UNIVERSITY OF CALIFORNIA, IRVINE



INSTITUTIONAL PROPOSAL FOR REAFFIRMATION OF ACCREDITATION

SUBMITTED TO THE WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES

November 1, 2009

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A. Setting the Institution's Context and Relating the Proposal to the Standards

A1. Institutional Context Statement

UC Irvine (UCI) shares the mission of the entire University of California system under the Master Plan for Higher Education - "to serve society as a center of higher learning, providing long-term societal benefits through transmitting advanced knowledge, discovering new knowledge, and functioning as an active working repository of organized knowledge." A detailed account of our institutional context related to the Institutional Proposal and WASC Standards is available in our "Accountability Profile." That Profile expands on the following overview, describes the financial capacity of UCI, and provides more information about our faculty and students. An even more comprehensive and detailed account of the university and our long-term planning through 2015 is available in our strategic plan, *Focus on Excellence: A Strategy for Academic Development at the University of California, Irvine, 2005-2015.* Other information pertinent to our WASC reaffirmation of accreditation review can be found on our WASC Website at http://www.assessment.uci.edu.

Overview of the Campus

UCI admitted its first class in 1965. Since then, we have secured a place among the best public research universities in the United States and have been a member of the Association of American Universities since 1995. In 2008-09, the campus contained 1,400 faculty and 27,500 students.⁴ Over the next decade, the pace of scholarly and scientific discovery on the campus will continue to accelerate, and we anticipate growing to 32,000 students with concurrent growth in faculty and staff. Most of that growth is projected to occur in our graduate and professional programs, which will eventually constitute about 25% of our total enrollment; we also anticipate a modest increase in the percentage of students from outside of California at the graduate and undergraduate levels.

Finances

In 2007-08 UCI had operating expenditures of over \$1.6 billion and capital expenditures of another \$280 million. Instruction accounted for about 28% of operating expenditures; Teaching Hospitals 29%; and Research 14%. Current fund operating revenues in 2007-08 totaled about \$1.67 billion. Of this amount, sales and services of medical centers totaled approximately \$518 million (31%); state appropriations totaled \$271 million (16%); federal government funds totaled \$218 million (13%). Tuition and fees totaled approximately \$213 million (13%), with the balance coming from state contracts, local government, private sources, sales and services of educational activities and auxiliary enterprises, and other sources. Our annual audits demonstrate the campus's consistent financial stability. (CFR 3.1, 3.4, 3.5)

Faculty and Research

By Fall 2008 UCI had 1,123 tenured/tenure-track faculty who among other forms of recognition and honors, have received three Nobel Prizes, three National Medals of Science, and two Pulitzer Prizes and include three MacArthur Fellows, twenty-four members of the National Academy of Sciences and thirty-seven Fellows of the American Academy of Arts and Sciences. Our academic strengths are distributed across the whole campus. Program quality is difficult to quantify or rank reliably, but according to the popular *U.S. News and World Report America's Best Graduate Schools 2010*, UCI is rated #1 in English: Literary Criticism and Theory; #5 in Criminology; #10 in

(http://www.universityofcalifornia.edu/aboutuc/missionstatement.html).

¹The University of California Academic Plan, 1974-1978

² http://www.evc.uci.edu/planning/UCI Accountability Profile 4-24-091.pdf

³ http://www.strategicplan.uci.edu/.

⁴ 2008-09, three-term average, unduplicated headcount (http://www.oir.uci.edu/enr/IIA01-total-enr-by-level-2008-09.pdf).

⁵ For detailed information on the budget see the University of California <u>Annual Financial Report</u> at http://www.universityofcalifornia.edu/finreports/index.php?file=07-08/welcome.html .

Organic Chemistry; #12 in Behavioral Neuroscience and #16 in Cognitive Psychology; and #22 in the general fields of English and Chemistry. Another twelve programs are ranked in the top fifty. In areas where research productivity can be quantified, data from NSF for 1998-2006 shows expenditures for extramurally-funded research at UCI increased dramatically by over 130%--the fastest rate of growth among UCI's benchmark peers (which include five of the other nine UC campuses: Berkeley, Davis, Los Angeles, San Diego, and Santa Barbara). Since 2006, expenditures have continued to rise, reaching a campus record of \$328 million in 2007-08. As of March 2009, expenditures for 2008-09 are on line to exceed last year's record by more than 10%.

In addition to fostering excellence in research, UCI also encourages and supports the diversification of our faculty through the UCI ADVANCE Program, which has become a national model. Originally funded by a NSF Institutional Transformation Award of \$3.5 million in 2001 and now institutionalized as part of our campuswide hiring and recruitment procedures, ADVANCE has improved gender equity and diversity in the professoriate. We have seen especially dramatic gains in the presence of women in science, technology, engineering, and mathematics, where the percentage of women among new hires went from 14% in 2001-02 to 41.7% in 2007-08.

Enrollment and Educational Programs

UCI enrolled 5,509 graduate students in 2008-09, including 3,722 in general campus academic programs, 1,115 in the health sciences (i.e., medicine), and 672 in self-supporting programs. Of graduate students on the general campus, 942 students were enrolled in Master's programs and over 2,600 were enrolled in our doctoral programs. In Fall 2008, UCI awarded 366 doctoral degrees, 934 Masters, and 92 MDs. UCI offers 51 Master's-level programs and 44 PhD programs in addition to professional doctoral programs in Medicine (MD) and Law (JD). UCI has been expanding its portfolio of graduate degree programs rapidly in the recent past, consistent with our strategic plan to increase the percentage of graduate and professional students on our campus. At the graduate level, nearly 20 new degrees have been established since 2000, including academic and professional programs in Public Health (MPH), Nursing Science (MS), and Master's of Public Policy (MPP), and Law (JD).

The undergraduate population was 22,122 in 2008-09. Our students are among the best of California's high school graduates; measures of their academic quality are high and getting even higher. From Fall 1996-2009, the Mean SAT-I (Verbal + Math) score of our students rose from 1122 to 1191, reflecting roughly similar increases in both the Math and Verbal categories; in Fall 2009, the average GPA for admitted freshmen exceeded 4.0. These increases in quality reflect the dramatic rise in the number of students applying to UCI over that same period. Over 44,000 applications were received for just over 4,000 spaces for Fall 2009, making UCI the 4th most selective campus in the UC system. UCI offers students 81 different majors and 59 minors. For each of the past two years, UCI has awarded just over 5,500 Bachelor's degrees--in the Social Sciences (51%), Biological Sciences (15%), Engineering/Information and Computer Sciences (13%), Humanities (12%), Physical Sciences (5%), and Arts (4%). The second state of the past two years, and the second state of the past two years, UCI has awarded just over 5,500 Bachelor's degrees--in the Social Sciences (51%), Biological Sciences (15%), Engineering/Information and Computer Sciences (13%), Humanities (12%), Physical Sciences (5%), and Arts (4%).

Diversity and Access

We believe diversity is essential to the academic quality of a university and a crucial part of the foundation for successful teaching and research in all fields.¹¹ UCI's academically strong student body is one of the most diverse in the United States. We have slightly more women than men, with the broad range of Asian/Pacific-Islander

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⁶ See UCI Advance Program <u>Data and Reports</u> at http://advance.uci.edu/.

⁷ Office of Institutional Research, http://www.oir.uci.edu/enr/IIA01-total-enr-by-level-2008-09.pdf; http://www.oir.uci.edu/deg/IVA01-degee-type-by-school-2000-2007SS.pdf

⁸ http://www.oir.uci.edu/enr/IIA01-total-enr-by-level-2008-09.pdf.

http://www.oir.uci.edu/adm/IA24-fall-fr-mean-sat-by-school-2000-2008.pdf

¹⁰ See "UC Irvine College Portrait" at http://web.oir.uci.edu/portrait/2008-uc-irvine-profile.pdf.

^{11 &}quot;Our Mission as a Public Research University" in *Focus on Excellence*, p. 32.

ethnicities constituting about half the population, Whites another quarter, and the remaining quarter includes Hispanic, African-American, and American Indians. *U.S. News and World Report* 2009 ranks UCI 26th among National Universities for racial diversity of the undergraduate student body. *Diverse Issues in Higher Education Magazine* ranks us 2nd in the U.S. for total number of baccalaureate degrees awarded to Asian American students; 4th for degrees to all minority students combined; and 31st for degrees to Hispanic students (all based on 2007-08 data). *Hispanic Outlook in Higher Education Magazine* ranks UCI 41st among its "Top 100" colleges awarding baccalaureate degrees to Hispanics and 13th among its "Top 100" colleges awarding doctoral degrees to Hispanics (2008 data). (See the UCOP "Accountability Framework" for a more detailed account of the student population. (2008 data). (See the UCOP "Accountability Framework" for a more detailed account of the student population. (2008 data) on the student population of diversity on students' educational experience. In our most recent University of California Undergraduate Experience Survey, 95% of the students reported a "good" or better rating for their "ability to appreciate, tolerate or understand racial and ethnic diversity," and 62% reported that they had "gained a deeper understanding of other perspectives through conversations with students of a different race or ethnicity." (2008 data) of the students of the deeper understanding of other perspectives through conversations with students of a different race or ethnicity."

Retention and Graduation

Almost all students who enroll as freshmen at UCI remain at the university and graduate. Retention between the freshman and sophomore year is 94% and students who enter as freshmen graduate in an average of thirteen quarters, or just over four years. Over 80% graduate in six-years. Our four year graduation rate places us 9th among the 34 public universities in the AAU and 12th with the 6-year rate. 88% of students who transfer to UCI from another college or university graduate; their average time to degree is 7.4 quarters, or about two and a half years. ¹⁴ The education they receive prepares them for success after college. Upon graduation, our students have received some of the nation's most prestigious scholarships and fellowships: 26 Fulbright Scholarships, 25 Goldwater scholarships, 6 Truman awards, 6 Mellon Scholarships, and 40 National Security Education Program awards. In addition, in 2006-08, ten students won National Science Foundation graduate fellowships.

Challenges

The most pressing challenge at present is how to maintain the quality of our educational programs in the face of severe reductions in our state funding. While our financial situation has changed drastically, we have protected our research and educational programs and worked hard to maintain diversity and access. The budget challenges have increased the need for assessment and oversight of our programs, so it is appropriate that two of our three themes for review focus on enhancing measures of success in our programs, especially regarding student learning (Theme 1) and academic program review (Theme 3). Theme 2, General Education, is also pertinent to the budget challenges because it directly addresses the effectiveness and efficiency of our effort to ensure a broad liberal education for students in the context of a comprehensive doctoral research university, with its many competing demands on the time, energy, and resources of our faculty and staff.

Response to Concerns Raised in the Last WASC Review

Upon the completion of our last WASC reaffirmation of accreditation review, the Commission directed the campus to respond to three issues as described below. Subsequent to the WASC review, the campuswide long-term planning initiative exercise identified several related objectives, including the need to expand participation in

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¹² http://www.universityofcalifornia.edu/accountability/.

¹³ University of California Undergraduate Experience Survey (UCUES) survey at http://www.assessment.uci.edu/academicunit.html. See also the summary of University of California Undergraduate Experience Survey in our "College Portrait" at http://web.oir.uci.edu/portrait/2008-uc-irvine-profile.pdf. Detailed data on student diversity is available at the Website of the Office of Institutional Research, "Enrollment by Ethnicity," http://www.oir.uci.edu/enr/IIA07-enr-by-ethnicity.pdf.

^{14 &}quot;College Portrait" at http://web.oir.uci.edu/portrait/2008-uc-irvine-profile.pdf.

undergraduate research, establish a writing center, and develop more systematic procedures for assessment of Student Learning Outcomes of undergraduate programs. Our response to the WASC directive was therefore incorporated into our long-term strategic planning, with the following results:

1. UCI Writing Programs: with enrollment growth, the campus needs "to ensure that there are sufficient numbers of well-trained instructors assigned and supported to sustain the quality and breadth of these exemplary writing programs."

Response: The School of Humanities and Department of English devoted two line-faculty FTE to writing instruction: a Campuswide Writing Coordinator, and a Director of Composition. Additional non-line instructional faculty were hired to help meet demand by offering sections of composition in WR39ABC and Humanities Core, though this remains an area of concern. More upper-division writing courses are being offered by academic units across the campus. The quality of these courses at all levels is monitored closely within the units and centrally as part of our new General Education requirement, which constitutes one of our themes for this WASC review, "Theme 2: General Education."

2. Undergraduate Research Programs: "the team found a need to provide more useful definitions of specific types of student research that the University wishes to promote, and for more effective incentives to foster and sustain faculty participation as research mentors."

Response: The Undergraduate Research Opportunities Program (UROP) has expanded considerably because of increased funding to support student work and grants that sponsor summer residential programs (such as the National Science Foundation Research Experiences for Undergraduates [REU]. See Appendix 10. The number of students engaged in funded research has grown substantially. In 2004 398 students presented their work in the annual symposium; in spring 2009 over 600 students participated. The number of faculty mentors increased from 268 to almost 400. The University of California Undergraduate Experience Survey data revealed that UCI students are more likely to participate in undergraduate research than any other UC campus.

3. Assessment of Undergraduate Education: WASC noted that "the University does not yet have a comprehensive approach for determining the overall educational effectiveness of its academic programs. . . . the University may find it useful to examine other research institutions, including those within the UC system, with strong emphases on educational effectiveness and the improvement of student learning. The use of UCI's own strong assessment programs [in Engineering, Physics, and Humanities Core] might be celebrated as exemplars." Part of managing growth should include assessing "the effectiveness of academic and co-curricular programs to ensure that they continue to meet student needs."

Response: Since the last review, we have taken several steps to develop a more comprehensive approach for determining the overall educational effectiveness of our academic programs and to foster a culture of assessment on campus. In 2003, we consulted with Dr. Rick Kroc, Associate Vice Provost, Office of Institutional Research and Planning Support, University of Arizona, who advised us on administrative support for assessment and consolidation of student data resources. The Office of Research and Evaluation in the Division of Undergraduate Education studied assessment practices at other UC campuses and engaged in professional development opportunities provided by WASC and other national organizations.

Under the leadership of Michael Clark, Vice Provost for Academic Planning, and Sharon Salinger, Dean of the Division of Undergraduate Education, additional resources have been provided to support assessment across our campus, including a new full-time assessment coordinator and funds for departmental assessment grants. (\$132,000 has been awarded as of summer 2009). In 2008, the Office of Research and Evaluation changed its name to Assessment and Research Studies in recognition of its new role to support assessment activities on campus. Their office Website provides information on grants and workshops and other assessment resources http://www.assessment.uci.edu.

Each of the three themes selected for the WASC review process are directly related to student learning assessment and use of the results for program improvement. In 2008-09, we launched Student Learning in the Major as the first campuswide assessment effort, focusing on the development of Student Learning Outcomes for undergraduate majors. Next steps for assessment of the major are outlined in Theme 1. Other steps have included a new requirement that new majors and minors on campus include Student Learning Outcomes and assessment plans as part of the Academic Senate approval process, identification of learning outcomes for the new General Education requirements (see Theme 2), and incorporation of survey results on self-reported student learning gains as part of the Academic Program Review process (see Theme 3).

Approach to Identifying and Assessing Student Learning Outcomes Across Campus

Our approach to assessment follows the one developed by Linda Suskie (2004). Assessment is an ongoing and systematic process which includes four steps: 1) identifying Student Learning Outcomes, 2) assuring students have opportunities to accomplish those outcomes, 3) collecting and analyzing evidence regarding how well students achieve those outcomes, and 4) using the results to understand and improve both instruction and student learning.

UCI's operating principle is that assessment should be locally defined, discipline-specific and faculty-driven. To assure that students are motivated to do their best on assessment activities, assessment should be course-embedded, that is, using work that students already produce as a normal part of their courses. We also encourage use of multiple measures of student learning, including both direct and indirect evidence, collected over time and using samples of student of student work. In addition, assessment results are used to improve teaching and learning in courses and programs, not to evaluate individual faculty or to compare academic programs.

A2. Preliminary Self-Review Under the Standards of Accreditation

In order to identify important themes and issues for the WASC review process, we undertook a self-study based on a systematic review of the four Standards and Criteria for Review (CFR), and we completed the Worksheet for Preliminary Self-Review Under the Standards (see Appendix 4). A comprehensive list of activities associated with the self-review can be found in the Work Plan and Milestones attached as Appendix 5. The initial review of the CFR was conducted by a team from UCI's Leadership Academy, a staff development program for high-level staff members with potential for administrative leadership. They collected and analyzed relevant campus documents and Web sites for every CFR and identified strengths and weaknesses related to those CFR. Next we asked major campus constituencies to review and comment on the CFR: the Irvine Division of the UC Academic Senate, Staff Assembly, Associated Students (undergraduates), Associated Graduate Students, University Libraries, Student Affairs, and the UCI Alumni Association. Comments from all groups were collated and analyzed by a subgroup of the WASC Steering Committee, which rated each CFR in terms of importance to address at this time (See Appendix 5 for a detailed timeline of activities related to this self-study and the development of the Institutional Proposal. See Appendix 6 for membership of the WASC Steering Committee.). The analysis was then reviewed and confirmed by the WASC Steering Committee and circulated among those groups for final review and comment as part of the penultimate draft of the Institutional Proposal.

What emerged suggests that UCI is strongest in addressing Standards 1 and 3. Under Standard 1, UCI has a clear sense of its essential values and character, its place in the higher education community, and its relationship to society at large. (Our values are embodied in the UCI Values Statement, which is published on the Chancellor's Web site and reinforced annually by the Chancellor's Living Our Values Awards. Furthermore, the *Focus on Excellence: A strategy for Academic Development at the University of California, Irvine, 2005-2015* provides a clear sense of purpose outlining campus goals for managing enrollment growth, supporting research, and improving undergraduate and graduate education.

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¹⁵ http://www.chancellor.uci.edu/values/award_program.php.

Only two exceptions to our strengths were revealed under Standard 1: the lack of a mission statement specific to UCI separate from the one established for all UC Campuses (CFR 1.1). The Academic Senate has agreed to take the lead in developing an appropriate mission statement for the campus to be published in the UCI Catalogue and we are working toward having educational objectives at all levels, including institutional objectives at the program and course levels.

In terms of Standard 3, the WASC Steering Committee determined that each CFR is an area of strength for the campus and does not need to be addressed at this time. The campus supports the educational and research missions of the campus through its investments in human, physical, fiscal and information resources and through effective organizational and decision-making structures. Decision-making is shared with faculty, deans, and administrative leaders through systematic and comprehensive consultation through several advisory groups including the Chancellor's Advisory Cabinet, the Academic Council of Deans, the Enrollment Council, the Budget Work Group, the Provost's Management Group, the Academic Planning Group and the Undergraduate Dean's Advisory Council. An additional set of Councils and Committees with authority over academic programs and personnel reviews are located within the Faculty Academic Senate. Information, data, and analysis is routinely provided by the Office of Institutional Research to inform decisions by the central administration and deliberations by the groups noted above and other groups and academic units as needed. The result is an evidence-based decision process that supports a high-quality learning environment for administrators, faculty and staff.

