the creative process is central. In addition to programs concerned primarily with studio and performance activity, courses are offered in the history and theory of the arts. The five major areas of instruction and production are art history, dance, drama, music, and studio art. The School is not organized into formal departments.

The composition of the faculty is deliberately balanced between approximately 70 percent permanent artists- and scholars-in-residence who continue to maintain professional assignments and 30 percent visiting artists. The visiting faculty members provide a constant inflow of ideas that challenge students to create freshly and freely.

Undergraduate Programs. The School offers undergraduate programs in Dance, Drama, Fine Arts, History of Art, Music, and Studio Art. Degree requirements include extensive studio and workshop experiences and course work in theoretical analysis, historical backgrounds, and criticism. All performing and studio majors are expected to work creatively for at least four hours a day throughout their four years of undergraduate study.

Performance activity in the School of Fine Arts has grown by more than 30 percent in the last three years. Many courses have recently been made available to nonmajors for the first time. As a result, the undergraduate workload in the School is expected to increase.

Dance. The program in dance provides studio experience in the fundamental knowledge and techniques of classical ballet and of contemporary dance movements. Students participate in faculty-choreographed concerts, student-choreographed concerts, and musical theatre productions. Three dance forms are emphasized: ballet, modern, and jazz.

Drama. Undergraduate students majoring in drama are trained in the interrelated areas of the theatre: performance, design, literature, history, and criticism. Majors are expected to complete considerable course work in art, dance, and music. The undergraduate drama curriculum includes courses in play writing, film writing, filmmaking, and television production. Both undergraduate and graduate students of drama are treated as members of a theatrical organization. They acquire experience in all phases of theatrical production in a professionally disciplined atmosphere.

Fine Arts General Interdisciplinary. The Fine Arts General Interdisciplinary major is for undergraduates interested in combining several of the Schools's disciplines. Students plan an individual course of study with the approval of a faculty advisor. The program emphasizes the study of history, theory, and criticism of the arts in three of the School's instructional areas. Participation in studio classes is also required.

History of Art. This undergraduate program is designed to provide a comprehensive study of art as a humanistic discipline. Artists' intentions and achievements are studied within their historical settings.

Music. The music program provides intensive training in performance and musicianship and in the theory and history of music. Additional tutorial staff supplement the faculty as required by student interest. Undergraduate music majors choose from among the following options: voice, piano, woodwind, brass, percussion, string, special string performance, or plucked instrument (guitar and lute). Both the Bachelor of Music and the Bachelor of Arts in Music degrees are offered.

Studio Art. The program in studio art provides basic studio experiences in the fundamental knowledge and techniques of drawing, painting, sculpture, ceramics, and graphic art. Courses also are offered in the history and criticism of art.



Graduate Program. The School offers a program leading to an interdisciplinary M.F.A. degree in Fine Arts with an emphasis in dance, drama, music, or studio art. Theoretical, literary, and historical courses complement the practical work in studio workshops and performance activities.

Graduate students who choose the dance emphasis receive instruction and extensive opportunities for experience in the areas of choreography, teaching the aesthetics and criticism of dance, and research in the history of dance. Most graduate classes in drama are performance-related: acting, directing, music-theater, play writing, and designing. Although graduate drama students specialize in either acting, directing, music-theater, or design, their work is not limited to these areas. Graduate instruction in music is available in four areas: composition, choral conducting/voice, piano performance, and instrumental performance. In the studio art program, graduate students are expected to work independently throughout the two-year M.F.A. program. At the end of the first year they are required to present an exhibition and a portfolio.

Special Facilities. The Fine Arts Village includes studio and classroom space for the areas of studio art, art history, dance, drama, music, and film. Specialized facilities for the studio art area include the Art Gallery and six studios for drawing, painting sculpture, graphics, and ceramics. Five campus locations are available for dance, music, and drama productions: the Village Theatre, the Concert Hall, the Studio Theatre, the Little Theatre, and the Virginia and Norman Nixon Studio Theatre. A music-listening laboratory is available to music students. Campus television studios also are located in the Village.

Fine Arts Production Units. Students in the School of Fine Arts are involved as participants throughout the year in various production units, including instrumental and choral ensembles, graduate art gallery, dance concerts, drama workshop, and film production.

Anticipated Plans. No major changes are planned through 1985 in either philosophy or make-up of the faculty of the School of Fine Arts.



## School of Humanities

Introduction. The School of Humanities provides students the opportunity to develop both their analytical and creative skills as they explore broad questions of human conduct, modes of human communication and symbolization, speculative thought, and the verbal arts. The School includes the basic disciplines of language, literature, history, and philosophy. Particular emphasis is placed on the ability to think and write clearly. The School concerns itself with a large portion of the liberal education of not only students who intend to pursue a major within the School, but also of students from other academic units.

Undergraduate Programs. The School offers undergraduate majors in Classical Civilization, Classics, Comparative Literature, English, French, German, History, Humanities, Linguistics, Philosophy, Russian, and Spanish. Undergraduate courses are also offered in Hebrew, Italian, and Portuguese. The interdisciplinary B.A. in Humanities provides a humanistic perspective on a selected topic, such as literature, film studies, or politics in twentieth-century America.

Undergraduate majors in the School of Humanities have the additional options of concentrating in social thought or women's studies. Social thought is an honors concentration available to students with a demonstrated aptitude for theory.

Humanities Core Course. The Humanities Core Course is a year-long eight-unit interdisciplinary course designed to introduce freshmen and other lower-division students to study in literature, history, and philosophy. Drawing mainly from the great books of Western culture, readings focus on the analysis and interpretation of these texts. In lectures, discussion group meetings, and individual conferences with their instructors, students learn ways in which textual material in the humanities can be analyzed and understood, and how the knowledge gained from that activity can be analyzed

and understood, and how the knowledge gained from that activity can be organized and expressed persuasively and clearly. The Humanities Core Course serves all freshmen majoring in the School and a significant number of freshmen from other academic units.

Graduate Programs. At the graduate level the School stresses post-Medieval studies and encourages a strong concern for theory. The Departments of Classics, English and Comparative Literature, French and Italian, German, History, Philosophy, and Spanish and Portuguese offer graduate programs in many areas. Although most departments also offer the M.A., the emphasis is on graduate study leading to the Ph.D. degree, with the exception of the two-year Writing Program, which confers the M.F.A. The School does not offer a Ph.D. in Humanities, but students may pursue an interdisciplinary modification of their degree.

Faculty Research Activities. Among other activities, faculty in the Departments of English and Comparative Literature, French and Italian, History, Philosophy, and Spanish and Portuguese participate with faculty from the Schools of Fine Arts and Social Sciences in the Focused Research Program in Critical Theory. The cooperative program is designed to provide a forum for debate among the competing theoretical movements in contemporary critical theory.

## Department of Classics

Introduction. The Department of Classics offers instruction leading to the B.A., M.A., and Ph.D. degrees and, in its scholarly activities and undergraduate service courses, provides essential breadth to the research and educational programs of the School of Humanities.

Undergraduate Programs. The Department offers two majors: Classics with an emphasis in Greek or Latin language and literature, or in linguistics; and Classical Civilization, which requires a full year of one classical language, with the remaining course work in English translation. There is affiliated with the Department a group in Hebrew and Judaic studies. For nonmajors, the Classics Department offers a variety of courses in translation, literature, philosophy, etymology, history, society, mythology, and religion.

Graduate Program. At the graduate level the Department operates an intentionally small Ph.D. program. The M.A. degree is available to students who have completed two years of satisfactory graduate work. Graduate work is individually supervised; much of it is independent, and formal course requirements are limited. The graduate program is now being conducted in some areas under cooperative arrangements with UCLA and UCSB. The Department has recently recruited some highly qualified new faculty; its principal scholarly interests are now clearly focused on Greek literature and associated fields.

Faculty Research Activities. The principal area of faculty research is Greek literature. This is particularly appropriate given the presence at UCI of the Thesaurus Linguae Graecae Project described in the following section. Substantial research is being conducted in the fields of Greek drama, Greek romance, Greek and Latin linguistics and poetics, and a bibliography of Greek literature.



Thesaurus Linguae Graecae Project. Affiliated with the Department is the Thesaurus Linguae Graecae (TLG) Project, which is financed from external sources. Established in 1972, it aims to create a computer-based data bank of Greek literature from its beginnings to 600 A.D. Since its inception, the Project has attracted over \$3 million in research grants. It is far advanced into its data collection program. Recently a major grant has been negotiated with the National Endowment for the Humanities for the next stage of the TLG's operations.

Administratively a separate entity, the TLG is related to the Department of Classics in various ways. Some faculty members are engaged in TLG research, and others actively benefit from its presence. In addition, graduate students gain professional expertise by being employed as TLG research assistants. The Department's resources are enriched by the text and reference materials acquired for the purposes of the TLG Project. Conferences sponsored by the Project, and visits by individual scholars for research purposes and consultation, bring the Department into contact with internationally distinguished classicists. Conversely, the TLG Project benefits from the specialized knowledge in Greek literature of faculty members of the Department of Classics, as well as from their scholarly contacts, and from contacts with Department visitors.

Department of English and Comparative Literature

Introduction. The Department of English and Comparative Literature focuses on four basic areas of literary study: English and American literature, comparative literature, creative and expository writing, and theory. The Department offers the B.A., M.A., M.F.A., and Ph.D. degrees in English and the B.A., M.A., and Ph.D. in Comparative Literature.

The Program in Comparative Literature studies literature from international and theoretical perspectives. It relies on faculty resources in the School of Humanities at large as well as four faculty who hold permanent appointments in Comparative Literature. Comparative Literature cooperates with the Program in Critical Theory in designing curriculum and organizing special events.

Undergraduate Program. At the undergraduate level, the Department organizes an ascending series of courses in each of these programs, so that students are exposed increasingly to sophisticated problems in criticism, literary history, and writing. The undergraduate programs and emphases focus in the junior year in a core course in criticism, followed by allied seminars in special topics. Students in English finish their degrees with three quarters of comprehensive exams in the senior year.

The Department also offers a number of undergraduate courses in which majors and nonmajors may enroll. Some of these courses are without prerequisites, including courses in English and American literary history and various topics such as literature and the other arts. These courses introduce students from the arts and sciences to basic problems in literary analysis and interpretation and familiarize them with more advanced problems as they progress.

Also at the undergraduate level, the Department administers the Humanities Writing Workshop, which handles basic writing problems in the context of other courses such as the Humanities Core Course. Beginning in the fall of 1980, the Department initiated special writing courses related to various academic disciplines as part of the administration of the campus writing requirement.

Graduate Programs. At the graduate level, the Department offers the Ph.D. in English and in Comparative Literature, the M.A. in both these programs, and the M.F.A. (in English) in poetry and fiction writing. Although literary theory does not have its own designated degree, it is integrated into all programs except creative writing; Ph.D. candidates may elect to take a formal critical theory emphasis. The Department is also active in the School's program in literary theory, which it helped to establish. That program regularly includes visitors for short periods, who bring to the campus some of the national and international enrichment imported formerly by the summer provision for visitors on a regular basis. All candidates for advanced degrees are urged to train as teachers in departmental courses. Students pursuing the Ph.D. in English may emphasize either American or English literature. The graduate degree program in Comparative Literature is interdisciplinary.

Faculty Research and Creative Activity. The faculty of the Department carries on research over a wide spectrum of areas in literary history, criticism, and theory. Several important new books on theory have been published in the past year by departmental faculty. Several critical studies and creative works are forthcoming this year. Participants in the M.F.A. program are active in the publication of fiction and poetry. Several critical books in Renaissance dramatic and nondramatic literature are in the offing, as are two studies of the English romantics and their modern critical ambience. By advancing a junior medievalist and adding a senior medievalist this year, the Department is increasing its research activity in this area.



## Department of French and Italian

Introduction. The Department of French and Italian offers instruction leading to the B.A., M.A., and Ph.D. degrees in French. It participates in the Program in Comparative Literature, and in the film studies and women's studies concentrations, offers undergraduate courses in Italian, and conducts research in selected areas.

Undergraduate Program. The undergraduate program of the Department of French and Italian is designed to provide linguistic competence and a broad knowledge of diverse aspects of French and Italian culture--literary historical, social, aesthetic. While these areas are fundamentally interrelated, each provides a focus on specific aspects of French and Italian culture. Hence, the undergraduate program in French offers three options within the major: literature, civilization and culture, and linguistics. The main objective of the lower-division program in French is to develop the student's competence in the language through understanding, speaking, reading, and writing. The Language Laboratory is used to complement classroom activity.

The chief objective of the upper-division program is to provide the challenging experience of understanding, appreciating, and perhaps identifying with the literature and culture of another people. The stress in all literature courses is placed on interpretation. In short, the Department strives to encourage creativity both in the language and literature courses.

Graduate Program. The graduate program in French seeks to expose students to a variety of critical methods both through courses in theory and through practice in analysis in literature courses. Graduate courses are offered by genre, by author, and by century. In consultation with a guidance committee, the student chooses freely from among the course offerings. Since the overwhelming majority of Ph.D. candidates plan to

teach, the Department recognizes its responsibility to train them as teachers. Therefore, as far as possible, all candidates without previous teaching experience are required to participate in a program of supervised teaching for at least one year.

Faculty Research. The faculty of the Department of French and Italian favors a wide variety of criticism methods including Post-Structuralism, new criticism, Marxist criticism, new literary history, and comparative aesthetics. In recent years it has emphasized literary theory both in historical and contemporary contexts as well as interdisciplinary studies, including the relationship between literature and such fields as philosophy, folklore, fine arts, theater arts, sociology, and feminism. This research covers periods from Dante and the French Renaissance to the present day, including francophone literature as well as major genres. In the field of linguistics, research is oriented towards phonology and morphology.