Our review under Standard 4 resulted in a mixed picture. UCI has demonstrated strengths under CFR 4.1, 4.2, 4.3, 4.5 and 4.8, but needs improvement under CFR 4.4, 4.6 and 4.7. UCI engages multiple constituencies, including faculty, in its planning processes and monitors the effectiveness of those plans and modifies them as needed. It aligns its academic, personnel, fiscal, physical and technology needs with its strategic priorities. The Office of Institutional Research provides data and information used in the academic program review process, including retention and graduation rates analyzed by gender and academic unit. In addition, external stakeholders are regularly involved in the assessment of educational programs as required for professional accreditation, such as engineering, nursing, business and medicine. We need to improve on CFR related to the assessment of student learning, including using evidence of educational effectiveness as part of the program review process; incorporating educational objectives into the assessment of campus climate; and using inquiry-based assessment results for the improvement of teaching and curricula. The Campus Climate Work Group is addressing the CFR on the assessment of campus climate, while the other two topics will be addressed by our three themes.

The Steering Committee identified Standard 2 as the area that needed the most improvement. As also noted in the campus strategic plan, *Focus on Excellence*, the campus needs to develop more systematic procedures for assessment of Student Learning Outcomes of undergraduate programs. Furthermore, it needs to reinforce processes for institutional learning and quality assurance by integrating the results of those assessments more fully into its processes for academic and administrative review. All three themes selected for the WASC reaffirmation of accreditation review are related to CFR under Standard 2 and are discussed below.

A3. Process for Proposal Development and Leadership Involvement

Development of the Institutional Proposal began with the formation by the Chancellor and Executive Vice Chancellor/Provost of the WASC Steering Committee in 2006. The group consists of faculty, staff, student, and administrative leaders and is charged with overseeing the whole WASC reaffirmation of accreditation process. See Appendix 5 for a detailed timeline of activities related to the WASC reaffirmation of accreditation review, and Appendix 6 for the membership of the Steering Committee, which continues to expand as themes and foci have been defined.

The WASC Steering Committee helped generate broad institutional support for the effort and has guaranteed continued input from all of the groups represented on the committee. First we considered optional formats for the

Institutional Proposal and agreed on a "Special Themes" approach. That decision was reviewed and approved by the Chancellor, Provost, and by Senate leadership. As we refined topics for the themes, specific councils of the Academic Senate were involved extensively to help develop Theme 2: General Education (the Senate Council on Educational Policy) and Theme 3: Academic Program Review (the Senate Executive Council and the Academic Program Review Group). Departmental Chairs from across the campus were involved in developing and implementing outcomes and assessment processes for Theme 1, Student Learning in the Major. Sections of the proposal were then assigned to those groups and others on campus for development. Composition of the proposal was overseen by the Vice Provost for Academic Planning and the Dean of Undergraduate Education (co-WASC ALOs). Work by those groups was reviewed periodically by the WASC Steering Committee to ensure consistency with the format and wording of the WASC Standards and CFR. In addition, following the identification in the self-study of a need for a formal mission statement for the university, the Academic Senate agreed to oversee development of that statement for review and adoption by the campus.

The text of the Institutional Proposal was written by a subgroup of the WASC Steering Committee. Drafts of separate sections were integrated into a comprehensive draft, which was circulated for review and comment by pertinent specific groups and revised per their suggestions. A complete draft of the Institutional Proposal was sent back out for review and comment to all segments of the campus in summer 2009. A draft of the complete proposal was also submitted at that time to WASC Assistant Director Diane Harvey for advice and comment. Results of that consultation with all groups were then incorporated into a final revision before the Institutional Proposal was formally submitted to WASC in the fall of 2009.

The commitment of campus leadership to the process of reaffirmation of accreditation is dramatically evident in the amount of effort devoted to the development of the Institutional Proposal by the Vice Provost for Academic Planning and the Dean of Undergraduate Education and the leadership of the Academic Senate, as described above. The highest level of our advisory councils repeatedly devoted significant time on their agendas to reports of progress, and our CEO/CAO, the Executive Vice Chancellor/Provost, has continued financial support for the reaffirmation of accreditation review despite the current budget crisis, which has resulted in significant cutbacks and layoffs in most other activities on the campus. Most recently, both the Chancellor and the Executive Vice Chancellor/Provost have reviewed and approved the Institutional Proposal and the course of action it describes for the Capacity and Preparatory Review and Educational Effectiveness Review over the next three years.

B. Framing the Review Process to Align the Capacity and Educational Effectiveness Reviews

Overview and Goals for the Accreditation Process

Our vision for the WASC review process is to embed the review process into our three institutional themes. Both Capacity and Preparatory Review and Educational Effectiveness Review will take place within each theme, as described below. Our themes are

Theme 1: Student Learning in the Major

Theme 2: General Education

Theme 3: Academic Program Review

Our institutional goals for the entire WASC review process are aligned with those recommended by WASC:16

- 1. Greater clarity about the institution's educational objectives and criteria for defining and evaluating those objectives (Themes 1 and 2);
- 2. Improvement of the institution's capacity for self review and of its systems of quality assurance (Themes 2 and 3):

¹⁶ WASC Handbook of Accreditation, 2008, "Outcomes of the Review Process."

- 3. A deeper understanding of student learning, the development of more varied and effective methods of assessing learning, and the use of the results of this process to improve programs and institutional practices (Themes 1, 2 and 3); and
- 4. Systematic engagement of the faculty with issues of assessing and improving teaching and learning processes within the institution, and with aligning support systems for faculty more effectively toward this end (Themes 1, 2 and 3).

Theme 1: Student Learning in the Major

In 2008-09, the campus adopted the theme of "Student Learning in the Major" as the first step in a more comprehensive approach to assessment of Student Learning Outcomes. The choice emerged from UCI faculty and staff attendance at the 2007 WASC Regional Workshop and Retreat on Student Learning. A total of nine faculty and staff attended. The faculty were especially engaged by the examples provided which focused on assessing student learning in the majors. By the end of the workshop, several of them identified assessment activities they would like to carry out in their own majors.

The success of the WASC workshop stimulated us to develop a campuswide workshop on Student Learning in the Major to introduce faculty to the process of identifying and assessing important Student Learning Outcomes and using the results for improvement of instruction and student learning. The workshop, held in February 2008, attended by 28 faculty and staff, also announced the availability of departmental assessment grants to jump-start the assessment process. The grants were provided with funding from Michael Clark, Vice Provost for Academic Planning, and Sharon Salinger, Dean of the Division of Undergraduate Education.

In May 2008, another workshop, attended by twenty-five department chairs, introduced them to the WASC expectations for assessment of student learning at the program level, which we defined as the undergraduate major. There, Michael Clark, Vice Provost for Academic Planning, and Co-Liaison for the upcoming WASC review process, explained that the campus would take an incremental approach to assessment, starting in 2008-09 by first identifying Student Learning Outcomes for each undergraduate major. To further assist department chairs, Assessment and Research Studies provided a number of assessment workshops during 2008-09 and also established a Website with assessment resources.

UCI held another workshop in November 2008 based on the realization that all UC campuses were engaged in identifying student learning outcomes. We developed a proposal, funded by UCOP, for a one day event on student learning outcomes in selected majors (Biology, Chemistry, English, Psychology, and Drama/Theatre). Department chairs and faculty from all of the UC campuses attended to share strategies and progress. Given the positive responses of participants (attendance consisted of 61 UC faculty and staff), we are hopeful UCOP will sponsor similar workshops for other majors.

By June 2009, approximately 90% of UCI's undergraduate majors had identified Student Learning Outcomes (see Inventory of Educational Effectiveness Indicators in Appendix 1). Our focus for 2009-10 is to help departments develop assessment plans using both direct and indirect measures of learning and begin to carry out those assessments. The focus for 2010-11 will be the use of assessment results for the improvement of instruction and learning. Each year, Assessment and Research Studies will provide workshops, individual assistance, and resources to help departments carry out assessment of student learning in each undergraduate major. Thus, the theme of "Student Learning in the Major" for our WASC review process is a natural extension of our current assessment efforts in this area.

Goals:

1. Achieve greater clarity in what students know, understand, and can do as a result of completing an undergraduate major at UCI. (CFR 1.2, 2.2, 2.3, 2.6)

2. Create and sustain a campus culture in which faculty are engaged in assessment of student learning and use the results for the improvement of teaching and learning. (CFR 2.3, 2.4, 2.7, 4.6, 4.7)

Expected Outcomes:

- 1. Faculty will identify important Student Learning Outcomes for each undergraduate major; these outcomes will be widely disseminated among faculty, students, staff, and the general public. (CFR 1.2, 1.7, 2.3, 2.4, 4.6)
- 2. Faculty will collect and analyze direct and indirect evidence of student learning in each undergraduate major and use the results for programmatic and curricular improvements. (CFR 2.6, 2.7, 4.6, 4.7)
- 3. Faculty will use the Assessment Information Management System to document their assessment efforts and how the results are used to improve student learning. (CFR 1.2, 2.4, 2.6, 2.7, 4.5, 4.6)

Approach for the Capacity and Preparatory Review (CPR)

At the time of the Capacity and Preparatory Review, we anticipate having Student Learning Outcomes for every undergraduate major and many, if not all, departments engaged in assessment activities. To further support faculty efforts and engagement in assessment of student learning, we will provide the following three types of infrastructure support for assessment.

1. Establish a University Assessment Committee (CFR 1.2, 2.4, 2.7, 3.4, 4.6)

As recommended by Linda Suskie (2004) and other assessment experts, one of the best ways to engage faculty in the assessment process is to establish an assessment steering committee, composed predominantly of faculty from a cross-section of disciplines. Therefore, we have established the University Assessment Committee, starting with a core of 10 faculty and staff, with the long-term goal of making it a standing committee of the Academic Senate. Faculty will be nominated from each of the schools to make sure that all academic disciplines are included. The Committee will also prepare a Reflective Essay on the status of assessing student learning in the major as part of the Capacity and Preparatory Review report using the WASC Rubric for Assessing the Quality of Academic Program Learning Outcomes and other WASC Rubrics for various assessment methods as appropriate.

2. Continue the Departmental Assessment Grant Program (CFR 1.2, 1.7, 2.2, 2.3, 2.4, 2.6, 3.4, 4.6, 4.7)

Our experience with the Departmental Assessment Grant Program indicates that this approach is already having a positive impact on how departments view the undergraduate curriculum, including course sequencing and course-prerequisites. Early grantees are providing coaching to newer grantees on how to frame Student Learning Outcomes and how to select assessment methods. Our goal is to provide one-time grant funds to each department with an undergraduate major, as funds allow. Our first-ever Assessment Colloquy, held in May 2009, showcased grantees and their accomplishments, and will become an annual event.

3. Develop an Electronic Assessment Information Management System (CFR 1.2, 2.4, 2.6, 2.7, 4.5, 4.6)

Given the expected amount of assessment documentation from over 80 undergraduate majors, Assessment and Research Studies is working with the Office of Information and Technology to develop an on-line system to capture important assessment documents and to track progress over time. We have identified an open-source software solution available from the University of Nebraska at Lincoln which we hope to pilot test during the 2009/10 academic year before rolling it out to the campus.

Approach for the Educational Effectiveness Review

At the time of the Educational Effectiveness Review, most departments will have conducted at least one assessment activity and used the results to improve student learning in the major. Our work leading up the Educational Effectiveness Review will be guided by the following research questions.

1. How does the assessment process impact student learning?

At the Educational Effectiveness Review we will have many examples of assessment of student learning and how the results are being used for program improvement. These examples can be tracked through the Assessment Information Management System. We are especially interested in documentation that demonstrates how student learning was improved as a result of program changes. A summary of the findings will be completed by the staff of Assessment and Research Studies in consultation with the Campuswide Assessment Committee. The final report will be submitted at the time of the Educational Effectiveness Review.

2. What are best practices in assessing student learning?

In our review of assessment methods used by departments, we will use WASC Rubrics for Portfolios, Capstone Courses, and other rubrics as available, to identify best practices in assessment. Best assessment practices will be showcased in our annual Assessment Colloquy and publicized through the Assessment and Research Studies Website. Staff from Assessment and Research Studies will summarize the best practices findings for the Educational Effectiveness Review report.

Theme 2: General Education

As part of our commitment to the values of a liberal education, all UCI undergraduates complete the same set of General Education requirements. General Education courses place the specialized study undertaken in the major within a broader context and cultivate the skills, knowledge, and understanding that will make students effective contributors to society and the world. (CFR 2.2a)

The campus embarked on a multi-year process to reshape General Education. A 2004 Report of the Task Force on Undergraduate Education recommended reducing the number of courses, re-structuring and simplifying the existing categories, and providing students with more latitude in the selection of courses. Their report was distributed and the campus community was invited to comment.

The Council on Educational Policy took the Report and comments, developed a set of Educational Goals and then designed a plan for General Education, which went to the campus for comment in Spring 2006. The Revised Plan was approved in May 2007 and went into effect with the entering class in Fall 2008. Also in the fall, the Council developed and approved Student Learning Outcomes for each category; these are now published in the 2009-10 UCI Catalogue. (CFR 1.2, 2.2, 2.3, 2.4)

The Council on Educational Policy performs periodic program reviews for each of the General Education categories and in 2008-09 reviewed Category I: Writing. (CFR 2.7, 4.4) The review team included one external and two internal reviewers, who considered among other forms of evidence results from a pilot assessment study of student writing in upper division writing courses from two academic disciplines. (CFR 2.7, 4.4) Thirty-four randomly selected papers were assessed by readers trained in the use of a scoring rubric developed specifically for the study. Results were analyzed by course, by students' language background, and by freshmen/transfer status, all of which were found to be significantly related to the quality of student writing. One of the outcomes of the study was the development of a scoring rubric to assess writing in more than one discipline. Although agreement among readers was only moderate, the scoring rubric was found to be helpful for exploring various components of the quality of writing in upper division courses. The scoring rubric is being further developed for use in a second study of upper division writing. (CFR 2.4, 2.6, 4.4, 4.7)

Despite these recent changes in UCI's General Education requirements, challenges remain: Although the Council has adopted learning outcomes for each of its General Education categories, it has yet to integrate them with the review and approval of General Education courses or the program review process. In addition, no additional General Education reviews are scheduled. Finally, few systematic efforts have been made to help students, faculty, or academic advisors understand the underlying philosophy of the new requirements, beyond the publication of the new requirements in the current Catalogue.

Approach for the Capacity and Preparatory Review

The purpose of the Capacity and Preparatory Review is to develop the infrastructure and support needed to accomplish the goals identified above. Our approach also includes the following research questions which will be addressed in essays for the Capacity and Preparatory Review:

Research Questions for Capacity and Preparatory Review:

1. How can Student Learning Outcomes be incorporated into the course review and approval process for General Education requirements?

How have peer institutions combined review with Student Learning Outcomes? How can the course review process be expanded to include more than just a review of the initial course syllabus? To what extent do previously-approved courses align with the Council on Educational Policy's learning outcomes for each category? To what extent do students' self-reported learning gains in General Education courses align with the Council on Educational Policy learning outcomes for each category?

2. What are the most appropriate methods for assessing Student Learning Outcomes associated with general education?

What are best practices used by other research universities? What are the advantages and disadvantages of various approaches, such as course-embedded assessment strategies, capstone courses, common exams across sections, and standardized exams? What are the most promising assessment approaches identified by UCI's assessment grantees?

The following activities will be undertaken for the Capacity and Preparatory Review:

- 1. The Council on Educational Policy will establish strategies for assessing the General Education categories. (CFR 1.2, 2.4, 2.7, 4.6, 4.7)
 - Design an ongoing assessment program for General Education using student self-assessment and instructor assessment of progress toward learning outcomes
 - Begin a re-approval process for General Education courses to ensure that they are designed to achieve the proper student learning outcomes
 - Continue the independent assessment of General Education categories
 - Send 2 faculty members to the February 2010 AAC&U conference on assessment in General Education in order to explore how peer institutions are assessing their general education outcomes and to identify pros/cons of various assessment approaches.
- 2. The Programs and Policy Subcommittee will review the current General Education requirements for possible changes and improvements (CFR 1.7, 2.2a)

General Education is still in the developmental phase with the definition of some categories farther along than others. For example, Writing has a curriculum in place, Student Learning Outcomes are clearly defined and

published, assessment procedures have been developed and implemented, results analyzed and Writing is at the point of using the results to modify and improve the curriculum. On the other hand, while the other categories are in place we have yet to populate them with an array of courses or identify the outcomes that fulfill the conceptual intent. Our goal is to establish ongoing assessment procedures for General Education linked to student learning outcomes by the Capacity and Preparatory Review and begin using the assessments to evaluate the General Education requirements by the Educational Effectiveness Review.

3. The Division of Undergraduate Education will develop and implement strategies to inform both students and academic advisors regarding the aims and importance of General Education. (CFR 1.7, 2.3, 2.4)

Approach for the Educational Effectiveness Review

The focus of this stage is the educational effectiveness of the new procedures put into place during the Capacity and Preparatory Review.

Research Question for the Educational Effectiveness Review

To what extent does incorporating information about student learning in program reviews of General Education categories improve teaching and learning?

Data for the research question will be in the form of ongoing assessment data and case studies of the General Education categories reviewed to date. For example, how and to what extent were the results from the writing assessments completed in 2008-09 and 2009-10 used to improve teaching and learning? What evidence is available to make that determination? In addition, we will assess whether or not our outreach efforts have improved students' and academic advisors' awareness and understanding of the new General Education requirements. Results of this research study will be summarized in an essay for the Educational Effectiveness Review.

Goals:

- 1. To promote a campus culture that values and uses evidence of student learning as a basis for making decisions about the general education program. (CFR 2.6, 2.7, 4.6, 4.7)
- 2. To assess the effectiveness of the general education program and demonstrate our commitment to ongoing improvement. (CFR 1.2, 2.7, 4.4, 4.6, 4.7)
- 3. To develop a deeper understanding of student learning and more and varied effective methods of assessing student learning, and to use the results to improve both teaching and learning. (CFR 1.2, 2.2, 2.3, 2.6)

Expected Outcomes:

At the end of the WASC Review process, we expect that the following institutional outcomes will be accomplished. Achieving these outcomes will provide the campus with ongoing evidence of the effectiveness of our general education program for undergraduates and will ensure alignment between courses and the intended learning outcomes for each General Education category.