## Department of German

Introduction. The Department of German offers instruction leading to the B.A., M.A., and Ph.D. degrees and carries out research in broad areas of German language, literature, and culture. The Department concentrates on the modern periods and has not sought to develop the full range of linguistic and philological offerings typical of an older, larger, and more traditional department.

Undergraduate Programs. At the undergraduate level the Department provides instruction in the German language to students from all academic units of the campus. It offers first-, second-, and third-year-level language, composition, and conversation courses, a course in reading German, and a wide variety of upper-division literature and culture courses. Each quarter the Department tries to offer a course on German literature or culture in translation to complement its regular course offerings, which are usually conducted in German. The literature-in-translation courses have been adapted to make them suitable for fulfilling the campus-wide upper-division writing requirement.

The Department offers two emphases for its undergraduate majors: literature and linguistics. The emphasis in linguistics requires a core of linguistics courses and enlists the cooperation of members of the Program of Linguistics, in addition to the German linguist in the Department whose appointment is half in Linguistics.

Graduate Program. At the graduate level, the Department has succeeded in recent years in attracting students from all over the United States. As a result, the number and quality of applicants to the Ph.D. program have improved considerably. Students who earn a Ph.D. in the Department are prepared for careers as scholars and teachers in institutions of high learning. Because the Department also stresses other kinds of skills that can be acquired in a graduate program, a number of students below the Ph.D. level have left UCI with sufficient preparation to begin successful careers in industry or with the State Department.



Because of the size of the Department, there is no strictly specified graduate curriculum, although there are certain courses that are repeated at regular intervals and in which all students are urged to enroll. All members of the faculty are expected to teach a graduate course each academic year. Most graduate seminars are closely related to the research interests of the faculty, and often explore new avenues of knowledge rather than the traditional standbys of the established Germanic curriculum.

Interdepartmental Cooperation. Members of the Department of German participate in a number of interdepartmental and interdisciplinary programs within the School of Humanities. These include instruction in the Humanities Core Course, in film studies, in the Program in Comparative Literature, and in linguistics.

Faculty Research Activities. The members of the Department have strong research interests in eighteenth-, nineteenth-, and twentieth-century topics, especially Goethe, Classicism, Romanticism, and Realism. Other areas of specialization include literary theory, aesthetics, and German linguistics. There are considerable shared interests which make it possible to bring different points of view to individual problems, and most members of the Department are active participants in the Focused Research Program on Goethe.

## Department of History

Introduction. The Department of History offers programs leading to the B.A., M.A., and Ph.D. degrees. The major emphasis is on European, American, and Latin American history, particularly in their theoretical, comparative, and social dimensions.

Undergraduate Program. The undergraduate program is designed to develop critical thinking and to foster an awareness of the world through the study of the past. The Department offers a variety of approaches to history, each emphasizing basic disciplinary skills: weighing evidence, expository writing, constructing logical arguments, and exploring the role of theory in historical analysis and human action.

The Department has developed a series of lower-division courses aimed primarily at nonmajors. In addition, new colloquia for upper-division History majors have been introduced in the following areas: political theory, social thought, social history, comparative history, and international history.

Graduate Programs. The M.A. and Ph.D. programs provide students with both basic analytical skills and a rigorous grounding in social and other comparative theory. The faculty believes that students should be encouraged to deal with broad questions about the past and to approach those questions in a methodologically sophisticated manner. The special nature of graduate education in the Department has resulted in stable graduate enrollments even though most history departments in the United States have been faced with declining enrollments.

Graduate students are required to develop the critical abilities necessary to deal with primary sources, secondary synthesis, and the interrelationships of history and theory. Four areas of specialization are offered: early modern European history, modern European history, American history, and Latin American history.

Faculty Research Activities. The Department's main area of research strength is in theoretically informed social history, especially of modern Europe and America. Faculty specializations include European and American social and intellectual history, social theory, and international relations, as well as Russian and Latin American social history.

Several faculty members participate with colleagues in the Graduate School of Management in the Focused Research Program on Authority Studies, which is concerned with authority relations in a variety of social organizations and institutions.



## Program in Linguistics

Introduction. Undergraduate linguistic studies are under the aegis of a campus-wide Committee on Linguistics composed of the faculty from the Program in Linguistics (a unit within the School of Humanities) and of faculty from the School of Social Sciences (specifically from the Cognitive Sciences group). With one exception, members of the Program in Linguistics also have had joint appointments in other units, such as the Departments of Classics, English and Comparative Literature, French and Italian, German, Philosophy, Spanish and Portuguese, and the Office of Teacher Education.

Educational Program. Through the Program in Linguistics in the School of Humanities and through the School of Social Sciences, the campus-wide Committee on Linguistics offers courses leading to the B.A. degree in Linguistics. Three tracks are available: General Linguistics, Theoretical and Formal Linguistics, and Applied Linguistics. Students can major in General Linguistics or in Applied Linguistics within the School of Humanities, and in General Linguistics or in Theoretical and Formal Linguistics within the School of Social Sciences. The Program in Linguistics also provides courses required for majors in a foreign language with an emphasis in Linguistics.

Faculty Research. Faculty research currently includes the study of American Indian languages, French and Spanish phonology, English syntax and semantics, phonological and syntactic theory, learnability theory, the biological foundations of language, speech perception, first- and second-language acquisition, new approaches to foreign language teaching, sociolinguistics, nonverbal communication, the history of linguistics, linguistics and education, and linguistics and literature.

Anticipated Plans. The reorganization of Linguistics at UC Irvine was devised to allow a fuller use of the linguistic resources currently

existing on campus. The immediate goals of the campus-wide Committee on Linguistics are to realize the possibilities made available by the changes and to fine-tune the resulting innovations. At this early stage, an excellent spirit of cooperation has fruitfully developed between faculty from different schools, course offerings have been harmonized and diversified, and a colloquium series, "The Irvine Linguistics Forum," has been instituted.

The absence of a fully developed graduate program in linguistics continues to be of serious concern to a number of faculty. A long-term goal is to establish a graduate program which would use the special strengths of existing resources without duplicating the efforts of other linguistics graduate programs at nearby UC campuses.

## Department of Philosophy

Introduction. The Department of Philosophy recently added two new faculty members. These changes have resulted in an increase in the variety of fields within the general area of philosophy in which the Department can claim strength, and a noticeable increase in the depth achieved in some of the areas previously covered. The Department has as its goal the strengthening of its already considerable excellence in several areas of philosophy. The Department offers instruction leading to the B.A., M.A., and Ph.D. degrees.

Undergraduate Program. The Department has been careful in its selection of new faculty to assure that it is constituted in such a way as to further the goals of its undergraduate program. All members of the Department are aware of their obligation to encourage not only the development of philosophical talent in Philosophy majors, but to stimulate the development of general learning skills amongst the undergraduates at UC Irvine. In all undergraduate courses, as well as graduate courses, emphasis is placed on clear and precise critical writing.

Graduate Program. As a result of the new faculty appointments, the graduate program curriculum has been considerably expanded. Though it is doubtful that the Department will allow any further increases in the number of graduate enrollments, it is expected that the quality of those participating in the graduate program will continue to increase because the Department is now enjoying a growing international reputation in the field.

Faculty Research. Due to the very nature of the field, research in philosophy is of necessity an individual undertaking. There are no "programs" in which joint research projects are launched. Still, in the



Department as a whole, there are a number of inter- as well as intra-departmental activities. For example, for a number of years the Department has had no fewer than three people working primarily in the area of formal logic. This has allowed a number of discussion groups and joint seminars to occur. The logic group at Irvine has also connected in a number of ways with its counterpart in the Philosophy Department at UCLA. The same is true in the areas of Greek philosophy and philosophy of religion. In both cases the Irvine Department has been involved with a number of activities with other departments in the UC system. As an example, last year beginning efforts were made to establish an ongoing colloquium in the area of philosophy of religion with students and faculty working in this area at UCLA. The Department expects that this kind of interplay, both within the UCI Department and between it and other neighboring departments of philosophy, will increase in the future. Of course, all of this has direct implications as regards the individual research going on in the Department.

### Program in Russian

Degree Program. The Program in Russian offers the B.A. degree with a choice of three concentrations: literature, language and linguistics, and civilization.

Faculty Research Strengths. Faculty research focuses primarily on modern Russian and contemporary Soviet literature, on methodology, and on innovation in the creation of instructional programs in language teaching and teacher training. Faculty strengths within the area of nineteenth- and twentieth-century literature include Critical Realism (Tolstoy and Dostoevsky), symbolism and literature of the revolutionary era, and Soviet prose of the 1960s and the 1970s.

Special Teaching Programs. The faculty is completing its work on a basic program in Russian language and culture which was developed with the support of innovative instructional project grants. It is expanding its self-paced/self-instructional program for beginning and intermediate Russian and has organized an undergraduate program in the training of prospective teachers.

UCI Russian Institute and Practicum. Each summer the Program in Russian offers a three-week, total-immersion summer program combining an institute in Russian language, literature, and culture with a practicum in teacher training. The program, which is entering its second decade, is open to members of the community. It provides undergraduate instruction and teacher training, as well as a forum for practicing teachers and an opportunity for scholarly exchange.

The Russian Studies Faculty Committee. The Committee deliberates and advises the Director on major issues pertaining to programmatic and curricular matters. Individual members of the Committee collaborate in research and course offerings, contribute to reviews and serve on the Scholarship Committee of the UCI Russian Institute and Practicum.

Relations with Other Institutions. Students from several California universities fulfill their language requirements by enrolling in courses offered by the UCI Program in Russian. The visiting students register in the self-paced program and other Russian language and literature courses through University Extension, and in the UCI Russian Institute through Summer Sessions.

Organization of International Programs. Aided by the resources of the State Department's International Communication Agency and of the International Scholarly Exchange Committee of the Union of Soviet Writers, the Russian faculty is involved in a direct scholarly exchange program with Soviet scholars and creative writers. The UCI Visiting Russian Writers Program (established in 1977) has brought some of the most eminent figures in Russian and Soviet literature to UCI.

An international symposium devoted to the 1960s and the 1970s in Russian Soviet literature will bring together Soviet writers and the American scholars who study their literature. The symposium is planned for fall 1982 and will take place on the Irvine campus.

Anticipated Plans. A proposal for an M.A.T. in Russian, offered in cooperation with the Office of Teacher Education and with the UCLA Center for Russian and East European Studies, is under study. Other suggestions for interdepartmental cooperation currently under discussion include a Ph.D. program in Comparative Literature with a specialization in Russian literature and a B.A. in Linguistics with a concentration in Slavic linguistics.



## Department of Spanish and Portuguese

Introduction. The Department of Spanish and Portuguese offers instruction leading to the B.A., M.A.T., M.A., and Ph.D. degrees in Spanish. It offers undergraduate courses in Portuguese, and engages in a variety of public service and scholarly activities. The Department participates in the School of Humanities Programs in Comparative Literature and Literary Theory and the Humanities Core Course.

Undergraduate Programs. The Department offers three emphases for its undergraduate majors: literature and culture, linguistics, and bilingualism and English as a second language. The emphasis in linguistics requires a core of linguistics courses and enlists the cooperation of members of the Program in Linguistics. The emphasis in bilingualism and English as a second language is designed primarily for the education of elementary and secondary school teachers and was developed in cooperation with the Office of Teacher Education. The emphasis in bilingualism is attracting increasing numbers of students. In addition to staffing courses for its majors, the Department teaches Spanish to large numbers of non-Spanish majors. As the number of Chicano students at UCI increases and as Californians become more aware of the need to study Spanish, enrollments in these undergraduate courses are expected to increase.

The Department plans to renew its efforts to create an undergraduate major in Latin American Studies to be offered jointly with the School of Social Sciences and the Department of History. This major could be offered with existing programmatic resources and would be attractive to prospective students.

Graduate Programs. The Department offers three programs at the graduate level. The M.A. degree program does not require a thesis, but the M.A.T. degree program, specifically directed at meeting the needs of working credentialed teachers, requires either a thesis or a curricular research project.

The Ph.D. degree program attempts to integrate period and genre studies with work in literary theory, linguistics, and socio-historical studies. It requires a number of courses outside the Department because the Department wishes to develop not narrow specialists but scholars who are acquainted with the various fields that relate to their discipline.

Faculty Research. Faculty research strengths lie in the areas of Latin American literature and literary theory. Recent publications include books on several Colombian and Chilean authors: Jose Asuncion Silva, Garcia Marquez, Neruda, and Bombal. A book on the theory of lyric poetry is soon to be published in Spain. Two Chicano novels and several poems have been published recently in the United States and Mexico.

The applied linguists in the Department have produced seminal articles on the new "natural method" in addition to studies on comparative phonology and dialectology. In the field of Spanish literature, faculty members have presented new interpretations of nineteenth- and twentieth-century novels and the medieval classic El libro de buen amor.

Anticipated Plans. The Department intends to continue the policy of inviting well-known Spanish and Spanish American authors as visiting professors when members of the regular faculty are on leave, and to utilize this system of visiting appointments as a means of broadening and further improving the Departmental educational programs.

## School of Physical Sciences

Introduction. The School of Physical Sciences consists of the Departments of Chemistry, Mathematics, and Physics. Each department divides its activities among a strong research program, a graduate program to train research scientists, and an undergraduate education program to train its majors and to provide service instruction for other majors. Each department offers the B.S., M.S., and Ph.D. degrees.

The research activities of the School are supported principally by Federal agencies including the National Science Foundation, the Department of Energy, the Public Health Service, and the Department of Defense. During the years 1982-85 the School plans to make a few new appointments that will strengthen and consolidate existing research and graduate education programs. No new programs are anticipated. Research activities should continue to expand and mature if the limitations imposed by inadequate physical facilities can be removed.

Department of Chemistry. The Department of Chemistry conducts active research programs in a number of areas in chemistry, including molecular spectroscopy, structural chemistry, chemical dynamics and reaction mechanisms, synthesis, theoretical chemistry, biochemical and biophysical chemistry, analytical chemistry, forensic chemistry, and nuclear and radiochemistry. The Department is especially strong in the area of gas phase chemistry. An additional area of research is the chemistry and physics of crystal surfaces, in which several faculty participate jointly with Physics faculty. Some Chemistry faculty are members of the Focused Research Program in Alternative Sources of Hydrocarbons, in which Biological Sciences faculty also participate. A modest joint biophysical chemistry program brings faculty from chemistry, biological sciences, and the basic science departments of the College of Medicine



together in an interdisciplinary effort. The Ion Cyclotron Resonance Facility and the Nuclear Reactor Facility (TRIGA - Mark I reactor) are unique research facilities of the Department.

The graduate program is designed to train research chemists for careers in academic institutions and in industrial and governmental laboratories.

The undergraduate curriculum serves two student populations. The Chemistry major program which graduates approximately 60 students per year is a rigorous program that develops the student's knowledge and ability in many aspects of the chemical sciences. Undergraduates are actively encouraged to participate in faculty research programs. This student-faculty interaction in the research laboratory is one of the strengths of the program. The involvement of the undergraduate major in the activities of the Department is facilitated by an active Chemistry Club.

The Department of Chemistry gives special attention to its large service responsibilities for the Schools of Biological Sciences and Engineering. The Department offers education in general chemistry, organic chemistry, and physical chemistry for majors from other academic units.

Department of Mathematics. The Department of Mathematics has research interests that span a wide area of mathematics and include probability, statistics, and optical procedures; analysis; mathematical physics; arithmetic and geometry; geometric analysis; and logic and algebra. These research activities are strengthened by the use of faculty positions for two-year appointments of young scholars to the Irvine Lectureships in Mathematics.

The graduate program in Mathematics leads to M.S. and Ph.D. degrees for students who plan a career in academic research and teaching, and

for students who require advanced mathematics for a career in industry, business, or government. The Department plans to expand its graduate course offerings and research activity in applied mathematics, with special attention to statistics and numerical analysis.

The undergraduate curriculum serves both the student with a strong interest in mathematics and the majority of UCI students who require some form of mathematical training as part of their own major. For the major, the Department offers a variety of options ranging from a specialization in pure mathematics to specializations in applied areas such as statistics and operational research. The program in statistics was recently developed at both the undergraduate and graduate levels. Plans of the Department include combined curricular development in applied mathematics with special attention to the needs and interests of other physical scientists and engineers on the campus. The Department also sponsors a very active Math Club.

Department of Physics. The Department of Physics has developed strong research programs which focus on particular areas of physics to allow a relatively small department to achieve excellence in these areas. The primary research areas of the Department are condensed matter physics, elementary particle physics, and plasma physics. Strong experimental and theoretical efforts exist in each area.

In addition, the Department has active research in astrophysics, mathematical physics, gravitational physics, and educational technology. Of special note are the experimental program in weak interactionn physics (neutrino physics and particle stability) and the theoretical program in crystal surfaces. The excellence of all the research activities has attracted a number of visiting scholars, permanent nonfaculty researchers, and postdoctoral students which exceeds the number of regular faculty.

Several faculty members who participate in the FRP on Brain Function (cooperative with Biological Sciences faculty) focus their research on the development of an understanding of the role of small groups of neurons in brain function.

The Educational Technology Center provides the focus for research on the use of modern technology, particularly computer technology, in the educational process.

The undergraduate program for Physics majors provides rigorous training in physics that serves as the basis for advanced work in any field of natural science and provides background and skills for employment in industry and government. In addition, many students use the undergraduate training in physics as a preparation for later work in medicine, law, or administration. Undergraduate Physics majors have excellent opportunities to become involved in research, particularly during their junior and senior years. The active chapter of the Society of Physics Students provides an opportunity for Physics majors to socialize and a forum for pursuing common interests.

The Department has introduced two concentrations that are designed to respond to students with interdisciplinary interests. The Applied Physics concentration serves students who plan to pursue a career in industrial or technological research and includes course work in biological sciences, chemistry, radiology, and physiology. The Biomedical Physics concentration emphasizes those aspects of physics involved in medical and biological technology.

Courses for nonmajors are offered in astronomy, earth sciences, and physics. These courses can be used to satisfy part of the UCI breadth requirement for students whose major is not in the School of Physical Sciences.



## School of Social Sciences

Introduction. The School of Social Sciences encompasses the disciplines of anthropology, economics, geography, linguistics, political science, psychology, and sociology. Although the School is not divided into separate departments, the faculty members are affiliated with one or more of the following established and developing groups: Cognitive Sciences; Comparative Culture; Culture and Health Practices; Economics and Public Policy; Networks; Politics, Society, and Social Issues; and Social Relations.

Cognitive Sciences. The Cognitive Sciences group is committed to the investigation of the abstract, complex structures that underlie human cognition: language, thought, memory, learning, and perception. The three main areas of research strength within the program are theoretical linguistics, visual and auditory perception, and mathematical psychology.

Comparative Culture. The program in Comparative Culture focuses on the study of the cultures of the United States, including dominant and minority cultures and their antecedents. The range of cultures is studied on a comparative basis, with some students concentrating on the expressive forms of culture and others on culture from the perspective of social inquiry.

Culture and Health Practices. The developing interdisciplinary emphasis in culture and health practices focuses on the investigation of the interrelationship of culture and health beliefs and practices from a cross-cultural perspective.

Economics and Public Choice. Faculty members who share an interest in economic theory, public economics, and the evaluation of public policy are developing this emphasis, which is oriented towards normative analysis and a wide range of social problems including welfare economics and public finance.

Networks. The developing emphasis in networks focuses on theoretical and methodological approaches to networks, including such topics as problems of measurement, scaling and clustering models, methods to facilitate the collection and analysis of networks data, and substantive issues in the study of social networks.

Politics, Society, and Social Issues. The group in Politics, Society, and Social Issues focuses on comparative public policy. Special areas of faculty research interest include organizational theory and bureaucratic behavior, mass media, democratic theory, political economy, and quantitative and mathematical political science. Future faculty appointments will emphasize six subareas: public policy, comparative politics, applied public choice, political institutions, democratic theory, and authority.

Social Relations. The Social Relations program is concerned with the study of naturally occurring social and cultural forms, with emphasis on quantitative approaches, cross-cultural comparison, and field work. Faculty research interests include cognitive anthropology, social change, personality theory, and comparative social organization.

Undergraduate Programs. The School of Social Sciences offers nine undergraduate majors: Anthropology, Comparative Culture, Economics, Geography, Linguistics (theoretical and formal; general), Political Science, Psychology, Social Science, and Sociology. An honors concentration in social thought is available to students with a demonstrated aptitude for theory. Undergraduate majors in the School of Social Sciences have the additional option of concentrating in women's studies.

Appropriate groups of Social Sciences faculty have begun to reassess the curriculum and requirements for each major in the School. As a result, the selection of courses offered for Economics majors is expected to improve considerably. Majors offered in Theoretical Linguistics

and in Psychology are designed to take full advantage of faculty resources in other academic units on campus, and similar plans are underway for the Sociology major. Intercampus cooperation with UCR has made it possible for the School to maintain a full curriculum in geography.

The group in Politics, Society, and Social Issues is composed of faculty and students trained in various disciplines who share a common interest in authority, participation, and public policy formation. Members are committed to studies involving the application of social science theory to the solution of social issues. The Ph.D. is granted in Political Science.

The group places special emphasis on recruiting students who propose to pursue research in the following areas: (a) authority, power, and value allocations--relating to public policy, organization, participation, and relationships within and between social and political units; (b) change and structure of cultures and of social and political units; and (c) empirical theory, mathematical models, and quantitative analysis of political phenomena.

Faculty currently are conducting research on authority relations, organizational theory, and bureaucratic behavior; economic models of political behavioral mass media and society; democracy and participation; public policy; political thought; quantitative political science; foreign policy and international relations; and comparative politics with an emphasis on Europe and Latin America.

The graduate programs are strongest in the areas that emphasize quantitative approaches, formal analysis, or both, including mathematical psychology, linguistics, cognitive anthropology, comparative cross-cultural analysis, and social network analysis. All graduate students must satisfy a methods requirement, usually by coursework in mathematics or statistics.



The faculty currently is reexamining all of the graduate programs in an attempt to provide greater structure and coherence. An attempt will be made to provide expanded core materials at both School and program levels with more explicit curricular options for graduate education.

Faculty Research. The School includes a number of faculty members with expertise in formal mathematical and methodological skills. Many of the publications emanating from the School involve significant contributions to the application of formalisms in social science theory or to the development and refinement of research methods.

Research contributions are not confined to methodology, however. There are two main areas of substantive research: cognitive sciences and social structure. Areas of special concern and competence within cognitive sciences are cognitive anthropology, language acquisition, mathematical psychology, and visual perception. Within social structure, special emphases include social network analysis, cross-cultural studies, and transportation research.

The integration of the former Program in Comparative Culture into the School of Social Sciences has strengthened the cross-cultural area by bringing together faculty with common interests in cross-cultural comparisons.

Faculty and students from the School are involved with four major interdisciplinary research activities on the Irvine campus: the Public Policy Research Organization (PPRO), the Institute of Transportation Studies (ITS) which recently became a Multi-campus Research Unit, and the Focused Research Programs in Authority Studies and Vulnerable Populations.

Research Facilities. The Social Sciences Research Laboratory contains 40 experiment and control rooms situated around a central core where two PDP-11 computers are available for research and instructional purposes. The Farm School is a small, open elementary school that serves

as a research facility for faculty and students having interests in how children learn. The Anthropology Laboratory has computer terminals for statistical studies and for the analysis of texts or verbal material. Students also have access to a video laboratory, three campus computers, and a collection of computer programs for social science data analysis.

Intercampus Cooperation. Geographers from the Riverside campus are teaching courses in the UCI School of Social Sciences under an inter-campus exchange agreement. Discussions are underway between social networks scientists at the Irvine and Santa Barbara campuses to develop a similar teaching exchange. The purpose of these exchange agreements is to enrich the curricula for both graduate and undergraduate students by enabling them to take advantage of faculty resources from more than one campus.

Anticipated Plans. In addition to an existing undergraduate honors program in political science, the faculty plans to develop a special honors program in mathematical social science. It will provide selected undergraduate students the opportunity to pursue an enriched set of courses with a strong mathematical orientation. The program will lead to a B.A. in Social Sciences.

In planning future research directions the primary focus of the School will be to build on existing strengths. Faculty recruiting will be geared toward enhancing existing methodological and substantive emphases. The School is considering developing ORUs in cognitive sciences and in social structure. Graduate and postdoctoral training in these fields will be strengthened in order to provide further support for ongoing research efforts.

A Ph.D. degree in Economics is planned as soon as sufficient faculty are recruited into the developing emphasis in Economics and Public Policy.

The campus has allocated a number of new faculty positions which when combined with existing faculty will provide the minimum resources for a graduate program in economics with a focus on public sector economics.

education and research. The degrees offered are the M.S.A. (Master of Science Administration), the M.P.A. (Master of Public Administration), and the M.B.A. (Master of Business Administration). In addition to the Ph.D. in Administration.

The Master's degree program is professionally oriented and designed to prepare management practitioners in business, government, and not-for-profit organizations. The Ph.D. degree program is an academic research oriented program designed to prepare future educators and scholars in the field of management.

Master's Degree Program. The Department of Management does not offer the M.S.A. degree. It does offer a limited number of courses designed for undergraduate students who want elective courses dealing with management and business administration, and those who wish to prepare for graduate study in this field. This has increased the number of undergraduate offerings of intermediate level graduate degree in this area. In addition, the efforts of the graduate concentration in management studies. This will be available to a limited number of upper division students who have completed the prerequisite courses. The concentration includes offerings from other schools on campus as well.

Through the Ph.D. program, students may earn a doctorate degree in an administrative field and a master's degree in management in a total of five years of study rather than six. The Ph.D. program is a research oriented program designed to prepare students for careers in research and teaching in higher education.

Faculty and Program. The Department of Management has a strong faculty and a strong program. The department is well equipped to provide a high quality education in management studies with a focus on public sector economics and business administration. The program is designed to provide a



### Graduate School of Management

The Graduate School of Management (GSM) offers a generic program of graduate education and research. The degrees offered are the M.B.A. (Master of Business Administration), the M.P.A. (Master of Public Administration), and the M.B.P.A. (Master of Business and Public Administration), in addition to the Ph.D. in Administration.

The Master's degree programs are professionally oriented and designed to prepare management practitioners in business, governmental, and not-for-profit organizations. The Ph.D. degree program is an academic research-oriented program designed to prepare future educators and scholars in fields relevant to management.

Undergraduate Program. The Graduate School of Management does not offer the baccalaureate degree. It does offer a limited number of courses designed for undergraduate students who want elective courses dealing with management and organization, and those who wish to prepare for graduate study in this field. GSM has increased the number of undergraduate offerings to accommodate the growing student demand in this area. In addition, GSM offers an undergraduate concentration in management studies. This will be available to a limited number of upper-division students who have fulfilled a set of prerequisite courses. The concentration includes offerings from other academic units on campus as well.

Through the 3-2 Program, students may earn a bachelor's degree in an undergraduate field and a Master's degree in management in a total of five years of study rather than six. Approximately 15 percent of GSM's entering master's degree students are 3-2 students from various academic units.