- 1. The Council on Educational Policy will establish ongoing assessment and periodic program reviews of General Education categories and incorporate evidence of the extent to which students have achieved the stated learning outcomes of each category. (CFR 2.7, 4.4, 4.6)
- 2. The Council on Educational Policy will incorporate Student Learning Outcomes into its procedures for reviewing and approving courses for each General Education category to insure alignment between course and General Education learning outcomes. (CFR 2.2, 2.2a, 2.3)
- 3. Undergraduate students and academic advisors will become more aware of the aims of the general education program and will develop meaningful programs of study around general education themes. (CFR 1.7, 2.3, 2.4)

Theme 3: Academic Program Review

Overview of Academic Program Review

Academic Program Review (APR) is a faculty-driven process under the leadership of the Academic Senate with administrative support from the Provost. The Academic Program Review Board of the Academic Senate oversees the process. The purpose of Academic Program Review is to assess the general quality of academic units and degree programs, ensure their currency and effectiveness, and promote "goal setting and planning." Academic Program Review was chosen as a theme for our WASC reaffirmation of accreditation review because it exemplifies major strengths of the campus in terms of CFR related to shared governance and evidence-based review of our academic programs. At the same time, we intend to enhance the process through more systematic development and incorporation of Student Learning Outcomes, one of our weaker areas in the CFR that will be addressed by our Theme 1 (CFR 1.2, 2.2-4, 2.6-7, 4.6-8)

The formal policy and procedures for Academic Program Review are described by the Senate in the "Joint Review of Academic Programs Description and Procedures May 2005." At the start of each review, the Academic Program Review Board meets with faculty and administrators in the unit under review to describe the process and initiate the self-study, which includes required sets of data and a list of questions relevant to undergraduate and graduate education that is negotiated with the unit. The Academic Program Review Board uses information from the self study and these other sources to compose a formal charge for the external review committee, which is made up of a team of national experts who are chosen by the Senate in consultation with the Provost and who are in the disciplines under review. The external reviewers conduct an on-site visit of two to three days, meeting with faculty and students in the unit, the Dean, staff and other personnel. The visit concludes with an exit briefing for the Dean and a separate meeting with the Provost. The reviewers then issue a written report, which is forwarded to the unit for comment and response. The report and those responses are then reviewed by the pertinent Senate councils, which add their comments and then forward the report and accompanying documents to the Provost for use in campuswide academic planning and budget decisions

This long-standing process was revised most recently in 2005 and now combines reviews of research, graduate education and undergraduate education within the academic unit (i.e., in most cases, a School and its departments). Each unit is reviewed every ten years. See Appendix 7 for a schedule of reviews through 2015-16. Three years after the completion of the review, the unit has a follow-up evaluation by Graduate Council and the Council on Educational Policy to determine which of the recommendations has been acted upon. (Many units are subject to additional concurrent review by professional accrediting boards, but those reviews are managed by the unit.)

Approach for the Capacity and Preparatory Review

For the Capacity and Preparatory Review, we propose to develop and incorporate direct and indirect assessments of Student Learning Outcomes into the review process, and to use the results of those assessments to improve teaching and learning in units under review (CFR 2.7, 4.6). In addition, we propose to develop a formal instrument and systematic process for assessing the effectiveness of Academic Program Review and its impact on the improvement of the educational quality of the programs under view.

Goals for the Capacity and Preparatory Review:

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¹⁷ For a full description of the APRB, its charge, and membership, see http://www.senate.uci.edu/Committees/APRB/index.asp http://www.senate.uci.edu/Committees/APRB/index.asp .

http://www.senate.uci.edu/Documents/joint_review_may_20_2005_procedures-final.pdf.) A detailed account of the Academic Program Review process and samples of the documents mentioned below are available on the APRB Website. www.senate.uci.edu/Committees/APRB/index.asp

- 1. Revise the criteria used in Academic Program Review for self-studies and for the charge to external reviewers to include (a) Student Learning Outcomes and results of assessment procedures (CFR 1.2, 2.7); and (b) integration of assessment results into decision-making processes in the unit used to improve student learning. (CFR 1.2, 2.2-2.7)
- 2. Develop a formal instrument for determining the effectiveness of the Academic Program Review that includes a comprehensive and systematic review of the Academic Program Review process on a regular basis. (CFR 1.2, 2.4, 2.7)

Research Questions for the Capacity and Preparatory Review:

- 1. What are best practices for academic program review which incorporate analyses of the achievement of the program's learning objectives and outcomes at the undergraduate level? (CFR 2.7, 4.4)
- 2. How extensively and systematically are the results of the Academic Program Reviews integrated into decision-making processes in the central administration? (CFR 4.6)
- 3. Should reviews of undergraduate and graduate components of the academic program be conducted separately, rather than combined into a comprehensive review of a unit? (CFR 2.2a, 2.2b, 2.7)
- 4. To what extent can and should the unit's research programs be reviewed separately from the educational programs? (CFR 2.7)
- 5. How well does UCI's current academic review process align with the WASC recommendations for making program review more useful for improving academic programs? (CFR 2.7)

Anticipated Results of the Capacity and Preparatory Review:

- 1. Revise the requirements of the self-study to require student-learning outcomes and methods of assessment from all units in the School under review. (CFR 2.7)
- 2. Modify the charge to reviewers to reinforce the importance of more evidence-based claims of educational effectiveness in reviewers' evaluation of a unit's programs. (CFR 2.7)
- 3. Develop a more formal instrument to assess the effectiveness of the review process itself. (CFR 4.5)
- 4. Map the points at which results of APRs are integrated into centralized administrative decision processes and enhance that integration to make the reviews even more important in the decision processes. (CFR 4.6)

Approach for the Educational Effectiveness Review

For the Educational Effectiveness Review, we propose to use the instrument developed in the Capacity and Preparatory Review to evaluate the effectiveness of Academic Program Review following the incorporation of Student Learning Outcomes and assessment of student achievement within the criteria by which the units' self-studies are conducted. We also intend to use the map developed in the Capacity and Preparatory Review to assess the extent and depth to which reviews are incorporated into the decision-making processes of the campus.

Primary Goals for the Educational Effectiveness Review:

- 1. Using the instrument developed in the Capacity and Preparatory Review, compare the academic program reviews after the changes implemented for the Capacity and Preparatory Review to reviews completed in the prior cycle in order to determine the effectiveness of the changes. (CFR 4.4, 4.5)
- 2. Using the map developed for the Capacity and Preparatory Review, assess the integration of Academic Program Review reports into academic planning within the units at the departmental and decanal levels, and in central administrative decision processes. (CFR 4.4, 4.5, 4.6)

Research Questions for the Educational Effectiveness Review:

- 1. How thoroughly has evidence of educational effectiveness, including assessment of progress toward Student Learning Outcomes, been integrated into the Academic Program Review process? (CFR 2.7, 4.4, 4.5, 4.6)
- 2. To what extent has the revised program review process actually been useful for the improvement of academic programs and student learning at UCI? (CFR 4.7)
- 3. How do modifications to the Academic Program Review process increase or diminish the effectiveness of the process itself? (CFR 4.7)

Anticipated Results of the Educational Effectiveness Review:

- 1. Make Academic Program Review more effective and efficient as a means to improve the educational programs in the units under review. (CFR 2.7, 4.7)
- 2. Integrate Student Learning Outcomes and assessment in units' consideration of programmatic success. (CFR 2.7, 4.7)
- 3. Focus external reviewers more directly and precisely on student learning in their assessment of the quality of a unit's educational programs. (CFR 2.7, 4.7)
- 4. Make the APRs a more productive part of central administrative decision processes, particularly in academic planning and the allocation of financial resources. (CFR 2.7, 4.7)
- 5. Make the evaluation and revision of Academic Program Review process more systematic and substantive. (CFR 2.7, 4.7)

C. Demonstrating a Feasible Plan of Work and Engagement of Constituencies

C1. Workplan and Milestones (A detailed workplan with milestones is located in Appendix 5)

C2. Effectiveness of Data Gathering and Analysis Systems

At UCI the Office of Institutional Research provides a wide variety of institutional and comparative data that are used to inform planning, policy development, and decision-making at the executive level and by the Academic Senate, deans, departments and faculty (see the OIR Website at www.oir.uci.edu). In addition, the Office of Assessment and Research Studies provides data on assessment of student learning and evaluation of instructional programs. Both offices will provide data for the reaffirmation of accreditation review process.

Current data systems and resources

1. Institutional Decision-Making and Strategic Planning

The Office of Institutional Research (OIR) provides institutional and comparative data on key indicators of success for decision-making by groups such as the Academic Planning Group, Enrollment Council, Budget Workgroup, deans and department chairs, plus the Academic Program Review Process. Information includes annual and ad hoc reports as needed for decision-making. Examples include:

- Information on student enrollments, faculty, and staff; class sizes; instructional workloads; expenditures; research and grant funds; plus trends over time.
- Peer benchmarking data, using a select group of peer institutions.
- Institutional data for the UC Accountability Framework and the Campus Profile and other UCOP initiatives.
- School profiles for Academic Program Review (Academic Senate).
- Admissions information (selectivity, yield, source schools);

- Retention and graduation data for enrolled students for entering freshmen and transfer classes; disaggregated by school, gender and ethnicity.
- Change of major information.
- Enrollment projections.
- Graduating student surveys.

2. Assessment of Student Learning.

The Office of Assessment and Research Studies (A&RS) provides several types of data and information on student learning which are used for program and policy decisions related to the improvement of undergraduate education. Groups who use the results include the Dean of the Division of Undergraduate Education, undergraduate associate deans in the schools, individual faculty, and Academic Senate groups (the Council on Educational Policy and Academic Program Review Board). Below are some examples of data and information provided:

- Evaluation studies of innovative first-year programs such as Freshman/Transfer Seminars, the First-Year Integrated program, Summer Bridge, and the Undecided/Undeclared Program.
- Assessment of writing in lower division and upper division courses for review of General Education Category I: Writing (2008-09).
- Assessment of the quality of summer instruction and its impact on success in subsequent courses.
- University of California Undergraduate Experience Survey, a biennial survey of the undergraduate experience, including self-reported academic and personal development gains, academic engagement and post-graduation plans; comparative data for every school and undergraduate major.

Future Enhancements

While UCI has adequate resources for data collection and analysis, as part of the review process we would like to develop the following enhancements.

1. Enhanced analysis of retention and graduation data

The campus needs to analyze retention and graduation data in more depth to understand the factors associated with student success, including personal characteristics, level of academic engagement, and participation in retention-related services such as academic support services. To that end, Office of Institutional Research and A&RS will explore ways to combine data from student surveys (University of California Undergraduate Experience Survey and Senior Surveys, for example) with retention and graduation data.

2. Enhanced dissemination of information on Student Learning Outcomes and assessment

As part of the WASC review process, the <u>Assessment Website</u> (<u>www.assessment.uci.edu</u>) will be enhanced to include: 1) additional University of California Undergraduate Experience Survey information on Student Learning Outcomes for use by schools and departments, and 2) reports from assessment grantees to describe their findings. Additionally, the adoption of the online assessment management system, as described in this proposal, will be another tool used to share assessment results across campus.

C3. Commitment of Resources to Support the Accreditation Review

Organization, Oversight, and Support for the Review

The review will be overseen by the WASC Steering Committee under the direction of its chair, the Vice Provost for Academic Planning, co-WASC ALO, in consultation with the Dean of the Division of Undergraduate Education,

co-WASC ALO. The co-ALOs will be responsible for keeping the Chancellor and the Executive Vice Chancellor and Provost informed of progress on the review and for identifying the resource needs as they arise. They will also inform the faculty Senate and coordinate contributions to the process as needed from faculty, staff, students, and alumni/ae. Requirements for the review will be met through assignment of specific tasks to workgroups under the direction of individuals as described below. Workgroups will report to the Steering Committee, which will collate the results of the work and integrate them into the reports for the Capacity and Preparatory Review and Educational Effectiveness Review.

The review will be supported by human resources consisting of reassigned staff time and faculty service credit from the individuals listed in Appendix 8. Technological support will be provided by the Office of Institutional Research and the Office of Assessment and Research studies in conjunction with the new campuswide technological support service, Information and Academic Technologies. Physical resources will be made available by the central administration and will include office space for the individuals mentioned below, meeting rooms to support group meetings, and modest amenities to support and encourage collaboration and cooperation among departmental chairs and other faculty and students.

Budget, Links to Institutional Structures, Sustaining Improvements

The campus will fund the review at the level necessary to address the WASC requirements for reaffirmation of accreditation. Most of the activities associated with the reaffirmation of accreditation review are extensions of responsibilities already assigned to existing offices, councils and leadership on the campus. In addition, the central decision-making process of the university is thoroughly evidence based and data-driven. It incorporates extensive use of institutional data to inform allocation of resources for funding and staff and faculty personnel allocations. It is therefore impossible to identify with any precision the exact budget for the review itself because most of what it requires is part of our on-going practices.

The Executive Vice Chancellor/Provost has already funded the appointment of a full-time assessment expert in the Division of Undergraduate Education and the expansion of the Division of Undergraduate Education staff to create the Office of Assessment and Research Studies. Substantial support for local development of Student Learning Outcomes and assessment activities has already been allocated to the units by the Dean of the Division of Undergraduate Education, including the grants and workshops described above and the temporary but nearly full-time release of the Director of Assessment and Research Studies to the School of Engineering to support development of assessment procedures required as part of their concurrent accreditation by ABET. Whatever additional resources are necessary to support the gathering of assessment results and other data and the incorporation of that evidence into more local levels of decision-making (i.e., in the departments and schools) will be provided by those units through their operational budgets as negotiated annually with the Executive Vice Chancellor/Provost.

See Appendix 9 for a list of administrative staff and offices and Academic Senate officers most extensively involved in the review and charged with specific responsibilities.

The link between activities and the reaffirmation of accreditation review process and existing institutional structures is close and continuing. With the substantial exception of the WASC Steering Committee, activities associated with the review should require no additional committees or administrative positions. Considerable amounts of staff time and faculty service credit have been reassigned, however, to address requirements for the Institutional Proposal. Continuing reassigned time will be necessary for the Capacity and Preparatory Review and Educational Effectiveness Review reports.

Sustaining improvements accomplished over the course of the reaffirmation of accreditation review process will occur by incorporating those improvements in the operation and responsibilities of the people and groups charged with overseeing activities associated with the review. In particular,

- O Student Learning in the Major—Student Learning Outcomes and assessment will be required parts of the newly revised academic program reviews; external reviewers will be asked to address them directly in their reports, which are used to inform decisions about the allocation of financial and faculty resources. The newly created Office of Assessment and Research Studies (A&RS) is charged with overseeing such activities.
- o General Education—requirements for General Education are subject to nearly annual review and revision by the Council on Educational Policy, so changes related to improvements on this theme can be adopted quickly and sustained as requirements for the future.
- Academic Program Review—improvements to the review process will be sustained as formal requirements that appear in the charge to external reviewers. They will also be included as criteria or topics for the self studies required of all units undergoing periodic review.

Improvements in data gathering and analysis will be sustained through incorporation into the practices of the Office of Institutional Research and its reports to advisory groups including the Academic Planning Group and the Budget Workgroup, as well as to the Provost and other academic and administrative leaders.

D. Presenting Appendices Related to the Proposal (See Appendices 1-10)

Theme 1: Student Learning in the Major

In 2008-09, the campus adopted the theme of "Student Learning in the Major" as the first step in a more comprehensive approach to assessment of Student Learning Outcomes. The choice emerged from UCI faculty and staff attendance at the 2007 WASC Regional Workshop and Retreat on Student Learning. A total of nine faculty and staff attended. The faculty were especially engaged by the examples provided which focused on assessing student learning in the majors. By the end of the workshop, several of them identified assessment activities they would like to carry out in their own majors.

The success of the WASC workshop stimulated us to develop a campuswide workshop on Student Learning in the Major to introduce faculty to the process of identifying and assessing important Student Learning Outcomes and using the results for improvement of instruction and student learning. The workshop, held in February 2008, attended by 28 faculty and staff, also announced the availability of departmental assessment grants to jump-start the assessment process. The grants were provided with funding from Michael Clark, Vice Provost for Academic Planning, and Sharon Salinger, Dean of the Division of Undergraduate Education.

In May 2008, another workshop, attended by twenty-five department chairs, introduced them to the WASC expectations for assessment of student learning at the program level, which we defined as the undergraduate major. There, Michael Clark, Vice Provost for Academic Planning, and Co-Liaison for the upcoming WASC review process, explained that the campus would take an incremental approach to assessment, starting in 2008-09 by first identifying Student Learning Outcomes for each undergraduate major. To further assist department chairs, Assessment and Research Studies provided a number of assessment workshops during 2008-09 and also established a Website with assessment resources.

UCI held another workshop in November 2008 based on the realization that all UC campuses were engaged in identifying student learning outcomes. We developed a proposal, funded by UCOP, for a one day event on student learning outcomes in selected majors (Biology, Chemistry, English, Psychology, and Drama/Theatre). Department chairs and faculty from all of the UC campuses attended to share strategies and progress. Given the positive responses of participants (attendance consisted of 61 UC faculty and staff), we are hopeful UCOP will sponsor similar workshops for other majors.

By June 2009, approximately 90% of UCI's undergraduate majors had identified Student Learning Outcomes (see Inventory of Educational Effectiveness Indicators in Appendix 1). Our focus for 2009-10 is to help departments develop assessment plans using both direct and indirect measures of learning and begin to carry out those assessments. The focus for 2010-11 will be the use of assessment results for the improvement of instruction and learning. Each year, Assessment and Research Studies will provide workshops, individual assistance, and resources to help departments carry out assessment of student learning in each undergraduate major. Thus, the theme of "Student Learning in the Major" for our WASC review process is a natural extension of our current assessment efforts in this area.

Goals:

1. Achieve greater clarity in what students know, understand, and can do as a result of completing an undergraduate major at UCI. (CFR 1.2, 2.2, 2.3, 2.6)

2. Create and sustain a campus culture in which faculty are engaged in assessment of student learning and use the results for the improvement of teaching and learning. (CFR 2.3, 2.4, 2.7, 4.6, 4.7)

Expected Outcomes:

- 1. Faculty will identify important Student Learning Outcomes for each undergraduate major; these outcomes will be widely disseminated among faculty, students, staff, and the general public. (CFR 1.2, 1.7, 2.3, 2.4, 4.6)
- 2. Faculty will collect and analyze direct and indirect evidence of student learning in each undergraduate major and use the results for programmatic and curricular improvements. (CFR 2.6, 2.7, 4.6, 4.7)
- 3. Faculty will use the Assessment Information Management System to document their assessment efforts and how the results are used to improve student learning. (CFR 1.2, 2.4, 2.6, 2.7, 4.5, 4.6)

Approach for the Capacity and Preparatory Review (CPR)

At the time of the Capacity and Preparatory Review, we anticipate having Student Learning Outcomes for every undergraduate major and many, if not all, departments engaged in assessment activities. To further support faculty efforts and engagement in assessment of student learning, we will provide the following three types of infrastructure support for assessment.

1. Establish a University Assessment Committee (CFR 1.2, 2.4, 2.7, 3.4, 4.6)

As recommended by Linda Suskie (2004) and other assessment experts, one of the best ways to engage faculty in the assessment process is to establish an assessment steering committee, composed predominantly of faculty from a cross-section of disciplines. Therefore, we have established the University Assessment Committee, starting with a core of 10 faculty and staff, with the long-term goal of making it a standing committee of the Academic Senate. Faculty will be nominated from each of the schools to make sure that all academic disciplines are included. The Committee will also prepare a Reflective Essay on the status of assessing student learning in the major as part of the Capacity and Preparatory Review report using the WASC Rubric for Assessing the Quality of Academic Program Learning Outcomes and other WASC Rubrics for various assessment methods as appropriate.