Master's Degree Programs. The Master's degree programs combine general education in management studies with specialization in organizational and functional skills. The programs are organized around 10

common core courses that provide basic knowledge and analytical techniques that may be applied in diagnosing and solving organizational problems in general. Four sector-specific courses in either business (for the M.B.A.) or public administration (for the M.P.A.) are required, with the option of taking all eight courses (for the M.B.P.A.). The remaining approved courses are electives that allow students to pursue a variety of specializations within an institutional sector, an administration-oriented discipline, or a technical management area.

There has been a consistent interest in access to the Master's degree program by employees and managers in the local community. GSM has responded to this need by scheduling classes in the late afternoon and evenings, and also by allowing full-time employees to enroll in the Master's degree programs on a part-time or reduced load basis. The reduced load is defined as being a minimum of two courses per quarter; maximum time to completion of the degree is four years. Currently (fall 1981), approximately 26 percent of the Master's degree students are enrolled on a reduced load basis.

During the past several years UCI has experienced a significant increase in the number of Master's program students who specialize in the business administration/management sector and a decrease among those in the public not-for-profit administration sector. This continues to be a matter of concern to GSM faculty. The increased visibility of faculty support for the public policy/management area has stimulated student interest; however, external factors have combined to make public management careers seem less attractive at the moment.

Ph.D. Program. The major focus of the Ph.D. program is the education of future scholars who expect to pursue careers in research and teaching at the university level. The requirements of the program emphasize the

development of research skills and methodology, as well as expertise in subject matter and theoretical issues. Effective fall 1982 entering GSM doctoral students must have either a bachelor's or a master's degree in a relevant field. This change is expected to increase the applicant pool significantly. The GSM Ph.D. may be pursued on a full-time basis only.

Currently the Ph.D. student body is distributed among a number of areas of specialization. Examples include organizational behavior, operations research, accounting, finance, and public policy.

The continuing demand for the doctoral program among international students has resulted in the admission of a larger percentage of international students. This trend is reflected in graduate management schools across the country, and is not expected to diminish in the near future. GSM has experienced some success recently in attracting women to the doctoral program.

Relations with the Community. The professional character of the Master's degree programs require that GSM be sensitive to community and professional needs. In conjunction with the UCI Industrial Associates, GSM formed the GSM Affiliates Program in 1978. The membership of the Affiliates includes both private and public sector organizations and individuals who are interested in promoting and enhancing professional management education. The Affiliates sponsor several functions throughout the year of particular interest to the professional management community.

In the area of continuing professional education, GSM inaugurated the UCI Executive Program in January 1973. Offered in cooperation with University Extension, this certificate program is designed for a maximum yearly enrollment of 60 upper-level managers who seek continuing educational opportunities. The Program is conducted by experts from UCI, other universities, business, and government organizations.



Another program which GSM offers in conjunction with University Extension is the Managerial Effectiveness Program (MEP). It is an evolutionary succession to the former Middle Management Program, which began in fall 1977. The MEP consists of two units of 12 sessions each; Unit I is offered each fall; Unit II each spring. The Managerial Effectiveness Program is taught by GSM faculty, professors from other universities, and industry experts, and is designed to benefit the middle level management of both small and large organizations. A few positions are available for selected staff from UCI and UCI Medical Center.

A Certificate in Operations Research is offered jointly by University Extension, the School of Engineering, the Department of Mathematics, and GSM. Both students and community members have taken advantage of the Certificate to achieve proficiency in this high-level management tool.

GSM also administers the University of California Management Institute (UCMI). UCMI conducts an annual workshop for top and middle management from the entire University of California system, including the various laboratories, to provide an overview of current management problems and techniques for solving them.

Faculty Research. The field of management is broad and complex. The major areas of research activity of GSM faculty have been classified into several concentrations: finance and managerial economics, public policy and management, decision sciences, accounting and information systems, marketing and business strategy, and organizational analysis and human resources. These concentrations are not rigidly defined; they are fluid and determined by self-declaration. Additionally, individual faculty members may be in more than one concentration.

GSM and the Public Policy Research Organization (PPRO), an Organized Research Unit on the Irvine campus, have jointly set up the Management Research Program (MRP). Its purpose is to promote research on management

issues and problems in organizations of all types--business, education, health, and others. The MRP is already providing increased visibility for GSM research, and is expected to be a strong source of recognition for the School and for PPRO in the future.

Some GSM faculty members participate in the Focused Research Program (FRP) on Authority Studies (with faculty in the Department of History in the School of Humanities) which focuses on authority relations in a variety of social organizations and institutions.

The faculty also participates with faculty from the Program in Social Ecology, the Schools of Social Sciences and Engineering, and the College of Medicine in an FRP on Vulnerable Populations. These researchers are working to advance knowledge about "vulnerable groups" in the population and how they are affected by housing, environmental quality, transportation, population growth, employment, and human services.

## Department of Information and Computer Science

Introduction. Information and computer science is concerned with understanding the processes by which information is stored, transformed, and transmitted in both natural and artificial systems. The Department of Information and Computer Science (ICS) conducts research in analysis of algorithms and their associated data structures; artificial intelligence and understanding of natural language processing; the architecture of computer hardware; the design and engineering of software; the social impacts of computers; and the economics and management of computing resources.

Computing resources available on the campus include interactive access to the systems in the UCI Computing Facility--DECsystem-10, Xerox Sigma-7, DEC PDP-11/45 and 25 single-user microcomputers. The Departmental computing laboratory equipment includes two DECsystem, a VAX-11/750, and several minicomputers.

Degrees Offered. The Department offers the B.S., M.S., and Ph.D. degrees in Information and Computer Science. The Bachelor's degree program prepares candidates for professional careers in computing in industry and government and for graduate study in computer science. The Master's degree program provides additional professional training in computer science and related fields, and basic theoretical understanding for practicing professionals. The M.S. program offers specialization in three fields: software design and analysis, information systems, and computer system organization. Specialization in the Ph.D. program is in the areas of research cited above in the introduction.

Interdisciplinary Efforts. Faculty in the Department are involved in a number of joint interdisciplinary research programs with faculty in other schools and departments on the UCI campus. Interdisciplinary efforts involve: English history, musicology, economics, and administration



of computing resources, information systems in firms and organizations, social impacts of computing, medical image processing, and physics education.

Anticipated Trends and Plans. Over the next five years the Department plans to strengthen the following five foci of expertise and excellence:

- o Theoretical Computer Science -- in the subfields of concrete complexity theory and analysis of algorithms
- o Artificial Intelligence -- in the subfields of natural language understanding and learning systems
- o Software Engineering -- in the subfields of program development and maintenance environments and programming and design methodology
- o Social Impacts of Computing
- o Computer Architecture

Recent successes in recruiting junior faculty have added strength to the first four of these areas. ICS is having continuing problems recruiting and retaining faculty in computer architecture. Future recruiting will be aimed at strengthening the above five areas and at enhancing the external visibility and reputation of the Department.

The number of undergraduates majoring in ICS has increased in the last 10 years and by more than 100 percent over the last three years. High undergraduate enrollments have resulted in an increase in ICS student-faculty ratios to more than 1.5 times the campus average. Efforts are currently under way to reduce undergraduate enrollments to numbers commensurate with the faculty size and its responsibility to graduate education. On the basis of recent experience, the number of graduate students in the Master's and Ph.D. programs in computer science is expected to hold steady, split roughly equally in numbers between the Master's and Ph.D. candidates. However, ICS should increase its production of Ph.D.s to meet the national need for computer science faculty and researchers.

## Program in Social Ecology

Introduction. The Program in Social Ecology is a multidisciplinary unit which focuses on social and environmental influences on human behavior and health. Central objectives of the Program are the application of scientific methods to the analysis and solution of societal problems and the development of theory and knowledge pertinent to environmental and social phenomena. Graduate and undergraduate curricula are organized into three areas--environmental analysis, social behavior, and criminal justice.

Environmental Analysis. Environmental analysis is concerned primarily with changes in the physical environment and their effect on human behavior and health. Also of interest is the reciprocal effect of human behavior on the environment. Urban planners, lawyers, social and environmental psychologists, public health specialists, and biological ecologists collaborate on research and intervention projects. Problems of particular interest include, but are not limited to, crowding, land use, pollution, economic change, and human stress that is the consequence of environmental problems.

Social Behavior. In the area of social behavior the central objective is to study variations in social settings which have implication for human behavior and the course of social development. Developmental and community psychologists, lawyers, and sociologists study problems, such as the nature of social environments, that promote constructive development in adolescence and early adulthood, the unintended long-run consequences of medication for childhood behavior problems, cognitive methods for the control of anger, and the modification of problematic behavior.

Criminal Justice. Criminal justice considers factors at both the individual and societal levels which promote criminal behavior and

examines the institutions which have arisen to control criminality. Criminologists, sociologists, and lawyers examine problems such as white collar crime, the prediction of violence and juvenile delinquency, and alternatives to the juvenile justice system.

Undergraduate Program. Social Ecology classes are oriented toward both theoretical and applied learning, so that each enhances and enlarges the other. The undergraduate program is organized around four curricular components: a principles-and-methods cluster and three subareas concerned broadly with problems of environmental analysis, criminal justice, and social behavior. Students do not major in a particular subarea; rather, they are expected to develop a degree of competence in each.

Students who major in Social Ecology are required to spend two quarters in field placements such as planning departments, mental health clinics, child care centers, and the public defender's office. In their field placements, students are able to apply material learned in the classroom to social and environmental problems in the settings where they occur and ultimately may be solved.

Interdisciplinary Programs. In addition to the B.A. in Social Ecology, the Program offers an interdisciplinary B.A. in Applied Ecology jointly with the School of Biological Sciences. This major provides a blend of theoretical and applied knowledge. It combines fundamental and rigorous training in the biological and physical sciences with relevant courses offered in Social Ecology.

Qualified undergraduates may enroll in the 3-2 Program offered by the Graduate School of Management, leading to a B.A. in Social Ecology after four years, and an Master's degree in Business Administration, Public Administration, or a combination of both after five years.



Graduate Program. The Program offers both the M.S. and Ph.D. degrees. Many applicants admitted into the M.S. program already have professional experience. Doctoral training prepares the student not only for academic positions but also for positions in local, state, or Federal agencies that deal with the investigation and amelioration of social problems that require broad interdisciplinary training.

The emphasis in Social Ecology graduate study is theory and research that have implications for policy and social action. As is true of the undergraduate program, graduate study is organized around the contemporary problems of environmental analysis, social behavior, and criminal justice. The program emphasizes the acquisition of multi-disciplinary concepts and methods. Methodologies used include program evaluation, field research, legal research, naturalistic observations, questionnaire and survey methods, and laboratory experimentation.

The doctoral program is both innovative and relatively young (i.e., currently is in its sixth year). The faculty undertakes a review of the graduate program each year. The Social Ecology reviews influence planning for the future.

Faculty Research. Faculty research interests include the three curricular subareas. A number of the faculty members are actively involved in Focused Programs (FRPs) in Vulnerable Populations and Diabetes Mellitus and in an Institute of Mental Health training program in environment, health and human development.

Faculty hiring is planned with a view to strengthening, complementing and extending the currently strong research programs and curricular areas. Candidates whose background enables them to teach courses in more than one Social Ecology subarea are generally preferred to individuals whose training is more limited.

Office of Teacher Education

Credential Programs. The Office of Teacher Education works with various academic units to prepare students in the following credential programs:

- o Multiple Subject
- o Single Subject
- o Bilingual/Cross-Cultural Emphasis
- o Early Childhood Education
- o Learning Handicapped
- o Severely Handicapped
- o Physically Handicapped
- o Administrative Services
- o Pupil Personnel Services

The present programs are all approved by the California Commission for Teacher Preparation and Licensing without conditions.

Students may concurrently earn a California teaching credential and an advanced academic degree. The Office of Teacher Education offers no degree programs. It has earned an excellent reputation locally, due to the high rate of placement of its students and to the knowledge that these credentialed teachers can be assumed to have had authoritative training in subject-matter fields.

Faculty Mix. About two-thirds of the Teacher Education faculty have been educational practitioners, and the remainder have joint appointments with academic units on the Irvine campus. This faculty mix makes it possible for the Office to keep abreast of changes in curriculum procedures in the public schools and of changes of emphasis in subject matter areas.

Faculty Research Activities. Although the primary objective of the Office of Teacher Education is to develop effective teachers, a number of faculty members have also developed interests in educational research.

Several have published textbooks and are involved in various areas of field research. Faculty research interests span such diverse areas as the use of computer technology and interactive television for instruction, the development of curiosity behavior and intellectual development from childhood through adolescence, comparative education, staff development, and the learning process in particular academic areas.

Intercampus Cooperation. The Office of Teacher Education is exploring the possibility of intercampus programs which would provide exceptionally knowledgeable teachers in subjects requiring this.

Anticipated Plans. Given certification trends, the Office expects to maintain present enrollment levels and programs through 1985. The faculty will focus on innovations in technology and course content in response to changing requirements for teachers and administrators in public education.

Increasing campus interest in the preparation of entering students will probably result in the involvement of more regular UCI faculty in the teacher education process, and will emphasize the responsibility of the program in teacher education to develop additional ways of helping improve instruction in the schools.

An honors program in teacher education is being planned for the near future to offer special classes and an accelerated program to qualified students. The honors program will involve relevant academic units on the campus.

The Office of Teacher Education faculty encourage discussion among researchers concerned about education through its cross-campus Forum for Education. The intent is to discuss UCI faculty members' research and to explore the implications of their research for education, as well as ways in which research activities and perceptions on the general



campus can be brought more closely together with the program in teacher education.

The Office of Teacher Education will participate in the development of the Program in Academic Support Services and other campus efforts to address the problems of underpreparation, especially with regard to curricular outreach.