2. Continue the Departmental Assessment Grant Program (CFR 1.2, 1.7, 2.2, 2.3, 2.4, 2.6, 3.4, 4.6, 4.7)

Our experience with the Departmental Assessment Grant Program indicates that this approach is already having a positive impact on how departments view the undergraduate curriculum, including course sequencing and course-prerequisites. Early grantees are providing coaching to newer grantees on how to frame Student Learning Outcomes and how to select assessment methods. Our goal is to provide one-time grant funds to each department with an undergraduate major, as funds allow. Our first-ever Assessment Colloquy, held in May 2009, showcased grantees and their accomplishments, and will become an annual event.

3. Develop an Electronic Assessment Information Management System (CFR 1.2, 2.4, 2.6, 2.7, 4.5, 4.6)

Given the expected amount of assessment documentation from over 80 undergraduate majors, Assessment and Research Studies is working with the Office of Information and Technology to develop an on-line system to capture important assessment documents and to track progress over time. We have identified an open-source software solution available from the University of Nebraska at Lincoln which we hope to pilot test during the 2009/10 academic year before rolling it out to the campus.

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At the time of the Educational Effectiveness Review, most departments will have conducted at least one assessment activity and used the results to improve student learning in the major. Our work leading up the Educational Effectiveness Review will be guided by the following research questions.

1. How does the assessment process impact student learning?

At the Educational Effectiveness Review we will have many examples of assessment of student learning and how the results are being used for program improvement. These examples can be tracked through the Assessment Information Management System. We are especially interested in documentation that demonstrates how student learning was improved as a result of program changes. A summary of the findings will be completed by the staff of Assessment and Research Studies in consultation with the Campuswide Assessment Committee. The final report will be submitted at the time of the Educational Effectiveness Review.

2. What are best practices in assessing student learning?

In our review of assessment methods used by departments, we will use WASC Rubrics for Portfolios, Capstone Courses, and other rubrics as available, to identify best practices in assessment. Best assessment practices will be showcased in our annual Assessment Colloquy and publicized through the Assessment and Research Studies Website. Staff from Assessment and Research Studies will summarize the best practices findings for the Educational Effectiveness Review report.

Theme 2: General Education

As part of our commitment to the values of a liberal education, all UCI undergraduates complete the same set of General Education requirements. General Education courses place the specialized study undertaken in the major within a broader context and cultivate the skills, knowledge, and understanding that will make students effective contributors to society and the world. (CFR 2.2a)

The campus embarked on a multi-year process to reshape General Education. A 2004 Report of the Task Force on Undergraduate Education recommended reducing the number of courses, restructuring and simplifying the existing categories, and providing students with more latitude in the selection of courses. Their report was distributed and the campus community was invited to comment.

The Council on Educational Policy took the Report and comments, developed a set of Educational Goals and then designed a plan for General Education, which went to the campus for comment in Spring 2006. The Revised Plan was approved in May 2007 and went into effect with the entering class in Fall 2008. Also in the fall, the Council developed and approved Student Learning Outcomes for each category; these are now published in the 2009-10 UCI Catalogue. (CFR 1.2, 2.2, 2.3, 2.4)

The Council on Educational Policy performs periodic program reviews for each of the General Education categories and in 2008-09 reviewed Category I: Writing. (CFR 2.7, 4.4) The review team included one external and two internal reviewers, who considered among other forms of evidence results from a pilot assessment study of student writing in upper division writing courses from two academic disciplines. (CFR 2.7, 4.4) Thirty-four randomly selected papers were assessed by readers trained in the use of a scoring rubric developed specifically for the study. Results were analyzed by course, by students' language background, and by freshmen/transfer status, all of which were found to be significantly related to the quality of student writing. One of the outcomes of the study was the development of a scoring rubric to assess writing in more than one discipline. Although agreement among readers was only moderate, the scoring rubric was found to be helpful for exploring various components of the quality of writing in upper division courses. The scoring rubric is being further developed for use in a second study of upper division writing. (CFR 2.4, 2.6, 4.4, 4.7)

Despite these recent changes in UCI's General Education requirements, challenges remain: Although the Council has adopted learning outcomes for each of its General Education categories, it has yet to integrate them with the review and approval of General Education courses or the program review process. In addition, no additional General Education reviews are scheduled. Finally, few systematic efforts have been made to help students, faculty, or academic advisors understand the underlying philosophy of the new requirements, beyond the publication of the new requirements in the current Catalogue.

Approach for the Capacity and Preparatory Review

The purpose of the Capacity and Preparatory Review is to develop the infrastructure and support needed to accomplish the goals identified above. Our approach also includes the following research questions which will be addressed in essays for the Capacity and Preparatory Review:

Research Questions for Capacity and Preparatory Review:

1. How can Student Learning Outcomes be incorporated into the course review and approval process for General Education requirements?

How have peer institutions combined review with Student Learning Outcomes? How can the course review process be expanded to include more than just a review of the initial course syllabus? To what extent do previously-approved courses align with the Council on Educational Policy's learning outcomes for each category? To what extent do students' self-reported learning gains in General Education courses align with the Council on Educational Policy learning outcomes for each category?

2. What are the most appropriate methods for assessing Student Learning Outcomes associated with general education?

What are best practices used by other research universities? What are the advantages and disadvantages of various approaches, such as course-embedded assessment strategies, capstone courses, common exams across sections, and standardized exams? What are the most promising assessment approaches identified by UCI's assessment grantees?

The following activities will be undertaken for the Capacity and Preparatory Review:

- 1. The Council on Educational Policy will establish strategies for assessing the General Education categories. (CFR 1.2, 2.4, 2.7, 4.6, 4.7)
- Design an ongoing assessment program for General Education using student self-assessment and instructor assessment of progress toward learning outcomes
- Begin a re-approval process for General Education courses to ensure that they are designed to achieve the proper student learning outcomes
- Continue the independent assessment of General Education categories
- Send 2 faculty members to the February 2010 AAC&U conference on assessment in General Education in order to explore how peer institutions are assessing their general education outcomes and to identify pros/cons of various assessment approaches.

2. The Programs and Policy Subcommittee will review the current General Education requirements for possible changes and improvements (CFR 1.7, 2.2a)

General Education is still in the developmental phase with the definition of some categories farther along than others. For example, Writing has a curriculum in place, Student Learning Outcomes are clearly defined and published, assessment procedures have been developed and implemented, results analyzed and Writing is at the point of using the results to modify and improve the curriculum. On the other hand, while the other categories are in place we have yet to populate them with an array of courses or identify the outcomes that fulfill the conceptual intent. Our goal is to establish ongoing assessment procedures for General Education linked to student learning outcomes by the Capacity and Preparatory Review and begin using the assessments to evaluate the General Education requirements by the Educational Effectiveness Review.

3. The Division of Undergraduate Education will develop and implement strategies to inform both students and academic advisors regarding the aims and importance of General Education. (CFR 1.7, 2.3, 2.4)

Approach for the Educational Effectiveness Review

The focus of this stage is the educational effectiveness of the new procedures put into place during the Capacity and Preparatory Review.

Research Question for the Educational Effectiveness Review

To what extent does incorporating information about student learning in program reviews of General Education categories improve teaching and learning?

Data for the research question will be in the form of ongoing assessment data and case studies of the General Education categories reviewed to date. For example, how and to what extent were the results from the writing assessments completed in 2008-09 and 2009-10 used to improve teaching and learning? What evidence is available to make that determination? In addition, we will assess whether or not our outreach efforts have improved students' and academic advisors' awareness and understanding of the new General Education requirements. Results of this research study will be summarized in an essay for the Educational Effectiveness Review.

Goals:

- 1. To promote a campus culture that values and uses evidence of student learning as a basis for making decisions about the general education program. (CFR 2.6, 2.7, 4.6, 4.7)
- 2. To assess the effectiveness of the general education program and demonstrate our commitment to ongoing improvement. (CFR 1.2, 2.7, 4.4, 4.6, 4.7)
- 3. To develop a deeper understanding of student learning and more and varied effective methods of assessing student learning, and to use the results to improve both teaching and learning. (CFR 1.2, 2.2, 2.3, 2.6)

Expected Outcomes:

At the end of the WASC Review process, we expect that the following institutional outcomes will be accomplished. Achieving these outcomes will provide the campus with ongoing evidence of the effectiveness of our general education program for undergraduates and will ensure alignment between courses and the intended learning outcomes for each General Education category.

- 1. The Council on Educational Policy will establish ongoing assessment and periodic program reviews of General Education categories and incorporate evidence of the extent to which students have achieved the stated learning outcomes of each category. (CFR 2.7, 4.4, 4.6)
- 2. The Council on Educational Policy will incorporate Student Learning Outcomes into its procedures for reviewing and approving courses for each General Education category to insure alignment between course and General Education learning outcomes. (CFR 2.2, 2.2a, 2.3)
- 3. Undergraduate students and academic advisors will become more aware of the aims of the general education program and will develop meaningful programs of study around general education themes. (CFR 1.7, 2.3, 2.4)

Theme 3: Academic Program Review

Overview of Academic Program Review

Academic Program Review (APR) is a faculty-driven process under the leadership of the Academic Senate with administrative support from the Provost. The Academic Program Review Board of the Academic Senate oversees the process.¹⁷ The purpose of Academic Program Review is to assess the general quality of academic units and degree programs, ensure their currency and effectiveness, and promote "goal setting and planning."¹⁸ Academic Program Review was chosen as a theme for our WASC reaffirmation of accreditation review because it exemplifies major strengths of the campus in terms of CFR related to shared governance and evidence-based review of our academic programs. At the same time, we intend to enhance the process through more systematic development and incorporation of Student Learning Outcomes, one of our weaker areas in the CFR that will be addressed by our Theme 1 (CFR 1.2, 2.2-4, 2.6-7, 4.6-8)

The formal policy and procedures for Academic Program Review are described by the Senate in the "Joint Review of Academic Programs Description and Procedures May 2005." At the start of each review, the Academic Program Review Board meets with faculty and administrators in the unit under review to describe the process and initiate the self-study, which includes required sets of data and a list of questions relevant to undergraduate and graduate education that is negotiated with the unit. The Academic Program Review Board uses information from the self study and these other sources to compose a formal charge for the external review committee, which is made up of a team of national experts who are chosen by the Senate in consultation with the Provost and who are in the disciplines under review. The external reviewers conduct an onsite visit of two to three days, meeting with faculty and students in the unit, the Dean, staff and other personnel. The visit concludes with an exit briefing for the Dean and a separate meeting with the Provost. The reviewers then issue a written report, which is forwarded to the unit for comment and response. The report and those responses are then reviewed by the pertinent Senate councils, which add their comments and then forward the report and accompanying documents to the Provost for use in campuswide academic planning and budget decisions

This long-standing process was revised most recently in 2005 and now combines reviews of research, graduate education and undergraduate education within the academic unit (i.e., in most cases, a School and its departments). Each unit is reviewed every ten years. See Appendix 7 for a schedule of reviews through 2015-16. Three years after the completion of the review, the unit has a follow-up evaluation by Graduate Council and the Council on Educational Policy to determine which of the recommendations has been acted upon. (Many units are subject to additional concurrent review by professional accrediting boards, but those reviews are managed by the unit.)

Approach for the Capacity and Preparatory Review

For the Capacity and Preparatory Review, we propose to develop and incorporate direct and indirect assessments of Student Learning Outcomes into the review process, and to use the results of those assessments to improve teaching and learning in units under review (CFR 2.7, 4.6). In addition, we propose to develop a formal instrument and systematic process for assessing the effectiveness of Academic Program Review and its impact on the improvement of the educational quality of the programs under view.

Goals for the Capacity and Preparatory Review:

- 1. Revise the criteria used in Academic Program Review for self-studies and for the charge to external reviewers to include (a) Student Learning Outcomes and results of assessment procedures (CFR 1.2, 2.7); and (b) integration of assessment results into decision-making processes in the unit used to improve student learning. (CFR 1.2, 2.2-2.7)
- 2. Develop a formal instrument for determining the effectiveness of the Academic Program Review that includes a comprehensive and systematic review of the Academic Program Review process on a regular basis. (CFR 1.2, 2.4, 2.7)

Research Questions for the Capacity and Preparatory Review:

- 1. What are best practices for academic program review which incorporate analyses of the achievement of the program's learning objectives and outcomes at the undergraduate level? (CFR 2.7, 4.4)
- 2. How extensively and systematically are the results of the Academic Program Reviews integrated into decision-making processes in the central administration? (CFR 4.6)
- 3. Should reviews of undergraduate and graduate components of the academic program be conducted separately, rather than combined into a comprehensive review of a unit? (CFR 2.2a, 2.2b, 2.7)
- 4. To what extent can and should the unit's research programs be reviewed separately from the educational programs? (CFR 2.7)
- 5. How well does UCI's current academic review process align with the WASC recommendations for making program review more useful for improving academic programs? (CFR 2.7)

Anticipated Results of the Capacity and Preparatory Review:

- 1. Revise the requirements of the self-study to require student-learning outcomes and methods of assessment from all units in the School under review. (CFR 2.7)
- 2. Modify the charge to reviewers to reinforce the importance of more evidence-based claims of educational effectiveness in reviewers' evaluation of a unit's programs. (CFR 2.7)
- 3. Develop a more formal instrument to assess the effectiveness of the review process itself. (CFR 4.5)
- 4. Map the points at which results of APRs are integrated into centralized administrative decision processes and enhance that integration to make the reviews even more important in the decision processes. (CFR 4.6)

Approach for the Educational Effectiveness Review

For the Educational Effectiveness Review, we propose to use the instrument developed in the Capacity and Preparatory Review to evaluate the effectiveness of Academic Program Review following the incorporation of Student Learning Outcomes and assessment of student achievement within the criteria by which the units' self-studies are conducted. We also intend to use the map developed in the Capacity and Preparatory Review to assess the extent and depth to which reviews are incorporated into the decision-making processes of the campus.

Primary Goals for the Educational Effectiveness Review:

1. Using the instrument developed in the Capacity and Preparatory Review, compare the academic program reviews after the changes implemented for the Capacity and Preparatory

Review to reviews completed in the prior cycle in order to determine the effectiveness of the changes. (CFR 4.4, 4.5)

2. Using the map developed for the Capacity and Preparatory Review, assess the integration of Academic Program Review reports into academic planning within the units at the departmental and decanal levels, and in central administrative decision processes. (CFR 4.4, 4.5, 4.6)

Research Questions for the Educational Effectiveness Review:

- 1. How thoroughly has evidence of educational effectiveness, including assessment of progress toward Student Learning Outcomes, been integrated into the Academic Program Review process? (CFR 2.7, 4.4, 4.5, 4.6)
- 2. To what extent has the revised program review process actually been useful for the improvement of academic programs and student learning at UCI? (CFR 4.7)
- 3. How do modifications to the Academic Program Review process increase or diminish the effectiveness of the process itself? (CFR 4.7)

Anticipated Results of the Educational Effectiveness Review:

- 1. Make Academic Program Review more effective and efficient as a means to improve the educational programs in the units under review. (CFR 2.7, 4.7)
- 2. Integrate Student Learning Outcomes and assessment in units' consideration of programmatic success. (CFR 2.7, 4.7)
- 3. Focus external reviewers more directly and precisely on student learning in their assessment of the quality of a unit's educational programs. (CFR 2.7, 4.7)
- 4. Make the APRs a more productive part of central administrative decision processes, particularly in academic planning and the allocation of financial resources. (CFR 2.7, 4.7)
- 5. Make the evaluation and revision of Academic Program Review process more systematic and substantive. (CFR 2.7, 4.7)

WASC Institutional Proposal Appendix 1A Mission Statement

"The distinctive mission of the University is to serve society as a center of higher learning, providing long-term societal benefits through transmitting advanced knowledge, discovering new knowledge, and functioning as an active working repository of organized knowledge. That obligation, more specifically, includes undergraduate education, graduate and professional education, research, and other kinds of public service, which are shaped and bounded by the central pervasive mission of discovering and advancing knowledge."

- from the University of California Academic Plan, 1974-1978
- http://www.universityofcalifornia.edu/aboutuc/missionstatement.html

University of California's Mission

The University's fundamental missions are teaching, research and public service.

We teach - educating students at all levels, from undergraduate to the most advanced graduate level. Undergraduate programs are available to all eligible California highschool graduates and community college transfer students who wish to attend the University of California.

Instructional programs at the undergraduate level transmit knowledge and skills to students. At the graduate level, students experience with their instructors the processes of developing and testing new hypotheses and fresh interpretations of knowledge. Education for professional careers, grounded in understanding of relevant sciences, literature and research methods, provides individuals with the tools to continue intellectual development over a lifetime and to contribute to the needs of a changing society.

Through our academic programs, UC helps create an educated workforce that keeps the California economy competitive. And, through University Extension, with a half-million enrollments annually, UC provides continuing education for Californians to improve their job skills and enhance the quality of their lives.

We do research - by some of the world's best researchers and brightest students in hundreds of disciplines at its campuses, national laboratories, medical centers and other research facilities around the state. UC provides a unique environment in which leading scholars and promising students strive together to expand fundamental knowledge of human nature, society, and the natural world. Its basic research programs yield a

multitude of benefits for California: billions of tax dollars, economic growth through the creation of new products, technologies, jobs, companies and even new industries, agricultural productivity, advances in health care, improvements in the quality of life. UC's research has been vital in the establishment of the Internet and the semiconductor, software and biotechnology industries in California, making substantial economic and social contributions.

We provide public service, which dates back to UC's origins as a land grant institution in the 1860s. Today, through its public service programs and industry partnerships, UC disseminates research results and translates scientific discoveries into practical knowledge and technological innovations that benefit California and the nation.

UC's agricultural extension programs serve hundreds of thousands of Californians in every county in the state.

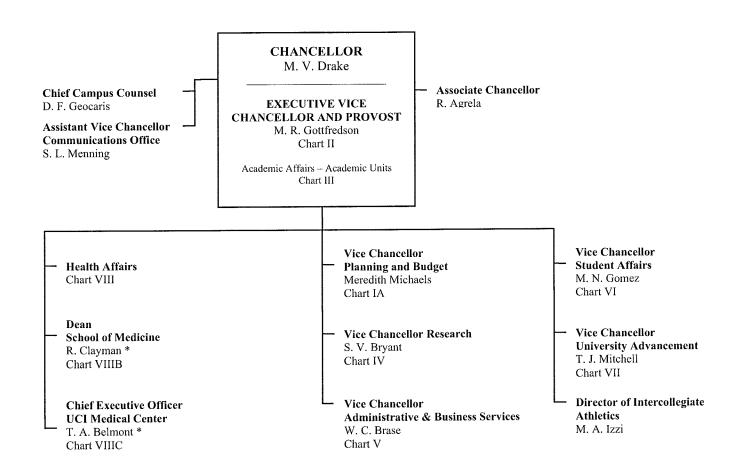
Open to all Californians, UC's libraries, museums, performing arts spaces, gardens and science centers are valuable public resources and community gathering places.

The University's active involvement in public-school partnerships and professional development institutes help strengthen the expertise of teachers and the academic achievement of students in communities throughout California.

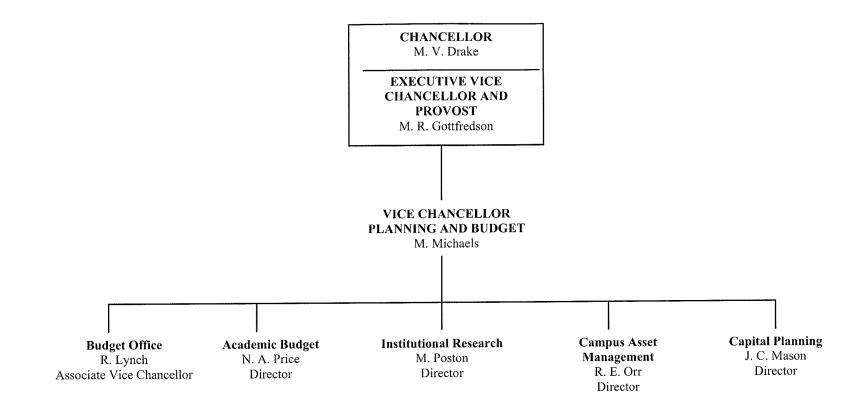
- from the University of California Website
- http://www.universityofcalifornia.edu/aboutuc/mission.html

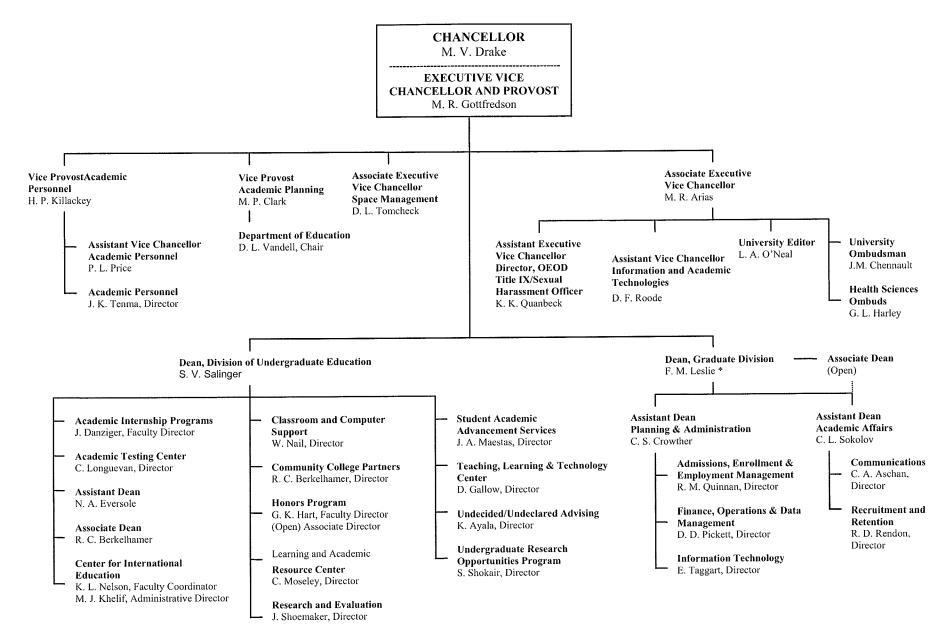
WASC Institutional Proposal Appendix 1B

Organizational Charts

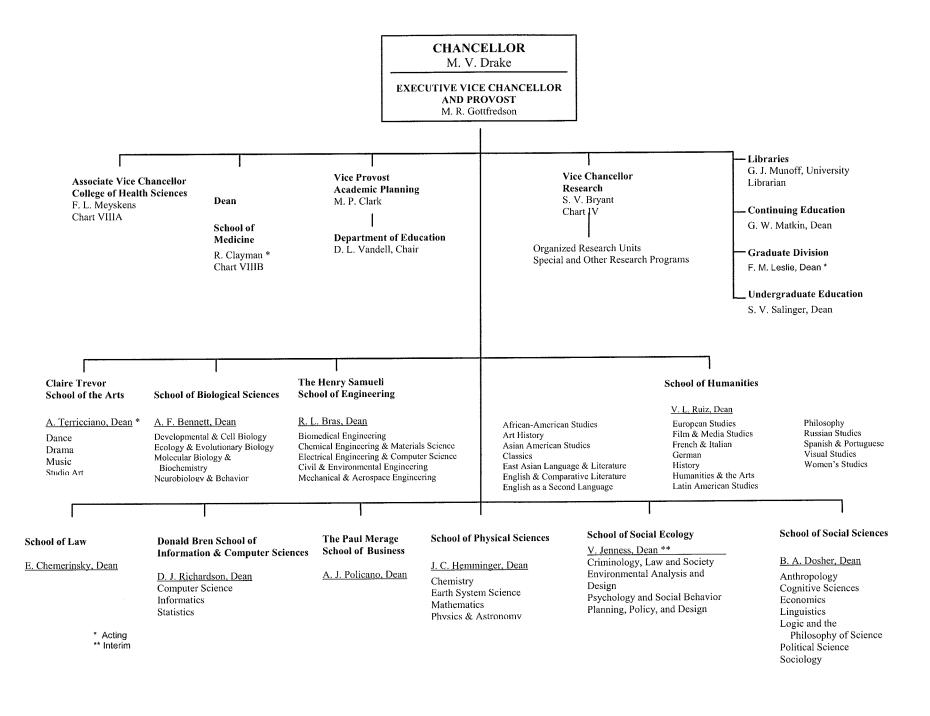


^{*} Interim





^{*} Acting



CHANCELLOR

M. V. Drake

EXECUTIVE VICE CHANCELLOR AND PROVOST

M. R. Gottfredson

VICE CHANCELLOR RESEARCH

S. V. Bryant

Associate Vice Chancellor

Administration

M. W. Warner

Organized Research Units

AirUCl Environmental Molecular Sciences Institute

Cancer Research Institute

Center for Embedded

Computer Systems

Center for the Neurobiology of Learning & Memory

Center for Research on Immigration,

Population and Public Policy

Center for Research on Information Technology & Organizations

Center for the Study of Democracy

Center for Virus Research

Critical Theory Institute

Developmental Biology Center

Genetic Epidemiology Research Institute

Health Policy Research Institute

Institute for Genomics and Bioinformatics

Institute of Geophysics and Planetary Physics

Institute for Immunology

Institute for Mathematical Behavioral Sciences

Institute for Memory Impairments and Neurological Disorders

Institute for Software Research

Institute for Surface & Interface Science

Institute of Transportation Studies

Molecular and Mitochondiral Medicine

and Genetics (MAMMAG)

Reeve-Irvine Research Center

Special and Other Research Programs

Beckman Laser Institute and Medical Clinic

California Institute for Telecommunications

and Information Technology

Environment Institute

Institute for Clinical and

Translational Science

Newkirk Center for Science and Society

Research Imaging Center

Sue & Bill Gross Stem Cell

Research Center

Thesaurus Linguae Graecae

UC Humanities Research Institute

Administrative Operations and Information Technology

D. S. Musto

Assistant Vice Chancellor

Research Development

J. E. Levin

Assistant Vice Chancellor

Office of Technology Alliances

R. G. Hanecak *

Assistant Vice Chancellor

University Laboratory Animal Resources

J. L. Goodwin

Director

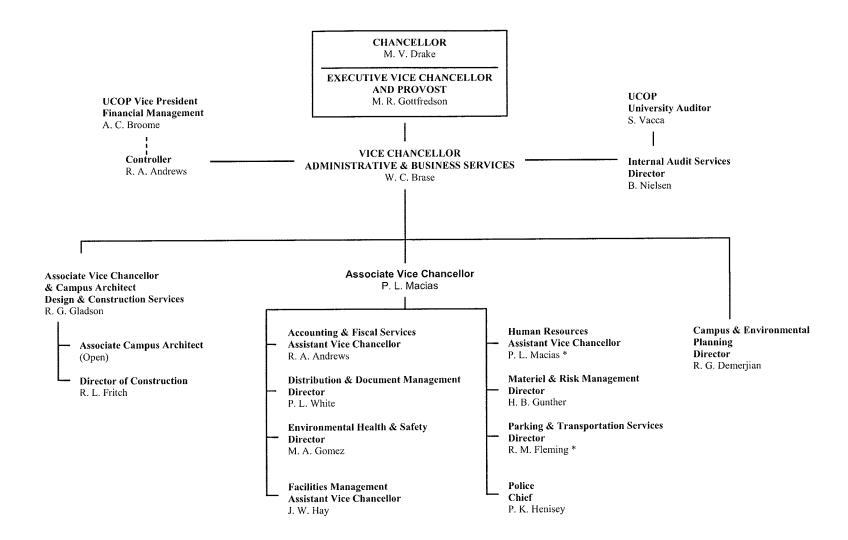
Associate Vice Chancellor Research

R. F. Holcombe

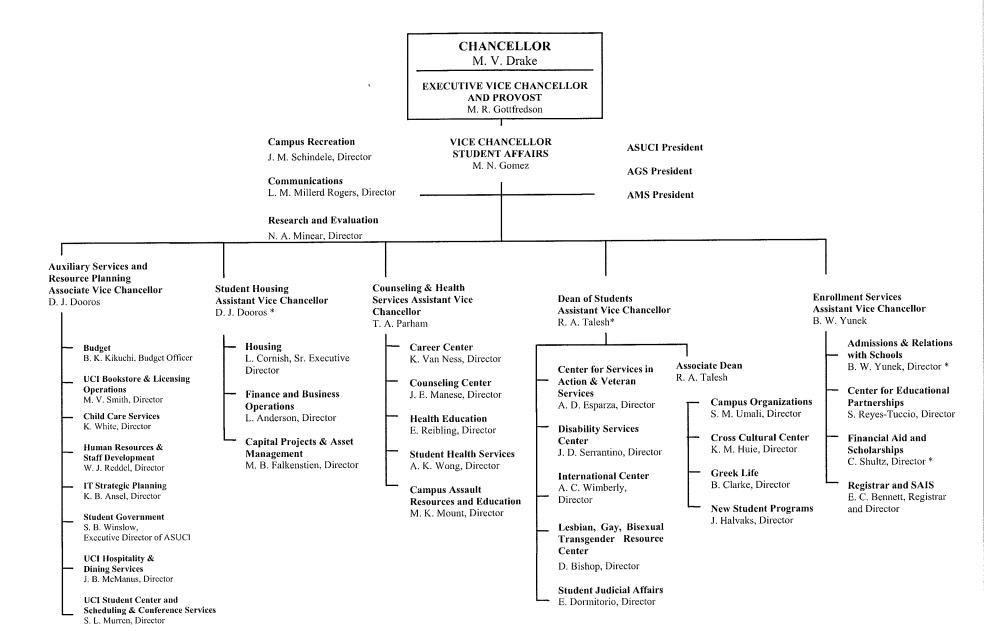
Research Administration

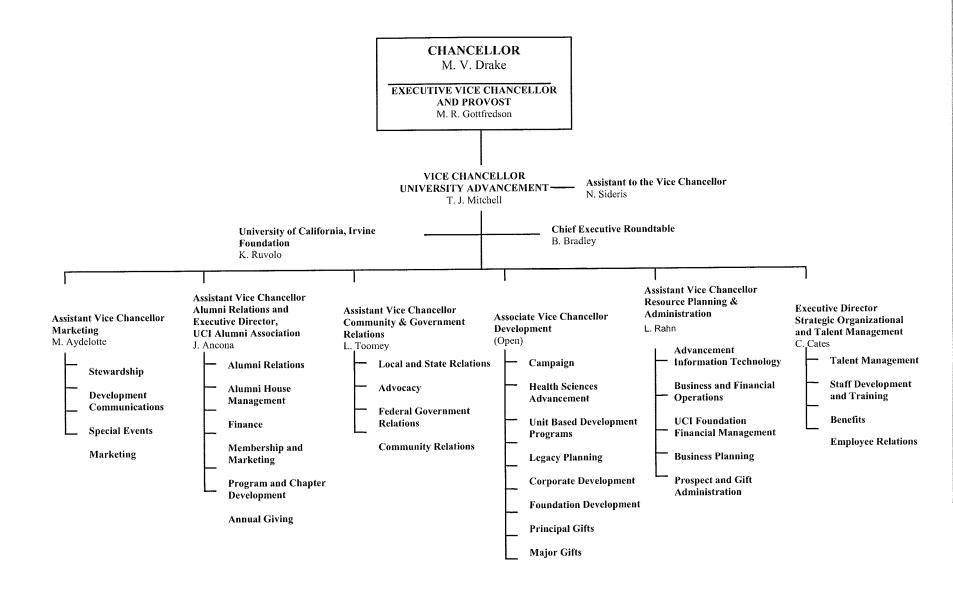
C. K. Hansen

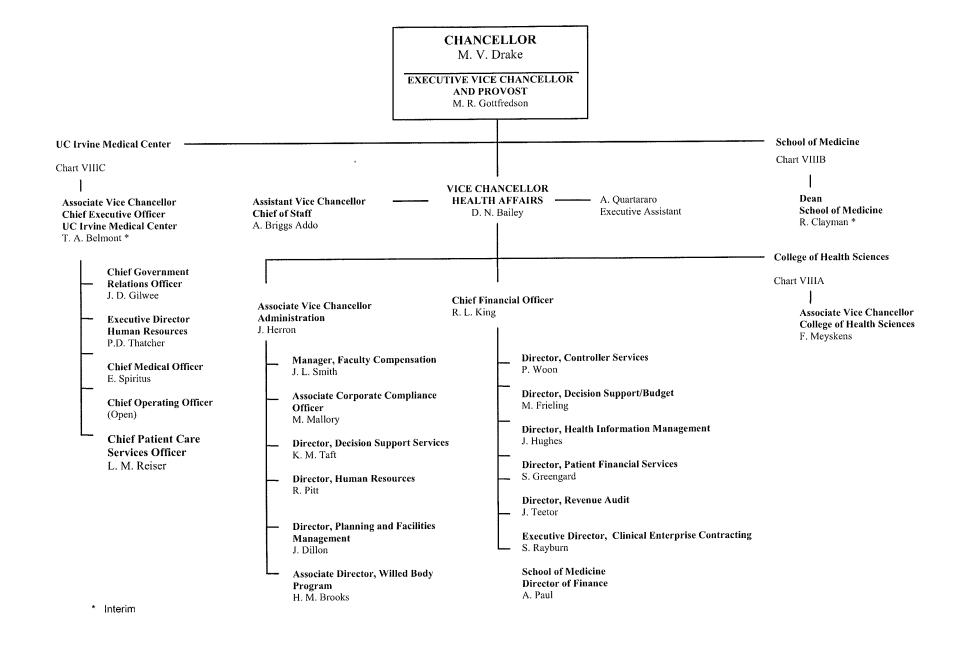
Assistant Vice Chancellor

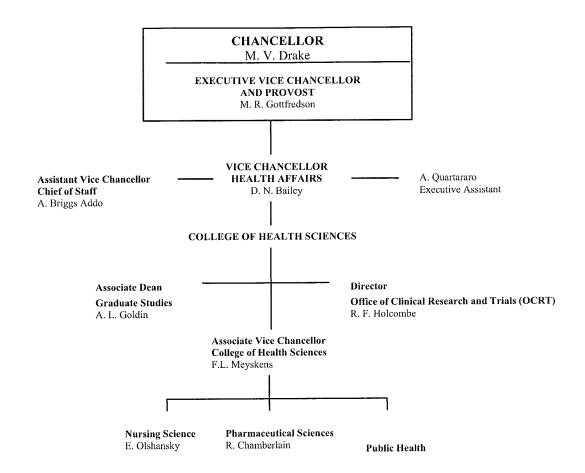


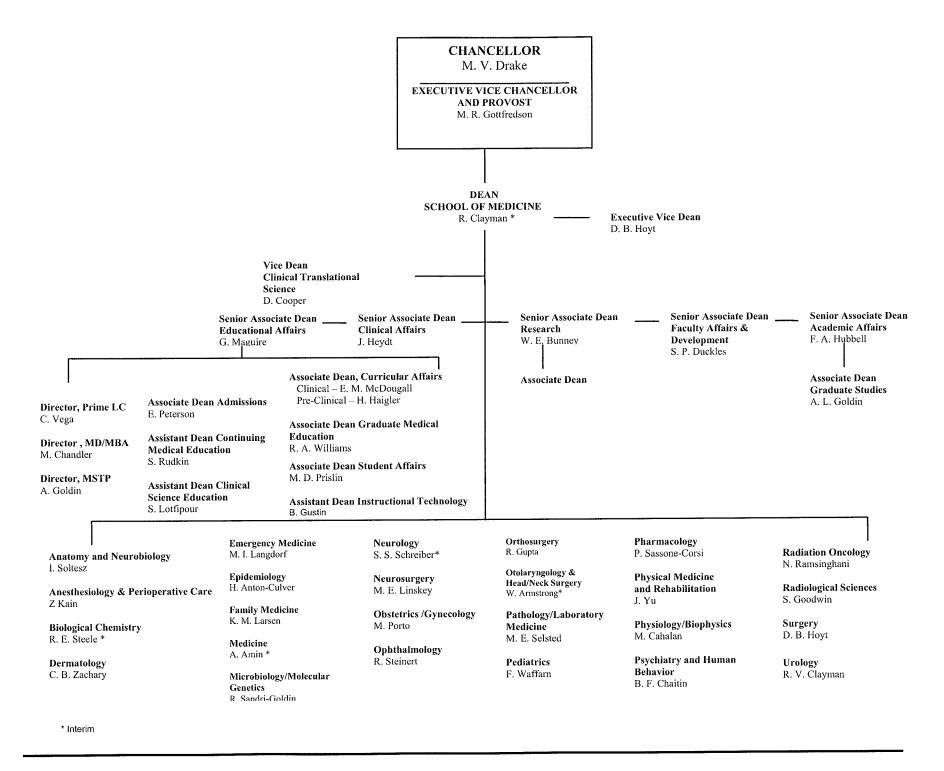
^{*} Interim



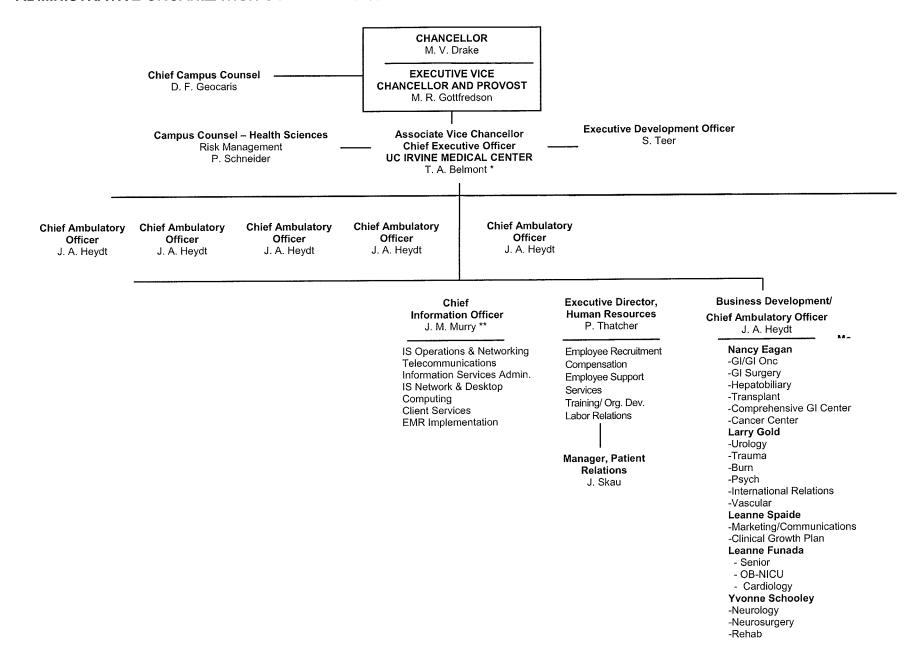




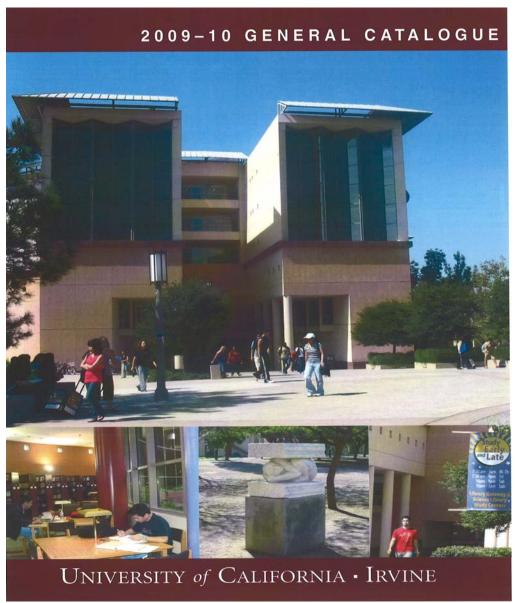




ADMINISTRATIVE ORGANIZATION UC Irvine Medical Center



Appendix 1C



http://www.editor.uci.edu/catalogue

Appendix 1D

WASC/ACSCU SUMMARY DATA

Institution:	University of California Irvine	Year founded:	1965
Chancellor:	Michael V. Drake, M.D.	Date:	July 29, 2009
Calendar plan: □ Semo	ester √Quarter □-Trimester □-Other		
Approved degree-gran	ting levels: \Box Associate $$ Bachelors $$ Masters	$\sqrt{ m Research~doctorate}$	\sim V Professional doctorate and other
Sponsorship and contro	ol:		
∃-Independent	ŧ		
∃-Independent	t, with affiliation		
□-Religiously	raffiliated		
□ California S	tate University		
$\sqrt{}$ University (of California		
University c	of Hawaii		
$\sqrt{ m Public}$			
□ -Proprietary			