Exploratory discussions are taking place between UCI and the Irvine Unified School District (IUSD) regarding the development of a University Lab School. Through a UCI-IUSD cooperative program of research, experimentation and instruction of highest quality, the proposed University Lab School could seek solutions to some of the most serious problems facing public schools today, including the dilemma of delivering high-quality instruction at a time when costs are rising and budgets are shrinking.

## Department of Physical Education

Organizational Structure. The Department of Physical Education administers three closely interrelated programs: physical education activity classes, intercollegiate athletics, and recreation. UCI students have the opportunity to participate in a broad program of specialized instruction, organized competition, and leisure-time activities that include intramurals, specialized sports clubs, and informal recreation. Although the Department does not offer a degree program, students are able to receive academic credit toward a degree at the rate of one-sixth of a course per class up to a total of one course credit by electing physical education activity classes.

The Chair of Physical Education also serves as the Director of Athletics. This administrative arrangement provides for the effective utilization of faculty and professional staff in the highly interrelated programs. The sharing of common facilities and professional instruction results in significant capital savings and provides flexibility to meet the needs and interests of the student population. Students presently have the opportunity to participate in 35 different sports activities and a variety of leisure-time programs.

Facilities. The Department's facilities include a gymnasium with activity areas for badminton, basketball, fencing, volleyball, and weight training; a classroom; baseball and track stadiums; lighted outdoor basketball and volleyball courts; indoor four-wall handball/racquetball courts; swimming pool; lighted tennis courts; and large playing fields. Due to budget limitations the programs in combatives and gymnastics have been eliminated. The space designated for and assigned to these programs has been modified to meet the increasing demand of the present program for indoor facilities.

Student and Faculty Achievements. The Department has achieved prominence in athletics by winning a total of 15 NCAA Division II team

championships and one Division title. More than 60 UCI student athletes have captured NCAA individual titles. In 1977-78, the men's athletic program moved to Division I of the NCAA as a member of the Pacific Coast Athletic Association. In four years the UCI Anteaters have won eight Conference titles. The women's athletic teams compete in the NCAA as Division I Independents. The Department's coaches have been selected to coach United States teams in international competition, to serve as consultants, and to serve on regional and national sports committees.

Anticipated Plans. During the next five years it will be increasingly important to monitor and review student needs so that efficient use will be made of crowded facilities and limited staff. The demand for increased class offerings and opportunities is compounded by the need to meet the interests of women, minorities, and the handicapped. To maintain the present program and meet these needs will require program adjustments and additional resources. The Department has expanded a plan to generate extramural funding through contracts and grants, increased income, and community support, but such activity will not be successful without the support of the University.

At relatively minimal additional cost, the Department could develop the curriculum required for specializations in fields related to physical education. The faculty and staff already provide the nucleus for concentrations in athletic coaching, sports administration, school and community recreation, special physical education, and athletic training and conditioning and could interface with other campus units to broaden course offerings.

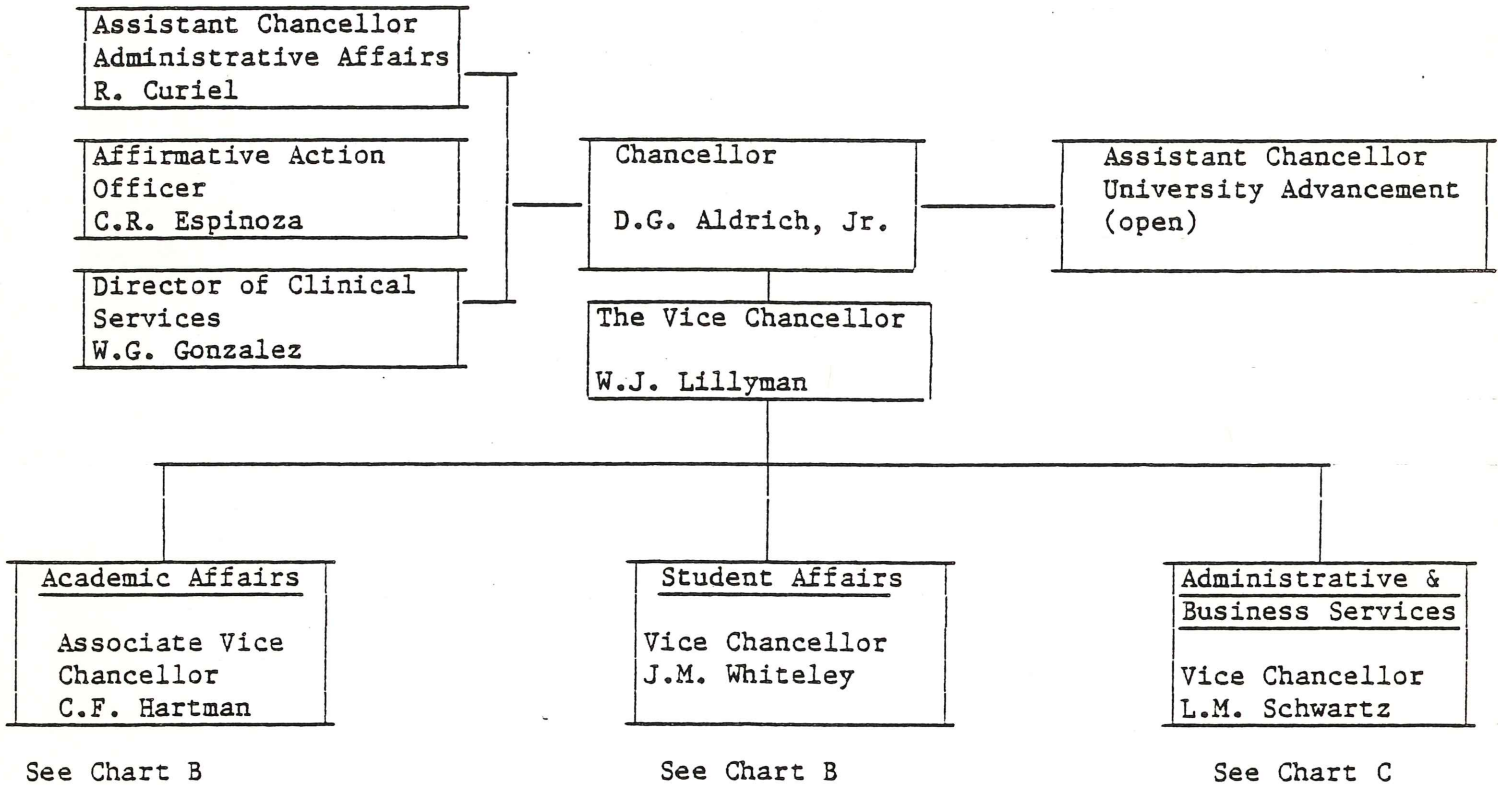
Academic units on campus, as well as the College of Medicine, currently offer most of the courses necessary as the scientific basis for specialized concentrations in athletics, recreation, and special physical education. Increased attention will be given to the development of plans for coordination and interfacing with related academic units and/or subject matters.



## APPENDICES

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IRVINE CAMPUS ADMINISTRATIVE ORGANIZATION



IRVINE CAMPUS ADMINISTRATIVE ORGANIZATION

July, 1982

Chart B

Chancellor D.G. Aldrich	
The Vice Chancellor W.J. Lillyman	
Associate Vice Chancellor--Academic Affairs C.F. Hartman	Vice Chancellor--Student Affairs J.M. Whiteley
Assistant Vice Chancellor--Plans and Programs B.H. Olson	Assistant Vice Chancellor S.K. Peterson
Financial Management Officer L. Bird	Business Manager C.R. Pieper
Special Assistant--Academic Affairs H.B. Press	Director, Campus Auxiliary Service K.L. Bocard
UCI Editor J. Varady	Director, Housing J.P. Phillips
Program of Academic Support Services Director (open)	Director, Relations with Schools and Colleges S. Lenhoff
Assistant Vice Chancellor--Academic Affairs D.J. Galligani	Director, Career Planning and Placement B. Riesenber (acting)
EOP/SAA Outreach Director M. Gomez	Financial Aid Officer O. Reyer
Director of Admissions J.E. Dunning	Director, Counseling Service J. Loxley
Registrar J.M. Brown	Director, Special Services J. Maestas
Assistant Vice Chancellor--Academic Personnel B.L. Reed	Director, Student Health C.R. Phillips
Assistant Vice Chancellor W.J. Parker	Special Assistant to the Vice Chancellor Enrollment Planning B. Bertin
University Librarian C. Boyer	
Dean, University Extension and Director, Summer Sessions R.N. Baisden	
Chair, Department of Physical Education and Director, Intercollegiate Athletics L.B. Dempsay	
Manager, Office of Resource Planning J.F. McGervey	



July 1982

Chart C

## IRVINE CAMPUS ADMINISTRATIVE ORGANIZATION

Chancellor D.G. Aldrich, Jr.
The Vice Chancellor W.J. Lillyman

Vice Chancellor--Administrative and Business Services L.M. Schwartz
--

Assistant Vice Chancellor--Business Affairs J.G. Wilson
--

Accounting Officer W.V. Phelps
-----------------------------------

Manager, Business Services A.L. Kaufman
--

Director of Computing D.M. Sheldon
---------------------------------------

Director, Information & Systems Management S.M. Frisch
---

Environmental Health & Safety Officer W.N. Smirl
---

Director, Facilities Management D.G. Sherman
---

Chief of Police M.F. Michell
---------------------------------

Manager, Staff Personnel R.O. Laue
---------------------------------------

Assistant Chancellor--Administrative Affairs
--

R. Curiel
-----------

Director of Clinical Services W.G. Gonzalez
--

Affirmative Action Officer C.R. Espinoza
---

Assistant Chancellor--University Advancement (open)
--

Director, Development (open)
---------------------------------

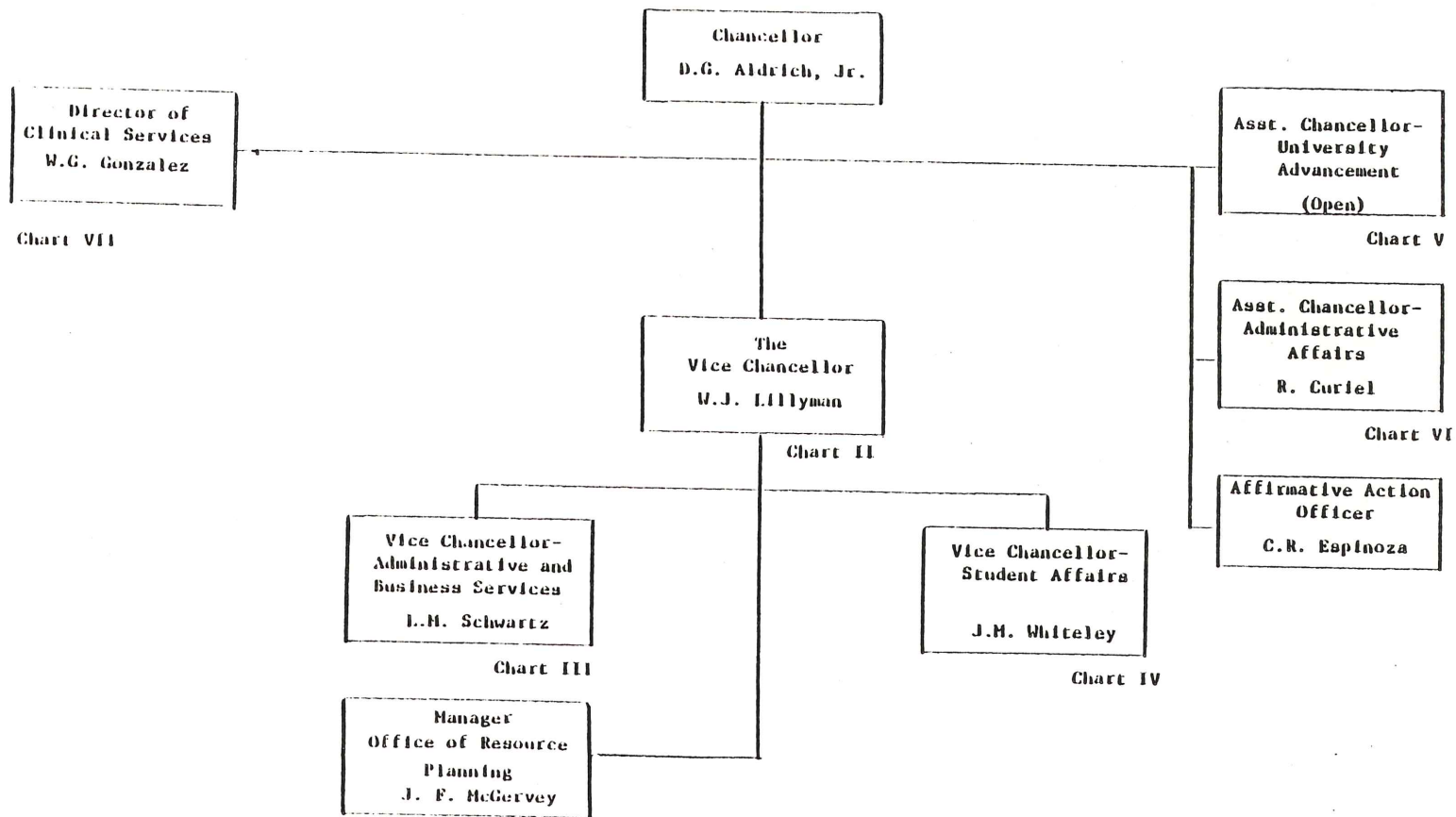
Assistant Director R. Berube
---------------------------------