FOR UNDERGRADUATE PROGRAMS:

Table 1 — Enr	ollment by e	thnicity and g	ender (using U	JC definitions	s for students):				Data re	ported as of	Fall 2008
Enrollment by category	Total FTE of students*	Total headcount of students	Non-resident alien headcount	Black, non- Hispanic headcount	Am Indian/ Alaska native headcount	Asian / Pacific Islander headcount	Hispanic/ Latino headcount	White/non- Hispanic headcount	Ethnicity unknown headcount	Total male headcount	Total female headcount
Undergraduate	21,699	22,122	603	498	96	11,576	2,855	5,146	1,348	10,500	11,622
Non-degree	0	0	0	0	0	0	0	0	0	0	0
Total	21,699	22,122	603	498	96	11,576	2,855	5,146	1,348	10,500	11,622

^{*} FTE formula = FT + (PT/3)

Table 2 — Freshmen cohort 6-year graduation rates, last 3 years, by ethnicity and gender

Freshman cohort year (entering Fall)	Overall graduation percentage	Non-resident alien %	Black, non- Hispanic %	Am Indian / Alaska native %	Asian / Pacific Islander %	Hispanic / Latino %	White, non- Hispanic %	Ethnicity unknown %	Male %	Female %
2000	79%	81%	68%	89%	83%	70%	73%	82%	76%	82%
2001	80%	82%	71%	65%	83%	69%	78%	79%	77%	82%
2002	81%	76%	72%	53%	85%	75%	77%	81%	79%	83%
3-year averages:	80%	79%	71%	70%	84%	71%	77%	80%	77%	82%

Table 3 — Transfer cohort 6-year graduation rates, last 3 years, by ethnicity and gender

Transfer cohort year (entering Fall)	Overall graduation percentage	Non-resident alien %	Black, non- Hispanic %	Am Indian / Alaska native %	Asian / Pacific Islander %	Hispanic / Latino %	White, non- Hispanic %	Ethnicity unknown %	Male %	Female %
2000	86%	84%	79%	75%	86%	87%	85%	88%	84%	86%
2001	85%	90%	61%	60%	87%	85%	83%	81%	82%	87%
2002	86%	86%	72%	75%	85%	84%	88%	88%	84%	87%
3-year averages:	85%	87%	72%	71%	86%	85%	85%	86%	84%	87%

FOR GRADUATE PROGRAMS:

Table 4 — Enrollment in each program level by ethnicity and gender (using UC definitions for students)

Data reported as of Fall 2008

Enrollment by category	Total FTE of students*	Total headcount of students	Non-resident alien headcount	Black, non- Hispanic headcount	Am Indian/ Alaska native headcount	Asian / Pacific Islander headcount	Hispanic/ Latino headcount	White/non- Hispanic headcount	Ethnicity unknown headcount	Total male headcount	Total female headcount
Post- baccalaureate (credential)	115	116	2	2	0	34	13	54	11	36	80
Masters	1,277	1,631	292	22	5	399	94	487	332	988	643
Research doctorate	2,630	2,685	686	41	7	355	198	1,075	323	1,568	1,117
Professional doctorate	408	430	0	5	2	116	32	129	146	236	194
Medical residents	647	647	n/a †	n/a †	n/a †	n/a †	n/a †	n/a †	647	n/a†	n/a†
Total	5,077	5,509	980	70	14	904	337	1,745	1,459	2,828	2,034

^{*} FTE formula = FT + (PT/3)

Data for cohort graduation rates, last 3 years, by ethnicity and gender:

[†] Ethnicity and gender data for medical residents is unavailable

Table 5A — 3-year completion rates for students entering with the objective of earning a master's degree

Cohort year	Graduation percentage (all programs)	Non-resident alien %	Black, non- Hispanic %	Am Indian / Alaska native %	Asian / Pacific Islander %	Hispanic / Latino %	White, non- Hispanic %	Ethnicity unknown %	Male %	Female %
2003	89%	90%	100% *	50% *	92%	82%	89%	88%	90%	88%
2004	91%	95%	100% *	100% *	95%	88%	90%	81%	92%	89%
2005	90%	98%	71%	100% *	87%	93%	89%	92%	89%	92%
3-year averages:	90%	95%	83%	83% *	92%	88%	89%	87%	90%	89%

^{*} There were 10 or fewer students who identified themselves as this ethnicity in the entering cohort

Table 5B — 8-year completion rates for students entering with the objective of earning a research or professional doctorate

Table 3B 0 y	Highest degree earned	Non-resident	Black, non-	Am Indian /	Asian / Pacific	Hispanic /	White, non-	Ethnicity		
Cohort year	and graduation percentage	alien %	Hispanic %	Alaska native %	Islander %	Latino %	Hispanic %	unknown %	Male %	Female %
Conort year	Master's: 21%	13%	0% *	0% *	29%	38%	16%	24%	20%	22%
1998	Doctorate: 58%	40%	100% *	50% *	42%	15%	62%	63%	57%	60%
	Master's: 22%	27%	25% *	n/a†	50%	19%	16%	24%	24%	20%
1999	Doctorate: 58%	53%	50% *	n/a †	31%	61%	61%	59%	55%	62%
	Master's: 21%	35%	0% *	n/a †	22%	11%	19%	23%	24%	17%
2000	Doctorate: 59%	43%	100% *	n/a†	47%	59%	60%	62%	58%	60%
	Master's: 21%	26%	13% *	0% *	33%	19%	17%	24%	23%	19%
3-year averages:	Doctorate: 58%	45%	75% *	50% *	40%	53%	61%	61%	57%	61%

^{*} There were 10 or fewer students who identified themselves as this ethnicity in the entering cohort

Current faculty *: Total FTE of faculty: 1,693 as of: Fall 2008 (October 31, 2008)

Full-time faculty headcount: 1,489 % non-Caucasian: 33% % male: 66% % female: 34%

Part-time faculty headcount: 480 % non Caucasian: 30% % male: 57% % female: 43%

FTE student-to-FTE faculty ratio: 16-to-1

Finances:

[†] There were no students who identified themselves as this ethnicity in the entering cohort

^{*} Includes ladder-rank (tenure and tenure-track) faculty; Senate lecturers; non-Senate lecturers; and other teaching faculty titles (i.e., adjunct professor; clinical professor; professor in residence; professor of clinical X; visiting professor)

A. Annual tuition rate (2008-09): \$29,383 Undergraduate non-resident tuition and fees: Undergraduate resident fees: \$8,775 \$26,268 \$11,262 Graduate non-resident tuition and fees: Graduate resident fees: B. Total annual operating budget (2007-08): \$1,673,666,000 15.4% C. Percentage from tuition and fees (2007-08): **\$0** (FY2006-07); **\$0** (FY2007-08) D. Operating deficit(s) for past 3 years: **\$0** (FY 2005-06); E. Current accumulated deficit: \$0 **UC** Regents F. Endowment (2007-08): \$55,486,000 \$186,514,000 **UCI** Foundation \$242,000,000 Total B. Meetings per year: 6 regularly scheduled bi-monthly A. Size: 26 Regents Governing board: meetings 3 FTE Off-campus locations (2008-09): 1 B. Total enrollment: A. Number: Distance education programs (50% or more of program/degree requirements are offered via any technology-mediated delivery system, 2008-09):

A. Number: 1 B. Total enrollment: 44 FTE

WASC Institutional Proposal

Appendix 1E WASC Institutional Proposal

Data Exhibit I Headcount Enrollment by Level (Fall Term)

	Total headcount enrollment	Lower division headcount	Upper division headcount	Graduate headcount	Post- baccalaureate (credential) headcount	Medical residents headcount	Total FTE enrollment
2004-05	24,876	7,866 32%	11,976 48%	4,290 17%	132 1%	612 2%	23,980
2005-06	24,987	8,287 33%	11,643 47%	4,302 17%	131 1%	624 2%	24,156
2006-07	25,870	9,209 36%	11,510 44%	4,386 17%	124 less than 1%	641 2%	25,063
2007-08	27,126	9,881 36%	11,815 44%	4,629 17%	158 1%	643 2%	26,319
2008-09	27,631	9,227 33%	12,895 47%	4,746 17%	116 less than 1%	647 2%	26,776

For more detailed enrollment information, see the Office of Institutional Research's website (http://www.oir.uci.edu/)

Data Exhibit II
Headcount Enrollment by Status and Location (Fall Term)

	Total headcount enrollment	Full-time headcount	Part-time headcount	On-campus location headcount	Off-campus location headcount
2004-05	24,876	23,532 95%	1,344 5%	24,876 100%	0 0%
2005-06	24,987	23,741 95%	1,246 5%	24,987 100%	0 0%
2006-07	25,870	24,659 95%	1,211 5%	25,870 100%	0 0%
2007-08	27,126	25,915 95%	1,211 5%	27,121 100%	5 0%
2008-09	27,631	26,349 95%	1,282 5%	27,628 100%	3 0%

For more detailed enrollment information, see the Office of Institutional Research's website (http://www.oir.uci.edu/)

Data Exhibit III Degrees and Certificates Granted by Level (Academic Year)

	Total degrees granted	Less than 2-year	Associate	Bachelor	Post- baccalaureate	Master	Doctorate	Other *
2003-04	6,098	n/a	n/a	4,909 78%	209 3%	907 14%	282 4%	0 0%
2004-05	6,923	n/a	n/a	5,506 80%	176 3%	943 14%	298 4%	0 0%
2005-06	7,114	n/a	n/a	5,660 80%	158 2%	951 13%	345 5%	0 0%
2006-07	7,004	n/a	n/a	5,514 79%	172 2%	922 13%	395 6%	1 0%
2007-08	7,132	n/a	n/a	5,505 77%	223 3%	942 13%	462 6%	0 0%

^{*} Candidate in Philosophy (awarded posthumously)

For more detailed degree information, see the Office of Institutional Research's website (http://www.oir.uci.edu/)

Data Exhibit IV Faculty by Employment Status *

	Total faculty headcount	Full-time faculty	Part-time faculty	Total faculty FTE
2004-05	1,791	1,351 88%	440 12%	1,535
2005-06	1,863	1,402 87%	461 13%	1,603
2006-07	1,919	1,416 86%	503 14%	1,640
2007-08	1,960	1,443 86%	517 14%	1,672
2008-09	1,969	1,489 88%	480 12%	1,693

^{*} Includes ladder-rank (tenure and tenure-track) faculty; Senate lecturers; non-Senate lecturers; and other teaching faculty titles (i.e., adjunct professor; clinical professor; professor in residence; professor of clinical X; visiting professor)

For more detailed faculty information, see the Office of Institutional Research's website ($\underline{\text{http://www.oir.uci.edu/}})$

Data Exhibit V Key Financial Ratios

	2004-05	2005-06	2006-07	2007-08
Return on net assets Change in net assets / total net assets at the beginning of the fiscal year	12.6%	11.0%	4.8%	9.0%
Net income ratio Change in unrestricted net assets / total unrestricted revenues	6.3%	2.8%	2.4%	2.0%
Operating income ratio Operating income / total expenses	91.7%	88.9%	86.8%	86.8%
Viability ratio Expendable net assets / long-term debt	24.8%	24.8%	14.2%	12.7%
Instructional expense per student	\$14,761	\$15,876	\$16,543	\$16,562
Net tuition per student	\$7,143	\$7,609	\$7,567	\$8,109

WASC Institutional Proposal

Appendix 1F Inventory of Educational Effectiveness Indicators

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
Institutional level:						N/A
General Education:	Yes	General Catalogue	For review of Category I: Writing, random samples of writing were evaluated by independent readers using a common scoring rubric. Results across courses were compared.	Council on Educational Policy	Results not yet available	2008-09 Category I
School of the Arts						
Arts & Humanities	Yes	UCI Course Guide; program website; information to prospective majors	Capstone course	Each undergraduate assigned a faculty advisor who assesses the student at the end of their course of study; Program Director conducts informal interviews with exiting seniors.		
Dance	Yes					
Drama	Yes					
Music	Yes	144				
Music Theatre	No					
Studio Art	Yes					
School of Biological Sc	iences					
Biochemistry &	Yes	Program website	Surveys; Scores in standardized			

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
Molecular Biology			tests; Cohort survival analyses.			
Biological Sciences	Yes	Program website	Surveys; Scores in standardized tests; Cohort survival analyses.			
Developmental & Cell Biology	Yes	Program website	Surveys; Scores in standardized tests; Cohort survival analyses.			100.00
Ecology & Evolutionary Biology	Yes	Program website				
Genetics	Yes	Program website	Surveys; Scores in standardized tests; Cohort survival analyses.			
Microbiology & Immunology	Yes	Program website	Surveys; Scores in standardized tests; Cohort survival analyses.			
Neurobiology	Yes	Program website	Surveys; Scores in standardized tests; Cohort survival analyses.			
Plant Biology	Yes	Program website	Surveys; Scores in standardized tests; Cohort survival analyses.			
Pharmaceutical Sciences (with Health Sciences)	No					
School of Business	<u> </u>	L				
Business Administration	Yes		The following AACSB approved assessment measures shall be used: assignments, exams, quizzes, presentations or parts of the above.	Same process used by MBA program (each faculty member who teaches a core course assesses each student on a pass/fail basis based on course's learning goals) will be used.		
Business Information Management (with Information and Computer Science)	No					
School of Engineering						1
Aerospace Engineering	Yes	Program website	Capstone course: Rubric - MAE 159	Instructor, Accreditation Faculty &/or curriculum committee	Continuous curriculum program improvement	2007-08 ABET

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
			Embedded assessment in upper-division core courses.	interprets data from rubrics, embedded assessment and grades.		
Biomedical Engineering	Yes	Program website	Capstone course: Rubric - BME 180A-B-C Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
Biomedical Engineering: Premedical	Yes	Program website	Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2004-05 Academic Senate Program Review
Chemical Engineering	Yes	Program website	Capstone course: Rubric - CBEMS 149A-B Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
Civil Engineering	Yes	Program website	Capstone course: Rubric - CEE 181A-B-C Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
Computer Engineering	Yes	Program website	Capstone course: Rubric - EECS 129A-B Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
Computer Science and Engineering (with Information and Computer Science)	Yes	Program website	Capstone course: Rubric-CSE 181A-B-CW Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2009-10 (projected initial review by ABET)
Electrical Engineering	Yes	Program website	Capstone course: Rubric - EECS 189A-B Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
Engineering	Yes	Program website	Embedded assessment in upper-division core courses.	Instructor, Faculty Advisor &/or curriculum committee interprets data from embedded assessment and grades.	Continuous curriculum program improvement.	2004-05 Academic Senate Program Review
Environmental Engineering	Yes	Program website	Capstone course: Rubric - CEE 181A-B-C Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
Materials Science Engineering	Yes	Program website	Capstone course: Rubric-CBEMS 189A-B-C Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
Mechanical Engineering	Yes	Program website	Capstone course: Rubric - MAE 151 Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	2007-08 ABET
College of Health Scien	ices		1			
Nursing Science	Yes	Student Handbook; program website	Standardized testing program (ATI); NCLEX Program Reports; Faculty evaluations of students' final projects; Clinical instructor evaluations from each quarter of clinical practicum.	At regular bi-annual faculty retreats, course evaluations, student feedback, and clinical instructor feedback is reviewed.	From discussions at bi- annual retreats, areas for improvement are identified and plans for implementing the necessary curriculum changes are developed.	
Pharmaceutical Sciences (with Biological Sciences)	No					
Public Health Policy	Yes	Program website; publicity material	Questionnaire to solicit responses on student experiences; evaluations from preceptors at the practicum agencies; writing samples from		Revised major requirements to facilitate student enrollment in a wider	

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
			students enrolled in the upper division writing course		variety of upper division electives; Continue to solicit student and faculty input on various aspects of the curriculum, as a result of assessment.	
Public Health Sciences	Yes	Program website; publicity material	Questionnaire to solicit responses on student experiences; evaluations from preceptors at the practicum agencies; writing samples from students enrolled in the upper division writing course		Revised major requirements to facilitate student enrollment in a wider variety of upper division electives; Continue to solicit student and faculty input on various aspects of the curriculum, as a result of assessment.	
School of Humanities	<u> </u>	<u></u>				
African American Studies	Yes	Program website; General Catalogue; publicity materials	Course embedded assessment through exams and papers; Assessment-related questions added to course evaluations; Exit questionnaires for graduating majors; Observations of oral presentations			
Art History	Yes	Department and School websites; advising and orientation materials	Teaching evaluations; Grades; Written assignments; Oral assignments; Exams; Feedback from majors in one-to-one advising sessions; Feedback from Art History Undergraduate Association.			
Asian American Studies	Yes	General Catalogue; program website; publicity materials	Course exams; Homework assignments; Research papers or reports; Oral exams and presentations; Portfolios of student	Faculty will discuss how to track the progress of students' written work between the introductory series and upper-division courses;	Program has changed its prerequisite and elective requirements accordingly to findings.	