Director, Alumni Affairs G. Kelsch
---------------------------------------

Director, Public Information H.M. Johnson
--

Director, Publications and Public Relations K. Jones
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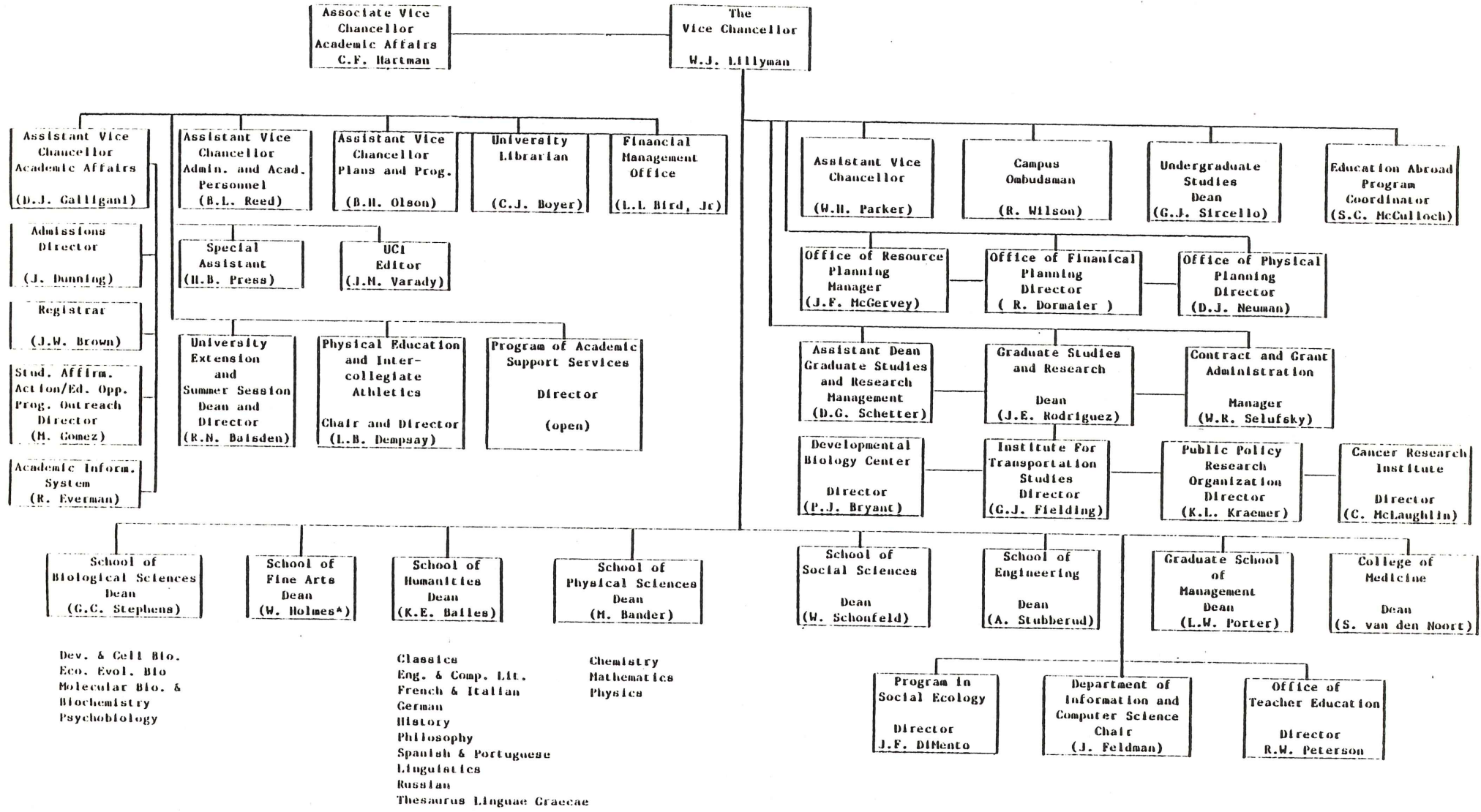
ADMINISTRATIVE ORGANIZATION  
University of California, Irvine



Effective July 1, 1982

ADMINISTRATION ORGANIZATION  
University of California, Irvine  
Academic Affairs

Chart II

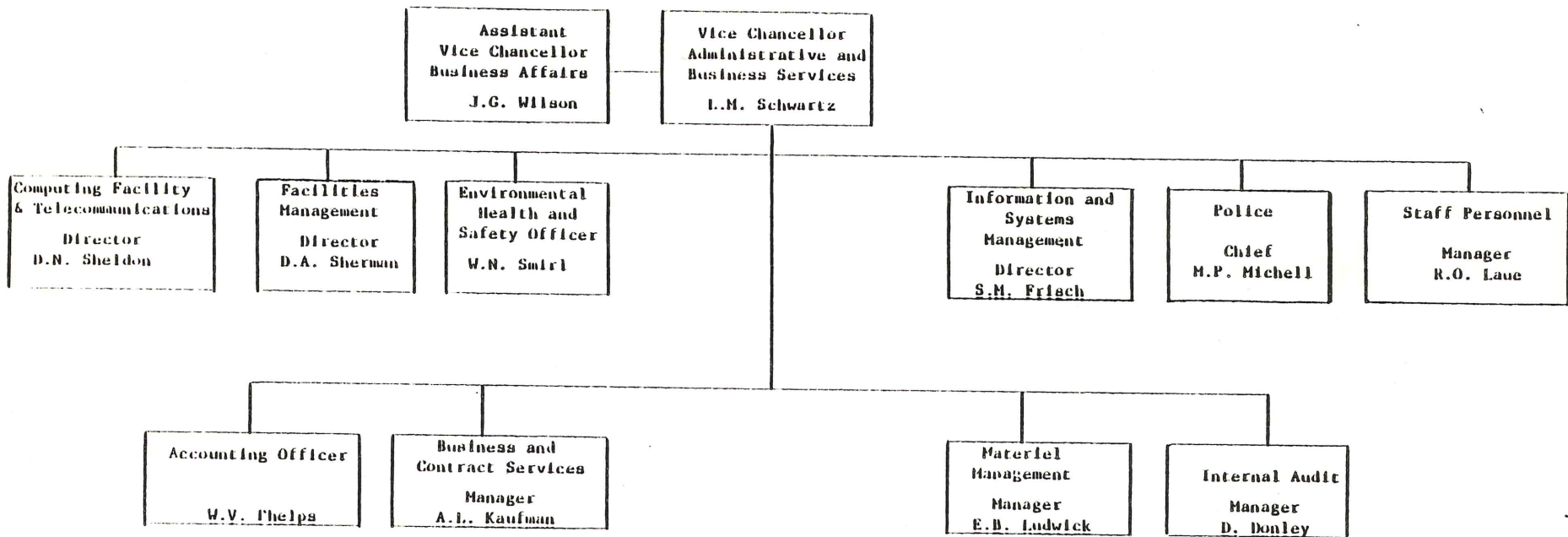


\*Acting

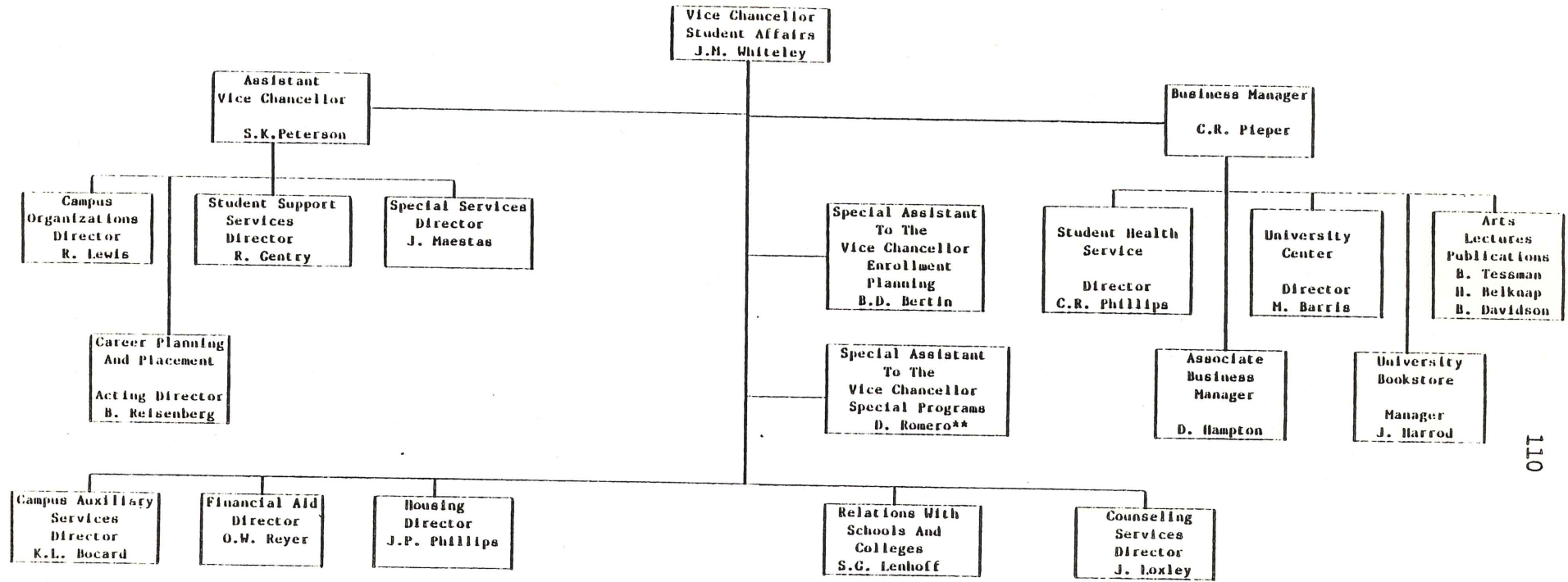
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ADMINISTRATIVE ORGANIZATION  
University of California, Irvine  
Administrative and Business Services

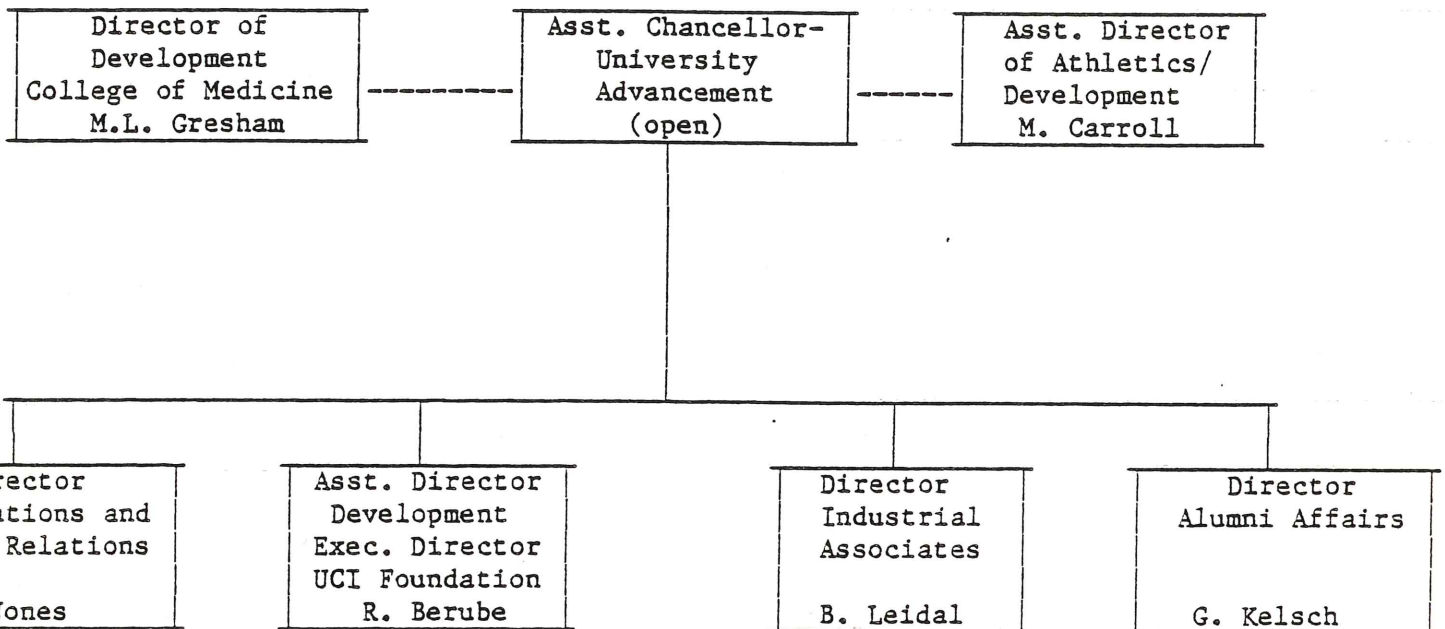


ADMINISTRATIVE ORGANIZATION  
University of California, Irvine  
Student Affairs



\*Special Assistant to the Vice Chancellor and Associate for Medical Student Affairs  
 \*\*Special Assistant to the Vice Chancellor and Counseling Psychologist in the Counseling Center

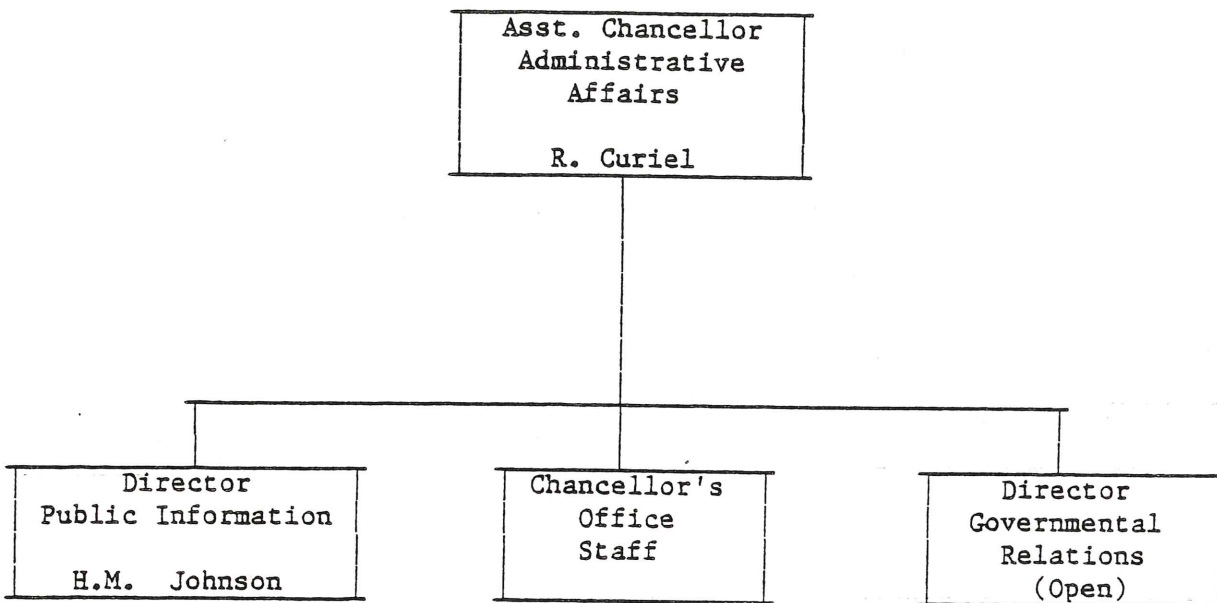
ADMINISTRATIVE ORGANIZATION  
 University of California, Irvine  
 University Advancement



Effective July 1, 1982



ADMINISTRATIVE ORGANIZATION  
University of California, Irvine  
Administrative Affairs



Effective July 1, 1982

1977-81 Workload Statistics

## INSTRUCTIONAL WORKLOAD INDICATORS

1980-81 INSTRUCTIONAL DATA  
UNIVERSITY OF CALIFORNIA, IRVINE

	FAC FTE	TA FTE	\$ EXPEND	UG MAJ	UG DEG	GRD HCT	GRD SCH	UG SCH	UG FTE	STU FTE
BIOLOGICAL SCIENCES	55.97	21.00	\$ 9,220,019	1,745	302	103	1,830	12,471	831.00	934.00
ENGINEERING	25.00	9.50	\$ 3,362,186	814	163	124	962	7,029	469.00	593.00
FINE ARTS	41.00	10.00	\$2,315,996	500	122	82	861	11,513	767.00	849.00
G.S. MANAGEMENT	18.75	1.00	\$ 1,081,300	0	0	255	3,030	416	28.00	283.00
HUMANITIES	96.50	46.00	\$ 6,145,848	609	177	229	2,646	21,176	1,412.00	1,641.00
I.C.S.	14.75	8.00	\$1,204,917	617	111	92	891	6,030	402.00	494.00
PHYSICAL SCIENCES	75.17	33.00	\$11,755,598	552	83	168	2,368	23,243	1,550.00	1,718.00
SOCIAL ECOLOGY	26.00	12.00	\$ 1,638,632	655	232	60	733	7,881	326.00	586.00
SOCIAL SCIENCES	70.50	24.00	\$ 4,852,092	1,164	336	136	1,502	18,928	1,262.00	1,398.00
TEACHER EDUCATION	6.50	0.00	\$ 726,822	35	0	195	1,741	2,483	166.00	361.00
OTHER	28.99	3.00	\$ 648,998	586	0	0	0	1,106	74.00	74.00
TOTAL	467.13	167.50	\$42,950,400	7,477	1,526	1,444	16,754	112,276	7,487.00	8,931.00

SOURCES: OFFICE OF ACADEMIC AFFAIRS BUDGETED FACULTY REPORTS;  
OFFICE OF ACADEMIC AFFAIRS BUDGETED T.A. REPORTS;  
UC CAMPUS FINANCIAL SCHEDULES;  
STUDENT FLOW SYSTEM---HEADCOUNT REPORTS;  
STUDENT FLOW SYSTEM---STUDENT CREDIT HOURS REPORTS;  
REGISTRAR'S DEGREES GRANTED REPORTS.

INFORMATION AND SYSTEMS MANAGEMENT



## INSTRUCTIONAL WORKLOAD INDICATORS

INFORMATION AND SYSTEMS MANAGEME

1979-80 INSTRUCTIONAL DATA  
UNIVERSITY OF CALIFORNIA, IRVINE

	FAC FTE	TA FTE	\$EXPEND	UG HAJ	UG DEG	GRD HCT	GRD SCH	UG SCH	UG FTE	STU FTE
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
BIOLOGICAL SCIENCES	33.97	22.50	\$ 8,103,355	2,086	310	111	1,962	11,989	799.27	910.
FINE ARTS	43.00	0.50	\$ 2,220,227	545	146	79	835	10,641	709.40	780.
HUMANITIES	96.50	46.00	\$ 5,262,082	713	178	227	2,602	20,499	1,366.60	1,393.
PHYSICAL SCIENCES	77.50	33.00	\$ 8,980,995	492	111	157	2,155	22,615	1,507.67	1,664.
SOCIAL SCIENCES	70.50	24.00	\$ 3,906,993	1,235	380	119	1,331	17,300	1,287.20	1,406.
PROF. & INT. STUDIES										
ENGINEERING	25.00	0.00	\$ 2,295,459	907	147	32	633	6,319	454.60	506.
INFO. & COMP. SCI.	11.75	6.50	\$ 713,150	377	91	90	750	5,236	349.07	437.
LEAD. SCH. OF MGMT.	16.50	1.00	\$ 964,622	0	0	228	2,767	133	10.33	230.
SOCIAL ECOLOGY	27.00	12.00	\$ 1,541,030	751	257	61	653	9,042	602.80	663.
TEACHER EDUCATION	6.50	0.00	\$ 652,371	26	0	166	1,493	2,251	150.07	318.
SUBTOTAL	60.75	27.50	\$ 6,166,040	2,261	475	627	6,316	13,503	1,366.67	2,170.
OTHER	20.91	0.00	\$ 624,258	0	0	0	0	1,135	73.67	75.
TOTAL	481.13	181.50	\$35,244,540	7,392	1,620	1,320	13,201	109,696	7,312.38	8,631.

## SOURCE(S) OF DATA:

OFFICE OF ACADEMIC AFFAIRS BUDGETED FACULTY REPORTS  
OFFICE OF ACADEMIC AFFAIRS BUDGETED TA REPORTS  
UC CAMPUS FINANCIAL SCHEDULES  
STUDENT FLOW SYSTEM--HEADCOUNT REPORT  
STUDENT FLOW SYSTEM--STUDENT CREDIT HOUR REPORT  
REGISTRAR'S BUDGETED SPANDED REPORT

## INSTRUCTIONAL WORKLOAD INDICATORS

INFORMATION AND SYSTEMS MANAGED

1978-79 INSTRUCTIONAL DATA  
UNIVERSITY OF CALIFORNIA, IRVINE

	FAC FTE	TA FTE	\$EXPEND	UG MAJ	UG DEG	GRD HCT	GRD SCH	UG SCH	UG FTE	STU FTE
BIOLOGICAL SCIENCES	53.97	22.50	\$ 5,713,672	2,039	324	107	1,862	12,574	630.27	945.
FINE ARTS	43.00	8.50	\$ 1,781,545	560	129	75	800	11,763	784.20	859.
HUMANITIES	76.50	46.00	\$ 4,680,002	847	199	213	2,325	20,559	1,370.60	1,583.
PHYSICAL SCIENCES	77.50	33.00	\$ 7,306,630	542	106	159	2,073	21,014	1,400.93	1,559.
SOCIAL SCIENCES	70.50	24.00	\$ 3,401,219	1,304	307	122	1,046	20,913	1,374.20	1,516.
PROF. & INT. STUDIES										
ENGINEERING	22.00	8.00	\$ 1,763,207	776	98	75	437	4,005	400.33	473.
INFO. & COMP. SCI.	11.75	3.50	\$ 572,879	438	78	66	495	4,595	306.33	372.
GRAD. SCH. OF MGMT.	17.50	1.00	\$ 809,813	0	0	211	2,507	131	0.73	219.
SOCIAL ECOLOGY	27.00	12.00	\$ 1,346,231	807	290	56	492	5,776	576.40	654.
TEACHER EDUCATION	6.50	0.00	\$ 563,680	15	0	158	1,441	1,824	112.27	280.
SUBTOTAL	84.75	27.50	\$ 5,255,810	2,034	466	566	5,372	21,841	1,438.06	2,002.
OTHER	33.91	0.00	\$ 501,641	0	0	0	1	1,107	73.00	73.
TOTAL	118.66	27.50	\$ 5,757,451	2,034	466	566	5,373	22,948	1,511.06	2,075.

## SOURCE(S) OF DATA:

OFFICE OF ACADEMIC AFFAIRS BUDGETED FACULTY REPORTS  
OFFICE OF ACADEMIC AFFAIRS BUDGETED TA REPORTS  
UC CAMPUS FINANCIAL SCHEDULES  
STUDENT FLOW SYSTEM--HEADCOUNT REPORT  
STUDENT FLOW SYSTEM--STUDENT CREDIT HOURS REPORT  
REGISTRAR'S DEGREE GRANTED REPORT

## INSTRUCTIONAL WORKLOAD INDICATORS

INFORMATION AND SYSTEMS MANAGER

1977-78 INSTRUCTIONAL DATA  
UNIVERSITY OF CALIFORNIA, IRVINE

	FAC FTE	TA FTE	\$EXPEND	UG HAJ	UG DEG	GRD HCT	GRD SCH	UG SCH	UG FTE	STU FTE
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
BIOLOGICAL SCIENCES	53.63	23.00	\$ 6,951,872	2,055	348	135	1,707	13,457	897.13	1,032.
FINE ARTS	43.00	7.00	\$ 1,699,542	547	124	60	669	10,657	716.47	770.
HUMANITIES	97.00	46.00	\$ 4,610,200	904	195	212	2,112	21,767	1,451.27	1,663.
PHYSICAL SCIENCES	76.50	33.00	\$ 6,812,480	515	121	163	2,218	19,770	1,319.33	1,482.
SOCIAL SCIENCES	63.50	23.00	\$ 3,123,214	1,202	264	124	1,045	19,371	1,292.73	1,416.
PROF. & INT. STUDIES										
ENGINEERING	19.00	6.00	\$ 1,614,021	612	65	55	401	4,475	298.33	363.
INFO. & COMP. SCI.	12.75	5.50	\$ 623,241	297	68	68	512	3,414	227.60	293.
GRAD. SCH. OF MSMT.	17.50	1.00	\$ 776,159	0	0	197	2,307	362	24.13	221.
SOCIAL ECOLOGY	27.00	12.50	\$ 1,380,690	872	308	45	402	9,230	615.33	660.
TEACHER EDUCATION	6.50	0.00	\$ 567,838	12	0	150	1,625	2,169	144.60	334.
SUBTOTAL	82.75	25.00	\$ 4,961,949	1,813	461	665	5,247	19,650	1,309.99	1,874.
OTHER	38.75	4.50	\$ 544,406	0	0	0	0	1,150	76.67	76.
TOTAL	121.50	29.50	\$ 5,506,355	1,813	461	665	5,247	20,800	1,386.66	1,950.

## SOURCE(S) OF DATA:

OFFICE OF ACADEMIC AFFAIRS BUDGETED FACULTY REPORTS  
OFFICE OF ACADEMIC AFFAIRS BUDGETED TA REPORTS  
UC CAMPUS FINANCIAL SCHEDULES  
STUDENT FLOW SYSTEM--HEADCOUNT REPORT  
STUDENT FLOW SYSTEM--STUDENT CREDIT HOURS REPORT  
REGISTRARS OFFICES GRANTED REPORT



## INSTRUCTIONAL WORKLOAD INDICATORS

INFORMATION AND SYSTEMS MANAGEMENT

1976-77 INSTRUCTIONAL DATA  
UNIVERSITY OF CALIFORNIA, IRVINE

	FAC FTE	TA FTE	\$EXPEND	UG MAJ	UG DEG	GRD HCT	GRD SCH	UG SCH	GR FTE	GR FTE
BIOLOGICAL SCIENCES	54.63	23.13	\$ 5,958,787	2,191	370	137	1,323	13,380	925.33	1,062.
FINE ARTS	43.00	5.00	\$ 1,482,413	558	171	61	673	11,824	788.40	847.
HUMANITIES	104.00	43.12	\$ 4,289,771	982	202	202	1,933	21,717	1,447.30	1,647.
PHYSICAL SCIENCES	77.00	33.00	\$ 6,262,011	533	122	163	2,066	19,881	1,325.40	1,426.
SOCIAL SCIENCES	61.00	18.50	\$ 2,730,964	1,091	277	135	1,163	17,611	1,174.07	1,309.
PROF. & INT. STUDIES										
ENGINEERING	16.50	4.00	\$ 1,208,433	514	71	66	406	3,967	257.80	323.
INFO. & COMP. SCI.	11.75	3.00	\$ 562,998	253	72	56	443	3,170	211.33	267.
GRAD. SCH. OF MGMT.	14.50	1.00	\$ 562,739	0	0	190	2,391	288	19.20	200.
SOCIAL ECOLOGY	24.00	0.00	\$ 1,576,690	965	347	41	418	10,850	703.33	744.
TEACHER EDUCATION	6.50	0.00	\$ 309,143	1	0	134	1,611	2,077	136.47	322.
SUBTOTAL	73.25	18.00	\$ 4,420,033	1,735	490	537	3,269	19,952	1,330.13	1,867.
OTHER	27.25	4.75	\$ 435,723	1	0	0	7	1,823	81.73	81.
TOTAL	100.50	22.75	\$ 4,855,756	1,736	490	537	3,276	21,775	1,411.86	1,948.