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
			work; Reflective essays; Course journals.	At the department Curriculum Committee meetings, as well as at faculty departmental meetings, all faculty assess outcomes.		
Chinese Studies	Yes	General Catalogue; Program website	Classroom performance; Graded assignments and tests.		Revisions made at the level of each learning objective, according to findings.	
Classical Civilization	Yes	Program website; General Catalogue; advising and orientation materials.	Capstone requirement (senior project); Students' post-graduation and career plans.	Individual faculty will assess individual students based on their performance in required and elective courses.		
Classics	Yes	Program webpage; General Catalogue; advising and orientation materials.	Senior capstone project; Students' post-graduation and career plans.	Individual faculty will assess individual students based on their performance in required and elective courses.		
Comparative Literature	Yes	Program website; advising and publicity materials.	Student evaluation forms; Student writing; Senior exit survey; graduates' post-graduation outcomes (graduate school admissions and employment).	Faculty review of student course evaluations annually; For student writing, faculty and graduate students will discuss features of student essays they find admirable and circulate these descriptions to students and faculty for inclusion on syllabi and post exemplary student work on our website; Exploring with the Campus Writing Coordinator the possibility of helping our students to create e-portfolios.	In anticipation of annual review of student writing, faculty who teach regularly in a particular segment of the curriculum have organized continuous meetings to discuss their approaches, methods, and expectations.	
East Asian Cultures	Yes	General Catalogue; Program website	Classroom performance; Assignments and tests	Discussion with Academic Coordinator and faculty about perceived deficiencies in learning outcome attainment; Deficiencies related to writing are addressed through consultation with the director and staff of the Writing	Changing the mix of courses made available as electives within the major and through discussion with the faculty in respective	

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
				Center.	program.	
English	Yes	General Catalogue; Program website; Advising materials	Coursework, course papers; Student course evaluations; Student work from the Composition Program's Writing Awards Tea; Students' post-graduation outcomes (e.g., acceptance to professional and graduate schools, employment, publications, public awards).	Individual faculty not only assess individual students based on their performance in courses but also act as advisors as well as instructors, guiding students in improving their work; Papers read and assessed by members of the Undergraduate Committee.	Student evaluations are regularly used for mentoring new teachers; Undergraduate committee actively reviews curricular and pedagogical matters and makes recommendations to the department, which discusses all these matters; Undergraduate committee and members of the department use results to make assessment issues prominent in a new way.	
European Studies	Yes	General Catalogue; Program website; publicly, advising, and orientation materials	Course-embedded assessments; Capstone course; Homework assignments, study questions, oral presentations, written reports, exams, final papers; Course evaluations.		Recently added History 70B to its core curriculum to provide students with a firm ground in European history and historical scholarship.	
Film and Media Studies	Yes	General Catalogue; Program website; publicity and orientation materials	Direct methods: capstone courses, noteboards, tests and exams, screenings of films, observations of oral presentations, performances. Indirect methods: Student course evaluations, student surveys (seniors, alumni), exit interviews, self-reflections			
French	Yes	General Catalogue; Program website	Series of oral and written tests; Capstone seminar.	Language proficiency is assessed throughout the lower division courses; Faculty identify further	Language assessment of students and faculty perception of difficulty	

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
				areas where they might want to make any improvements through capstone seminar.	in making the transition to upper division courses was an important impetus for recent major revisions.	
German Studies	Yes	General Catalogue	Exams and papers/essays; Class participation; Oral reports.	Rely on exams and papers due at the end of each quarter, and on discussions of majors among the faculty.		
Global Cultures	Yes					
History	Yes	General Catalogue; Program website	Research papers from History 100W and History 190	All faculty members teaching the two courses are use rubrics and make competency ratings. Mean scores will be tabulated and will be examined to determine if students have met proficiency on core competencies.		
Japanese Language and Literature	Yes	General Catalogue; Program website	Junior-Senior capstone seminar, which includes a major research paper; Course evaluations.			
Korean Literature and Culture	Yes	General Catalogue; Program website	Junior-senior colloquium, where all students demonstrate research and writing abilities by writing papers.			
Latin	Yes	General Catalogue; Program website; Advising and orientation materials	Senior capstone project; Students' post-graduation and career outcomes.	Individual faculty will assess individual students based on their performance in required and elective courses.		
Literary Journalism	Yes	General Catalogue; Program website; Advising materials	Coursework; post-graduation outcomes (e.g., professional and graduate schools, employment, publications, public awards).	Faculty assess individual students based on their performance in courses and also act as advisors as well as instructors, guiding students in improving their work; Faculty and teaching assistants meet regularly to discuss and review sample student work and discuss grading rubrics and	Now in its fifth year, the major has already added and then refined a course, LJ 21, in order to provide a foundation in research and reporting.	

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
				student performance.		
Philosophy	Yes	General Catalogue; Program website; Advising materials	Written essays; exams.			
Religious Studies	Yes	General Catalogue; Program website; Advising materials		Individual faculty assess individual students based on their performance in courses; Program director looks at the overall performance of this small group of majors and brings up any concerns to the Religious Studies Committee.		
Spanish	Yes					
Women's Studies	Yes	General Catalogue; Department website; publicity materials.	Senior capstone seminar; Senior exit survey.	Faculty member teaching senior capstone course tailors guidance for student learning; Senior exit survey administered in the capstone course.	Prerequisites have been added to upper-division core courses; results of exit survey and capstone course performance discussed at dept. meetings.	
School of Information &	Computer Sci	iences				
Business Information Management (with Business)	No					
Computer Science	Yes	Program website				
Computer Science and Engineering (with Engineering)	Yes	Program website	Capstone course: Rubric-CSE 181A-B-CW Embedded assessment in upper-division core courses.	Instructor, Accreditation Faculty &/or curriculum committee interprets data from rubrics, embedded assessment and grades.	Continuous curriculum program improvement	
Informatics	Yes	Program website				
Information and Computer Science	Yes	Program website				
School of Physical Scien	ices					

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
Chemistry	Yes	Program website	E-portfolios; other individual student activities (e.g. oral presentations, poster sessions); Data from graduating seniors and alumni.	Departmental Assessment Committee with rotating membership will analyze assessment data; Assessment Committee will summarize its assessment activities at the end of each academic year and will report the results to the Vice Chair for Curriculum and to the full faculty.	Department will decide upon and carry out appropriate follow-ups to all assessment activities; Individual course instructors will use the feedback to modify their courses.	
Earth and Environmental Studies, B.A.	Yes					
Earth and Environmental Studies, B.S.	Yes					
Mathematics	Yes					
Physics	Yes	Program website	Coursework from graduating seniors; Senior projects and oral presentations.	Randomly select coursework to be evaluated by the undergraduate committee; Faculty evaluation of senior projects and oral presentations at the annual UROP symposium.		
School of Social Ecology	7					
Criminology, Law and Society	Yes					
Psychology and Social Behavior	Yes	General Catalogue; Program website	GRE subject test; Samples of final field study papers; student survey at entrance and at exit points.			
Social Ecology	No					
Urban Studies	Yes	Program website; advising material.				
School of Social Science	es				1	1
Anthropology	Yes	Program website;	Research papers; senior exit survey			

PROGRAM	(1) Have formal learning outcomes been developed?	(2) Where will these learning outcomes be published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree?	(4) Who interprets the evidence? What is the process?	(5) How have the findings been used?	(6) Date of last program review for this degree program
	-	General Catalogue; Publicity materials				
Business Economics	No					
Economics	Yes	Program website; General Catalogue	Exams			
Quantitative Economics	No					
Chicano/Latino Studies	Yes	General Catalogue; Publicity materials;	Oral presentations and research projects; Writing assignments; Post-graduation careers and study.	Faculty review of oral presentations and research projects; Annual assessments of a random sample of writing assignments submitted by Chicano/Latino Studies majors in upper-division classes; Monitoring of post-graduation careers and study.		
International Studies	Yes	Program website; General Catalogue	Exams			
Political Science	Yes	Program website; General Catalogue				
Psychology	Yes					
Social Science	No					
Sociology	Yes	Program website; General Catalogue				

UNDERGRADUATE AND GRADUATE DEGREES

Degree Title	Degree ¹	Degree Title	Degree ¹
Aerospace Engineering	B.S.	Genetic Counseling	M.S.
African American Studies	B.A.	Genetics	B.S.
Anthropology	B.A., M.A. ² , Ph.D.	German	M.A. ² , Ph.D.
Art History	B.A.	German Studies	B.A.
Arts and Humanities	B.A.	Global Cultures	B.A.
Asian American Studies	B.A.	History	B.A., M.A., Ph.D.
Biochemistry and Molecular Biology	B.S.	Humanities	B.A.
Biological Sciences	B.S., M.S. ⁴ , Ph.D.	Humanities and Arts	B.A.
Biomedical Engineering	B.S., M.S., Ph.D.	Informatics	B.S.
Biomedical Engineering: Premedical	B.S. B.S.	Information and Computer Science	B.S., M.S., Ph.D.
Dusings Administration		International Studies	B.A.
Business Administration	B.A., M.B.A.		B.A.
Business Economics	B.A.	Japanese Language and Literature Korean Literature and Culture	B.A.
Business Information Management	B.S.		
Chemical and Biochemical Engineering	M.S., Ph.D.	Latin	B.A.
Chemical Engineering	B.S.	Law	J.D.
Chemistry	B.S., M.S. ^{2, 5} , Ph.D.	Literary Journalism	B.A.
Chicano/Latino Studies	B.A.	Management	M.S. ² , Ph.D.
Chinese Studies	B.A.	Materials Science and Engineering	M.S., Ph.D.
Civil Engineering	B.S., M.S., Ph.D.	Materials Science Engineering	B.S.
Classical Civilization	B.A.	Mathematics	B.S., M.S. ⁵ , Ph.D.
Classics	B.A., M.A. ² , Ph.D. ⁶	Mechanical and Aerospace Engineering	M.S., Ph.D.
Comparative Literature	B.A., M.A. ² , Ph.D.	Mechanical Engineering	B.S.
Computer Engineering	B.S.	Medicine	M.D.
Computer Science	B.S., M.S., Ph.D.	Microbiology and Immunology	B.S.
Computer Science and Engineering	B.S.	Music	B.A., B.Mus., M.F.A.
Criminology, Law and Society 1	B.A., M.A.S., Ph.D.	Music Theatre	B.F.A.
Culture and Theory	M.A. ² , Ph.D.	Networked Systems	M.S., Ph.D.
	S.A., B.F.A., M.F.A.	Neurobiology	B.S.
Developmental and Cell Biology	B.S.	Nursing Science	B.S., M.S.
Drama	B.A., M.F.A.	Pharmaceutical Sciences	B.S.
Drama and Theatre	Ph.D. ⁷	Pharmacology and Toxicology	M.S. ² , Ph.D.
Earth and Environmental Sciences	B.S.	Philosophy	B.A., M.A. ² , Ph.D.
Earth and Environmental Studies	B.A.	Physics	B.S., M.S. ² , Ph.D.
Earth System Science	M.S. ² , Ph.D.	Planning, Policy, and Design	Ph.D.
East Asian Cultures	B.A.	Plant Biology	B.S.
East Asian Languages and Literatures	M.A. ² , Ph.D.	Political Science	B.A., M.A. ² , Ph.D.
Ecology and Evolutionary Biology	M.A, PII.D. B.S.	Psychology	B.A., M.A. ² , Ph.D.
Economics Economics		Psychology and Social Behavior	B.A., Ph.D.
	B.A., M.A. ² , Ph.D.	Public Health	Б.А., Г II.D. М.Р.Н.
	Credential Programs	Public Health Policy	м.р.н. В.А.
Education	M.A. ² , Ph.D.	Public Health Sciences	B.S.
Educational Administration and Leadership			
Electrical and Computer Engineering	M.S., Ph.D.	Quantitative Economics	B.A. B.A.
Electrical Engineering	B.S.	Religious Studies	
Elementary and Secondary Education	M.A.T.	Social Ecology	B.A., M.A., Ph.D.
Engineering	B.S., M.S., Ph.D.	Social Science	B.A., M.A. ⁹ , Ph.D.
English B.A., M	I.A. ² , M.F.A., Ph.D.	Sociology	B.A., M.A. ² , Ph.D.
Environmental Analysis and Design	B.A. ³	Spanish	B.A., M.A., Ph.D.
Environmental Engineering	B.S.	Statistics	M.S., Ph.D.
Environmental Health Science and Policy	M.S. ³ , Ph.D. ³	Studio Art	B.A., M.F.A.
Environmental Toxicology	M.S., Ph.D.	Transportation Science	M.S., Ph.D.
European Studies	B.A.	Urban and Regional Planning	M.U.R.P.
Film and Media Studies	B.A.	Urban Studies	B.A.
Fine Arts	M.F.A.	Visual Studies	$M.A.^2$, Ph.D.
French	B.A., M.A. ² , Ph.D.	Women's Studies	B.A.

Degrees: B.A. = Bachelor of Arts; B.F.A. = Bachelor of Fine Arts; B.S. = Bachelor of Science; B.Mus.= Bachelor of Music; Ed.D. = Doctor of Education; J.D. = Juris Doctor; M.A. = Master of Arts; M.A.S. = Master of Advanced Study; M.A.T. = Master of Arts in Teaching; M.B.A. = Master of Business Administration; M.F.A. = Master of Fine Arts; M.P.H. = Master of Public Health; M.S. = Master of Science; M.D. = Doctor of Medicine; M.U.R.P. = Master of Urban and Regional Planning; Ph.D. = Doctor of Philosophy. Titles of degrees may not correspond exactly with specific fields of study offered; see the Index and the academic unit sections for information.

NOTE: A list of inactive degree programs is available in the Appendix.

 $^{^2}$ Emphasis at the graduate level is on the Ph.D. degree; the master's degree may be awarded to Ph.D. students after fulfillment of the requirements.

³ Admission to this program is no longer available.

⁴ Emphasis at the graduate level is on the Ph.D. degree; the M.S. degree may be awarded to Ph.D. students after fulfillment of the requirements. However,

students may apply directly to the M.S. concentration in Biotechnology and in Ecology and Evolutionary Biology.

⁵ In addition to the regular M.S. degree program, a program coordinated with the Department of Education leads to an M.S. degree and a Teaching Credential.

⁶ UCI, UCR, and UCSD joint program.

⁷ UCI and UCSD joint program.

⁸ UCI and CSU Fullerton, Long Beach, Los Angeles, and Pomona joint program; admission is no longer available.

⁹ Emphasis at the graduate level is on the Ph.D. degree; the M.A. degree may be awarded to Ph.D. students after fulfillment of the requirements. However, an M.A. in Social Science (concentration in Demographic and Social Analysis or in Mathematical Behavioral Sciences) is available.

UNDERGRADUATE MAJORS, MINORS, AND ASSOCIATED AREAS OF STUDY

Students are urged to become informed of and understand all requirements concerning their intended majors, minors, and associated areas of study. Special restrictions apply to some majors and minors; for example, some minors require formal application or declaration by students, others may be completed without such formalities. Information about the programs listed below may be found in the academic unit sections of the Catalogue.

Undergraduate majors are offered in all of the bachelor's degree programs on the list of degree titles; the degree programs are referred to as majors in the following list. In association with these majors, UCI offers a number of minors, concentrations, specializations, and emphases.

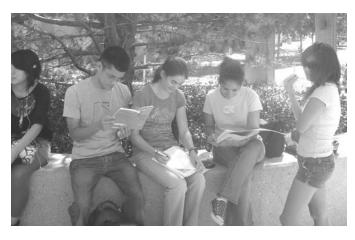
A **minor** consists of a coordinated set of courses (seven or more) which together take a student well beyond the introductory level in an academic field, subject matter, and/or discipline but which are not sufficient to constitute a major. An interdisciplinary minor consists of courses offered by two or more departments, schools, or programs. Generally, all minors are available to all students, with the following exceptions: (1) students may not minor in their major, and (2) students may not complete certain other major/ minor combinations that are expressly prohibited, as noted in the Catalogue. Minors are listed on a student's transcript but not on the baccalaureate diploma.

A concentration is a program of interdisciplinary study consisting of courses offered by two or more schools or programs. Concentrations are similar to minors in that they require fewer units of work than majors do, and the area of concentration appears on the student's transcript but not on the baccalaureate diploma. Concentrations are taken in combination with a major in one of the schools or programs offering the concentration.

A **specialization** is a program of study which enables students to focus on courses in a particular field within a major. The area of specialization pursued appears on the student's transcript but not on the baccalaureate diploma.

An emphasis is a program of study within a major which emphasizes a specific area of the discipline. Emphases usually have a defined course of study and are not listed on the transcript nor on the baccalaureate diploma.

In addition, the Campuswide Honors Program, various majorspecific honors programs, and Excellence in Research programs are available. See the Division of Undergraduate Education section for information.