## SOURCES OF DATA:

OFFICE OF ACADEMIC AFFAIRS BUDGETED FACULTY REPORTS  
OFFICE OF ACADEMIC AFFAIRS BUDGETED TA REPORTS  
UC CAMPUS FINANCIAL SCHEDULES  
STUDENT FLOW SYSTEM - HEADCOUNT REPORT  
STUDENT FLOW SYSTEM - FINANCIAL CREDIT HOUR REPORT  
REGISTRAR'S DEGREES GRANTED REPORT

## INSTRUCTIONAL WORKLOAD INDICATORS

INFORMATION AND SYSTEMS MANAGE

1975-76 INSTRUCTIONAL DATA  
UNIVERSITY OF CALIFORNIA, IRVINE

	FAC FTE	TA FTE	\$EXPEND	UG HAJ	UG DEB	GRD HCT	GRD SCH	GRD SCH	UG FTE	STU FTE
BIOLOGICAL SCIENCES	54.63	22.00	\$ 5,196,086	2,316	364	125	1,657	14,272	951.47	1,076.
FINE ARTS	43.00	5.00	\$ 1,400,715	613	153	40	571	12,516	834.40	882.
HUMANITIES	57.00	40.00	\$ 3,725,112	950	233	202	2,108	22,077	1,471.73	1,673.
PHYSICAL SCIENCES	77.00	33.00	\$ 5,897,368	544	140	152	2,066	20,728	1,381.87	1,533.
SOCIAL SCIENCES	60.70	18.50	\$ 2,457,174	1,090	276	138	1,120	17,475	1,163.30	1,303.
COGT. & INT. STUDIES										
ENGINEERING	17.00	4.00	\$ 1,270,509	381	55	65	411	2,793	186.33	211.
INFO. & CORP. SCI.	11.75	5.00	\$ 507,761	224	59	43	440	3,150	210.00	253.
GRAD. SCH. OF NGHT.	14.50	1.00	\$ 592,200	0	0	181	2,465	597	77.50	220.
SOCIAL ECOLOGY	23.00	2.50	\$ 1,130,174	747	252	43	559	11,992	799.47	840.
TEACHER EDUCATION	6.50	0.00	\$ 557,099	8	0	102	1,441	1,854	123.60	318.
SUBTOTAL	72.75	12.50	\$ 4,085,743	1,560	366	524	5,316	20,308	1,359.20	1,603.
OTHER	20.25	0.00	\$ 363,825	8	0	0	0	1,248	83.20	83.
TOTAL	93.00	12.50	\$ 4,449,568	1,568	366	524	5,316	21,556	1,442.40	1,686.

## SOURCE(S) OF DATA:

OFFICE OF ACADEMIC AFFAIRS BUDGETED FACULTY REPORTS  
OFFICE OF ACADEMIC AFFAIRS BUDGETED TA REPORTS  
UC CAMPUS FINANCIAL SCHEDULES  
STUDENT FLOW SYSTEM--HEADCOUNT REPORT  
STUDENT FLOW SYSTEM--STUDENT CREDIT HOURS REPORT  
REGISTRAR'S BUDGETED WORKLOAD REPORT

Distribution of Faculty FTE  
JULY 1982

ACADEMIC UNIT	TOTAL FTE
<u>Biological Sciences</u>	<u>57.00</u>
Deans's Office	1.00
Developmental & Cell Biology	20.50
Ecology & Evolutionary Biology	11.00
Molecular Biology & Biochemistr	13.00
Psychobiology	11.50
<u>Engineering</u>	<u>28.00</u>
<u>Fine Arts</u>	<u>41.00</u>
<u>Graduate School of Management</u>	<u>19.25</u>
<u>Humanities</u>	<u>97.50</u>
Dean's Office	3.50
Classics	5.50
English	24.00
French & Italian	11.00
German	8.00
History	18.50
Philosophy	12.00
Russian Program	3.00
Spanish & Portuguese	12.00
<u>Information &amp; Computer Sciences</u>	<u>17.75</u>
<u>Physical Sciences</u>	<u>75.17</u>
Dean's Office	1.00
Chemistry	21.50
Mathematics	28.00
Physics	24.67
<u>Social Ecology</u>	<u>26.00</u>
<u>Social Sciences</u>	<u>71.50</u>
<u>Teacher Education</u>	<u>6.50</u>
<u>Physical Education</u>	<u>8.00</u>

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In addition to 6.5 faculty FTE, there are seven positions funded from support funds



ACADEMIC UNITS	TOTAL FTE
<u>Student Recommended Faculty</u>	<u>4.00</u>
<u>Office of Academic Affairs</u>	<u>1.00</u>
<u>Unallocated</u>	<u>16.46</u>
Received July 1982 <sup>2</sup>	<u>22.00</u>
TOTAL	491.13

<sup>2</sup>

To be allocated during 1982-83

## DEGREES

## Degree List

Administration.....	Ph.D.
Anthropology.....	B.A.
Applied Ecology.....	B.A.
Biological Sciences.....	B.S., M.A.T., M.S., Ph.D.
Business Administration.....	M.B.A., M.B.P.A.
Chemistry.....	B.S., M.S., Ph.D.
Classical Civilization.....	B.A.
Classics.....	B.A., M.A., Ph.D.
Comparative Culture.....	B.A., M.A., M.A.T., Ph.D.
Comparative Literature.....	B.A., M.A., Ph.D.
Dance.....	B.A., M.F.A.*
Drama.....	B.A., M.F.A.*
Economics.....	B.A.
Education.....	Credential Programs Only
Engineering.....	B.S., M.S., Ph.D.
English.....	B.A., M.A., M.F.A., Ph.D.
Fine Arts.....	B.A., M.F.A.
French.....	B.A., M.A., Ph.D.
Geography.....	B.A.
German.....	B.A., M.A., Ph.D.
History.....	B.A., M.A., Ph.D.
History of Art.....	B.A.
Humanities.....	B.A.
Information and Computer Science.....	B.S., M.S., Ph.D.
Linguistics.....	B.A.
Mathematics.....	B.S., M.S., Ph.D.
Medicine.....	M.D.
Music.....	B.A., B.Mus., M.F.A.*
Pharmacology and Toxicology.....	M.S., Ph.D.
Philosophy.....	B.A., M.A., Ph.D.
Physics.....	B.S., M.S., Ph.D.
Political Science.....	B.A., Ph.D.
Psychology.....	B.A., Ph.D.
Public Administration.....	M.P.A., M.B.P.A.
Radiological Sciences.....	M.S., Ph.D.
Russian.....	B.A.
Social Ecology.....	B.A., M.A., Ph.D.
Social Science.....	B.A., M.A., Ph.D.
Sociology.....	B.A.
Spanish.....	B.A., M.A., M.A.T., Ph.D.
Studio Art.....	B.A., M.F.A.*

\*Graduate study in Dance, Drama, Music, or Studio Art leads to the degree Master of Fine Arts in Fine Arts.

ORGANIZED RESEARCH UNITS  
AND  
MULTI-CAMPUS RESEARCH UNIT

Cancer Research Institute is an Organized Research Unit established by The Regents of the University in early 1980 to provide leadership and support for researchers working toward understanding and controlling cancer. The Institute serves as a means of focusing, coordinating, and directing efforts of scholars in basic and clinical sciences from several departments of the School of Biological Sciences and the College of Medicine. The ORU provides a central source of information concerning cancer-related research, as well as a forum in which basic researchers and clinicians can assess advances that may be of immediate value in the diagnosis and treatment of cancer, and in the detection of chemicals or conditions that cause cancer. Ongoing and projected research activities involve the regulation of cell function; tumor cell surfaces and control of proliferation and metastasis; viral carcinogenesis; environmental carcinogenesis; and clinically related studies.

Developmental Biology Center is an Organized Research Unit that provides a focus within the School of Biological Sciences for research in several related areas of developmental biology and genetics. The major goal of the Center is to understand the mechanisms responsible for the control of growth and the generation of spatial patterns of differentiation during development. Experimental techniques from the fields of cell biology, embryology, genetics, neurobiology, and endocrinology are applied to insects, hydra, fish, and amphibians. The work carried out in the Center has potential implications in such areas as the control of growth and regeneration of lost body parts and the cause and prevention of cancer, nervous system anomalies, and birth defects in man. Research in the Center also involves the analysis of insect developmental hormones which may lead to the discovery of new methods to control agricultural pests and disease vectors.



Public Policy Research Organization is an Organized Research Unit established to foster empirically grounded research into problems of public policy. In pursuing its broad policy study missions, PPRO has focused its effort since 1973 on information technology and public policy, and more recently has developed research programs concerned with public management and human cost accounting.

As a campuswide research unit, PPRO draws its research expertise from the full faculty and student resources of the Irvine campus. Of the 60 faculty and students currently doing research in PPRO, the majority are from the School of Social Sciences, the Department of Information and Computer Science, the Program in Social Ecology, the Graduate School of Management, and the College of Medicine. Among PPRO researchers are experts in law, public administration, economics, public finance, political science, sociology, psychology, planning, and public health.

Institute of Transportation Studies (ITS) was previously an Organized Research Unit but has recently been designated a Multi-campus Research Unit (MRU). It was established to foster research, education, and training in the field of transportation. The Institute's main branch was established in 1947 on located on the Berkeley campus. The Irvine campus branch was established in 1974.

Emphasis at Irvine has been on the development of a strong interdisciplinary research capability. Completed and ongoing research projects have involved faculty and students from the Graduate School of Management, the School of Social Sciences, the School of Engineering, the Program in Social Ecology, the College of Medicine, and the Department of Information and Computer Science. Research at Irvine focused upon transportation systems planning and evaluation, fiscal and administrative management of public transit systems, labor relations in the transit industry, and energy and environmental issues.

## FOCUSED RESEARCH PROGRAMS

Introduction. The purpose of a Focused Research Program (FRP) is to develop and sustain significant research programs on the Irvine campus that could not be carried out through individual effort or within the resources of a single academic unit. An approved FRP provides formal recognition and, in most cases, seed money for a limited period of time. Participating faculty may or may not be from the same department or school. Although all members of the research group need not be involved in the same project, their work must be focused and integrated.

Unlike an ORU, an FRP may be established within a few months. An FRP has a finite lifetime and formal campus recognition, whereas an ORU has formal University recognition. The funds available for an FRP are less than those normally available for an ORU.

FRP in Alternative Source of Hydrocarbons. Faculty involved are from the Department of Chemistry (School of Physical Sciences) and the Departments of Molecular Biology and Biochemistry, Ecology and Evolutionary Biology (School of Biological Sciences). The objective of this research program is the development of new sources of alternative and renewable petrochemicals from plant biomass. The program is being conducted in collaboration with Mexican scientists from the Universidad Nacional Autonoma de Mexico and the Centro de Investigacion de Quimica Aplicada.

FRP in Authority Studies. Faculty represent a variety of programs in the School of Social Sciences, the Department of History (School of Humanities), and the Graduate School of Management. Participating faculty intend to study authority relations and patterns of such

relations, their subsegments, and subcultures with the overall expectation that coherent research and theory of authority relations will emerge. Initial efforts are directed at developing a useful set of data archives and field study of adaptation to authority relations.

FRP in Brain Function. Faculty represent the Department of Physics (School of Physical Sciences) and the Department of Psychobiology (School of Biological Sciences). The objective of this program is to develop an understanding of the role of small groups of neurons in brain function. The program involves the close interaction of theoretical physicists and experimental neurobiologists who will bring some of the recent advances in studying cooperative phenomena in physical systems to bear on this program.

FRP in Diabetes Mellitus. Faculty participants include basic and clinical researchers representing the Departments of Pathology, Medicine, Pediatrics, Ophthalmology, and Neurology (College of Medicine) and the Program in Social Ecology. The program is designed to establish an interdisciplinary research program directed at developing techniques to improve blood glucose control in diabetics and determine the psychological and biomedical results of their control. A registry of diabetic patients in Orange County will be created as part of the program to serve as an on-going data resource for the study of diabetes from an epidemiological perspective.

FRP on Goethe. Faculty from the UCI Departments of German, French and Italian, the Program in Comparative Literature, and the School of Fine Arts--along with other scholars from UCLA's Department of German and UCSC's Department of Literature. Objective is to mount a symposium on Goethe on the 150th anniversary of his death (1982) with a concentration on his narrative fiction. The FRP is, in addition, expected to give rise to scholarly research papers on Goethe and to facilitate scholarly collaboration and exchange among younger and leading scholars concerned with Goethe.





FRP in Vulnerable Populations. Faculty from the Program in Social Ecology, the School of Social Sciences, the School of Engineering, the College of Medicine and the Graduate School of Medicine are working to advance knowledge about "vulnerable groups" in the population. Interviews are to be conducted with a random sample of Orange County residents, focusing on substantive issues such as population growth, housing, environmental quality, transportation, employment, and human services. A collaborative effort of data collection and survey analysis will provide systematic studies of the extent to which attitudes, life circumstances, and responses to chance vary among distinguishable populations.

FRP in Critical Theory. Participants in this interdisciplinary program include faculty from the Departments of English and Comparative Literature, French and Italian, History, Philosophy, and Spanish and Portuguese in the School of Humanities as well as faculty from the Schools of Fine Arts and Social Sciences. This cooperative program is designed to provide a forum for debate among the competing theoretical movements in contemporary critical theory. In each of the first two years, two distinguished visiting scholars will present a two-week series of lectures and seminars for faculty and graduate students. As a culmination of the FRP, a major symposium will be held in the third year on issues being debated in current theory.