CLAIRE TREVOR SCHOOL OF THE ARTS

Majors:

Arts and Humanities

Dance

Specializations (B.F.A. only):

Choreography

Performance

Drama

Music

Emphases (B.A. only):

Composition

Music History

Music Theory

Performance

Specializations (B.Mus. only):

Guitar and Lute Performance

Instrumental Performance

Bassoon

Clarinet

Double Bass

Flute

Horn

Ohoe

Percussion

Trombone

Trumpet

Tuba

Viola

Violin

Violoncello

Jazz Studies

Bass

Percussion

Piano

Saxophone Trombone

Trumpet

Piano Performance

Vocal Performance

Music Theatre

Studio Art

Concentration: Game Culture and Technology (available to currently enrolled students majoring in Studio Art, Computer Science, Informatics, or Information and Computer Science)

Minors:

Digital Arts

Drama

Studio Art

Concentration: Medieval Studies (in combination with any major in the Claire Trevor School of the Arts or the School of Humanities)

OC IIVIIIe 2009-10 • Aleas of Study	
SCHOOL OF BIOLOGICAL SCIENCES	Graphics/Vision
Majors:	Parallel and Distributed Computing
Biochemistry and Molecular Biology	Electrical Engineering Specializations:
Biological Sciences	Electro-optics and Solid-State Devices
Developmental and Cell Biology	Power Electronics and Power Systems
Ecology and Evolutionary Biology	Systems and Signal Processing
Genetics	Engineering
Microbiology and Immunology	Environmental Engineering
Specializations:	Materials Science Engineering
Immunology Microbiology	Specializations:
Virology	Biomaterials
Neurobiology	Electronics Processing and Materials
Pharmaceutical Sciences (coordinated for the College of Health Sciences)	Materials and Mechanical Design
Plant Biology	Mechanical Engineering
Concentration: Biological Sciences Education	Specializations:
Minor: Biological Sciences	Aerospace Engineering
THE DALL MEDIAGE GOLLOGI, OF DURINGS	Energy Systems and Environmental Engineering Flow Physics and Propulsion Systems
THE PAUL MERAGE SCHOOL OF BUSINESS	Design of Mechanical Systems
Majors:	Minors:
Business Administration	Biomedical Engineering
Specializations:	Materials Science Engineering
Accounting	
General Management	SCHOOL OF HUMANITIES
Marketing	Majors:
Business Information Management (offered jointly with the Donald	African American Studies
Bren School of Information and Computer Sciences)	Art History
Minors: Accounting	Asian American Studies
Management	Chinese Studies
3-2 Program: Available to outstanding undergraduates in all majors*	Emphases:
	Chinese Culture and Society
*The Henry Samueli School of Engineering majors should contact their academic counselor.	Chinese Language and Literature
DEDARTMENT OF EDUCATION	Classical Civilization
DEPARTMENT OF EDUCATION	Classics
Minor: Educational Studies	Emphases: Greek
THE HENDY CAMHELL COHOOL OF ENGINEEDING	Latin
THE HENRY SAMUELI SCHOOL OF ENGINEERING	Comparative Literature
Majors:	Specialization: Cultural Studies
Aerospace Engineering	East Asian Cultures
Biomedical Engineering	English
Specializations:	Emphasis: Creative Writing
Biophotonics	European Studies
Micro and Nano Biomedical Engineering Biomedical Engineering: Premedical	Emphases:
Chemical Engineering Chemical Engineering	British Studies
Specializations:	Early Modern Europe
Biochemical Engineering	Encounters with the Non-European World French Studies
Environmental Engineering	German Studies
Materials Science	Italian Studies
Civil Engineering	Medieval Studies
Concentrations:	The Mediterranean World: Past and Present
Computer Applications	Modern Europe (1789–Present)
Engineering Management	Russian Studies
Infrastructure Planning	Spanish-Portuguese Studies
Mathematical Methods	Film and Media Studies
Specializations:	French
General Civil Engineering	German Studies
Environmental Hydrology and Water Resources Structural Engineering	Global Cultures
Transportation Systems Engineering	Emphases:
Computer Engineering	Atlantic Rim
Computer Engineering Computer Science and Engineering (offered jointly with the Donald	Hispanic, U.S. Latino/Latina, and Luso-Brazilian Culture
Bren School of Information and Computer Sciences)	Africa (Nation, Culture) and its Diaspora
Tracks:	Asias (Nation, Culture) and its Diaspora Europe and its Former Colonies
Algorithms	Pacific Rim
Artificial Intelligence	Inter-Area Studies

Inter-Area Studies

History Informatics Humanities and Arts Specializations: Humanities (Interdisciplinary) Software Engineering Japanese Language and Literature **Human-Computer Interaction** Korean Literature and Culture Organizations and Information Technology Latin Information and Computer Science Specializations: Literary Journalism Philosophy Artificial Intelligence Religious Studies Computer Systems Implementation and Analysis of Algorithms Emphases: Judaism/Christianity/Islam Information Systems World Religious Traditions Networks and Distributed Systems Spanish Optimization Software Systems Emphases: Cinema: Spain, Latin America, and U.S. Latino Concentrations: Literature and Culture Engineering and Computer Science in the Global Context (by Spanish for Future Teachers approval of the Associate Dean, in combination with any major in the Bren Women's Studies Minors: Game Culture and Technology (available to currently enrolled students African American Studies majoring in Computer Science, Informatics, Information and Computer Archaeology Science, or Studio Art) Art History Minors: Asian American Studies Informatics Asian Studies Information and Computer Science Chinese Language and Literature Statistics Classical Civilization **INTERDISCIPLINARY STUDIES** Comparative Literature English European Studies Business Information Management (offered jointly by The Paul Film and Media Studies Merage School of Business and the Donald Bren School of Information French and Computer Sciences) German Studies Computer Science and Engineering (offered jointly by the Donald Bren Global Cultures School of Information and Computer Sciences and The Henry Samueli Greek School of Engineering) History Tracks: Humanities and Law Algorithms Italian Studies Artificial Intelligence Japanese Language and Literature Graphics/Vision Jewish Studies Parallel and Distributed Computing Korean Literature and Culture Minors: Latin Civic and Community Engagement Latin American and Caribbean Studies Global Sustainability Philosophy History and Philosophy of Science Portuguese Native American Studies Queer Studies Religious Studies SCHOOL OF PHYSICAL SCIENCES Russian Studies Majors: Spanish Chemistry Women's Studies Concentrations: Concentration: Medieval Studies (in combination with any major in the Claire Biochemistry Trevor School of the Arts or the School of Humanities) Chemistry Education Earth and Environmental Sciences DONALD BREN SCHOOL OF INFORMATION AND Earth and Environmental Studies **COMPUTER SCIENCES** Mathematics Concentration: Mathematics for Economics Business Information Management (offered jointly with The Paul Specializations: Merage School of Business) Applied and Computational Mathematics Computer Science Mathematics for Education Computer Science and Engineering (offered jointly with The Henry Statistics Samueli School of Engineering) Physics Tracks: Concentrations: Algorithms Applied Physics Artificial Intelligence Biomedical Physics Graphics/Vision Computational Physics Parallel and Distributed Computing Philosophy of Physics

Physics Education Specialization: Astrophysics

UC Irvine 2009-10 • Areas of Study

Minors:

Earth and Atmospheric Sciences

Mathematics

SCHOOL OF SOCIAL ECOLOGY

Majors:

Criminology, Law and Society

Psychology and Social Behavior

Social Ecology

Urban Studies

Minors:

Criminology, Law and Society

Environmental Design

Psychology and Social Behavior

Urban and Regional Planning

Urban Studies

SCHOOL OF SOCIAL SCIENCES

Majors:

Anthropology

Business Economics

Specialization: International Issues and Economics

Chicano/Latino Studies

Economics

Specialization: International Issues and Economics

International Studies

Political Science

Psychology

Quantitative Economics

Specialization: International Issues and Economics

Social Science

Specializations:

Multicultural Studies

Public and Community Service

Research and Social Policy

Social Sciences for Secondary School Education

Sociology

Minors:

Anthropology

Chicano/Latino Studies

Conflict Resolution

Economics

Linguistics

Medical Anthropology

Political Science

Psychology

Sociology

COLLEGE OF HEALTH SCIENCES

Majors:

Nursing Science

Pharmaceutical Sciences

Public Health Policy

Public Health Sciences

Minor: Public Health

AREAS OF GRADUATE STUDY

For information about any area of graduate or professional study, **including the precise title of the degree conferred,** consult the *Catalogue's* academic unit sections.

Claire Trevor School of the Arts

Acting

Choral Conducting

Collaborative Piano

Dance

Design

Directing

Drama

Drama and Theatre

Guitar/Lute Performance

Guitai/Lute i citorinanee

Instrumental Performance

Integrated Composition, Improvisation, and Technology (ICIT)

Piano Performance

Stage Management

Studio Art

Vocal Arts

School of Biological Sciences

Anatomy and Neurobiology

Biological Chemistry

Biological Sciences

Biotechnology; Stem Cell Biology

Cellular and Molecular Biosciences (CMB)1

Developmental and Cell Biology

Ecology and Evolutionary Biology

Experimental Pathology

Interdepartmental Neuroscience Program (INP)1

Mathematical and Computational Biology²

Medicinal Chemistry and Pharmacology (MCP)2

Microbiology and Molecular Genetics

Molecular Biology and Biochemistry

Neurobiology and Behavior

Physiology and Biophysics

The Paul Merage School of Business

Business Administration

Executive M.B.A. (EMBA)

Fully Employed M.B.A. (FEMBA)

Health Care Executive M.B.A. (HCEMBA)

Management

Department of Education

Education

Elementary and Secondary Education

Multiple Subjects Credential (elementary)³

Single Subject Credential (secondary)³

Single Subject Credential in Mathematics, English, or Science with an Internship³

Bilingual Crosscultural, Language, and Academic Development (BCLAD) Emphasis in Spanish³

Preliminary Administrative Services³

Professional Clear Administrative Services³

The Henry Samueli School of Engineering

Biomedical Engineering

Chemical and Biochemical Engineering

Civil Engineering

Civil Engineering/Urban and Regional Planning⁴

Computer Graphics and Visualization

Computer Networks and Distributed Computing

Computer Systems and Software

Electrical Engineering

Environmental Engineering

Materials and Manufacturing Technology Materials Science and Engineering Mechanical and Aerospace Engineering Networked Systems⁵

School of Humanities

Asian American Studies⁶

Art History7

Chicano/Latino Literature

Chinese Language and Literature

Classics

Comparative Literature

Creative Nonfiction

Creative Writing: Poetry or Fiction

Critical Theory

Culture and Theory

East Asian Cultural Studies

East Asian Languages and Literatures

English and American Literature

Feminist Studies⁸

Film and Media Studies⁷

French

German

Greek

History

History of Gender and Sexuality

Humanities

Japanese Language and Literature

Latin

Philosophy

Spanish

Spanish Literature

Spanish-American Literature

Translation Studies

Visual Studies

Donald Bren School of Information and Computer Sciences

Computer Science

Critical Practices in Art, Science and Technology (CPAST)

Embedded Systems

Informatics

Information and Computer Science

Networked Systems⁵

Statistics

Interdisciplinary Graduate Programs

Critical Practices in Art, Science and Technology (CPAST)

Cellular and Molecular Biosciences (CMB)¹

Chemical and Materials Physics

Interdepartmental Neuroscience Program (INP)1

Mathematical and Computational Biology²

Mathematical Behavioral Sciences

Medicinal Chemistry and Pharmacology (MCP)²

Networked Systems⁵

Transportation Science

Visual Studies

School of Law

Law (J.D.)

School of Physical Sciences

Chemical and Materials Physics

Chemistry

Chemistry and Teaching Credential

Earth System Science

Mathematics

Mathematics and Teaching Credential

Medicinal Chemistry and Pharmacology (MCP)²

Physics

School of Social Ecology

Criminology, Law and Society Demographic and Social Analysis Environmental Analysis and Design Epidemiology and Public Health9 Planning, Policy, and Design

Psychology and Social Behavior Social Ecology

Urban and Regional Planning

Urban and Regional Planning/Civil Engineering4

School of Social Sciences

Anthropology

Chicano/Latino Studies

Cognitive Neuroscience

Cognitive Sciences

Demographic and Social Analysis

Economics

Games, Decisions, and Dynamical Systems

Logic and Philosophy of Science Mathematical Behavioral Sciences

Political Psychology

Political Science

Psychology

Public Choice

Social Networks

Social Science

Sociology

Transportation Economics

College of Health Sciences

Nursing Science Public Health

School of Medicine

Anatomy and Neurobiology

Biological Chemistry

Cellular and Molecular Biosciences (CMB)1

Environmental Toxicology

Epidemiology and Public Health9

Experimental Pathology

Genetic Counseling

Interdepartmental Neuroscience Program (INP)1

Medical Residency Programs

Medical Scientist Program (M.D./Ph.D.)

Medicinal Chemistry and Pharmacology (MCP)²

Medicine

Medicine/Business Administration¹⁰

Microbiology and Molecular Genetics

Pharmacology and Toxicology

Physiology and Biophysics

Program in Medical Education for the Latino Community (PRIME-LC)

¹ School of Biological Sciences and School of Medicine joint program.

 $^{^{2}\,}$ Available in conjunction with selected Ph.D. programs.

³ Credential program.

⁴ The Henry Samueli School of Engineering and School of Social Ecology concurrent master's program.

⁵ Donald Bren School of Information and Computer Sciences and The Henry Samueli School of Engineering joint program.

⁶ Available in conjunction with selected graduate programs. Contact the Department of Asian American Studies for information.

⁷ Graduate program in Visual Studies.

⁸ Available in conjunction with selected graduate programs. Contact the Department of Women's Studies for information.

⁹ The School of Social Ecology offers this concentration with participation from the Department of Epidemiology in the School of Medicine.

 $^{^{\}rm 10}$ School of Medicine and The Paul Merage School of Business program.

Appendix 2 Off-Campus and Distance Education Degree Programs

Off-Campus and Distance Education Report*

University of California, Irvine

Program Name	Degree	Modality	City	State	Country	Implementation	FTE
Criminology, Law, and Society	M	Distance Education				11/2001	21

^{*}Information on this page is based on Fall 2008 data.



Office of the Chancellor

510 Aldrich Hall Irvine, CA 92697-1900 (949) 824-5111 (949) 824-2087 FAX

WASC Institutional Proposal Appendix 3 **Institutional Stipulation Statement**

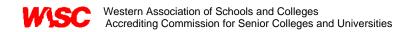
I. Michael V. Drake, Chancellor of the University of California, Irvine, hereby stipulate that the:

- The University of California, Irvine, is using the review process to demonstrate its fulfillment of the two Core Commitments; we will engage in the process with seriousness and candor, that data presented are accurate and that the Institutional Proposal will fairly present the institution.
- The University of California, Irvine, has published and publicly available policies in force as identified by the Commission in Appendix 1 of the WASC Handbook of Accreditation. Such policies will be available for review on request throughout the period of accreditation. Special attention will be paid to the institution's policies and recordkeeping regarding complaints and appeals.
- The University of California, Irvine, will abide by procedures adopted by the Commission to meet Department of Education (USDE) procedural requirements as outlined in Section VI of the WASC Handbook of Accreditation.
- The University of California, Irvine, will submit all regularly required data, and any data specifically requested by the Commission during the period of Accreditation.
- The University of California, Irvine has reviewed its off-campus programs to ensure that they have been approved as required by the WASC Substantive Change process.

Michael V. Drake, M.D.

Chancellor

10/15/09



Appendix 4A

Worksheet for Preliminary Self-Review Under the Standards (Updated 12.12.08)

Purpose of the Worksheet

This worksheet is designed to assist planning groups preparing for a WASC review to undertake a preliminary, systematic institutional self-analysis under the WASC Standards. Every institution is expected to describe in its Proposal how its review will address issues that have arisen from a self-review under Commission Standards. The use of the worksheet is recommended; the institution may choose some other means of reviewing itself under the Standards. The worksheet leads planning groups to identify strengths and areas of good practice as well as areas that may need attention under each Standard and Criteria for Review. The process may also surface themes or topics for further exploration in the accreditation review.

The WASC Standards and CFRs

The WASC Standards are designed to guide institutions in self-review, to provide a framework for institutional presentations to the Commission and review teams, and to serve as the basis for judgments by evaluation teams and the Commission. Each standard is set forth in broad holistic terms that are applicable to all institutions. Under each of the four Standards are two or more major categories under which the standard is more specifically defined. Within each sub-section are Criteria for Review (CFRs), intended to identify and define key elements of the standard. Guidelines identify expected forms or methods for demonstrating performance related to certain Criteria for Review. By design, the Commission has not developed a Guideline for each Criterion for Review. This worksheet contains all the CFRs and Guidelines, where applicable. For more detailed information on application of the Standards, see the Handbook of Accreditation.

Strategies for Using this Worksheet

The worksheet is designed for use during the early stages of thinking about the Institutional Proposal and may be revisited later when preparing for the Capacity & Preparatory Review. It is meant to be a heuristic tool for stimulating discussion and exploration rather than a definitive grading scheme or a mechanical checklist for compliance. Through its use, key areas may be identified where more evidence is needed or more development is required. The planning group may modify the worksheet in any way that suits its purposes. One approach is to have members of the planning group complete the worksheet individually with responses reviewed by the group. Another approach is to divide the worksheet by Standards with different groups completing each Standard.

Once the institution has completed this self-review process, priorities that are identified using this form should be integrated with the institution's context, goals, and planning in the development of its proposal. Summary questions are provided in the worksheet as a means of assisting institutions in determining areas of greatest concern or areas of good practice to be addressed or highlighted in the proposal and CPR and EER reports. This worksheet may be used in conjunction with "Questions for Institutional Engagement."

Copies of this worksheet are available on the WASC website at www.wascsenior.org.

Worksheet for Preliminary Self-Review Under the Standards

Suggested Rating for Columns in the Worksheet:

Self Review Rating

- 1= We do this well; area of strength for us
- 2= Aspects of this need our attention
- 3= This item needs significant development
- 0= Does not apply or not enough evidence to address

Importance to address at this time

A= High priority B= Lower priority

C= Does not need to be addressed at this time

Standard 1. Defining Institutional Purposes and Ensuring Educational Objectives.

The institution defines its purposes and establishes educational objectives aligned with its purposes and character. It has a clear and conscious sense of its essential values and character, its distinctive elements, its place in the higher educational community and its relationship to society at large. Through its purposes and educational objectives, the institution dedicates itself to higher learning, the search for truth, and the dissemination of knowledge. The institution functions with integrity and autonomy.

Criteria for Review	Guidelines	Self- Review Rating	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Institutional Purposes				
1.1 The institution's formally approved statements of purpose and operational practices are appropriate for an institution of higher education and clearly define its essential values and character.	The institution has a published mission statement that clearly describes its purposes. The institution's purposes fall within recognized academic areas and/or disciplines, or are subject to peer review within the framework of generally recognized academic disciplines or areas of practice.	3	Will recommend that Faculty Senate address the lack of a UCI mission statement.	University of California Mission Statement http://www.universityofcalifornia.edu/aboutuc/mission.html UCI Values Statement http://www.chancellor.uci.edu/values/ Faculty, administration, and staff interpret. The Mission Statement sets overall direction and scope in strategic planning.
1.2 Educational objectives are clearly recognized throughout the institution and are consistent with stated purposes. The institution develops indicators for the achievement of its purposes and educational objectives at the institutional, program, and course levels. The institution has a system of measuring student achievement, in terms of retention, completion, and student learning. The institution makes public data on student achievement at the institutional and degree level, in a		3	А	With the assistance of DUE's Assessment and Research Studies, most departments have identified educational objectives for their undergraduate majors and methods to measure student achievement of those objectives. http://www.asessment.uci.edu/ See Associated Students comments on CFR 2.2a See Leadership Academy comments on CFR 2.2b

manner determined by the institution.		

Criteria for Review	Guidelines		Self- Review Rating	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Institutional Purposes					
1.3 The institution's leadership creates sustains a leadership system at all levels that is marked by high performance, appropriate responsibility, and accountability.			1	С	Academic and staff personnel systems require periodic performance reviews of faculty and staff.
Integrity			<u> </u>	·	
1.4 The institution publicly states its commitment to academic freedom for faculty, staff, and	The institution has published or has readily available policies on academic freedom. For those institutions that strive to instill specific beliefs and world-views, policies clearly state how these views are implemented and ensure these conditions are consistent with academic freedom. Due process procedures are disseminated, demonstrating that faculty and students are protected in their quest for truth.	1	С	http://www.ucop.edu/a	policy statements on academic freedom cited in 1.4. acadadv/acadpers/apm/apm-015.pdf acadadv/acadpers/apm/apm-140.pdf acadadv/senateweb/default2.asp?active_page_id=745
1.5 Consistent with its purposes and character, the institution demonstrates an appropriate response to the increasing diversity in society through its policies, its educational and cocurricular programs, and its administrative and organizational practices.	The institution has demonstrated institutional commitment to the principles enunciated in the WASC Statement on Diversity.	1	С	DUE, provides a car The Committee also Experience Survey orientation, and ger of students on cam improvement which http://www.assessi	re Work Group, chaired by the Associate Dean of mpus forum for the discussion of diversity issues. The reviewed data from the UC Undergraduate (UCUES), disaggregated by race/ethnicity, sexual nder identification. Student Affairs held focus groups pus climate and has made recommendations for will be considered by the Work Group next Fall. Ment.uci.edu/UCUESindex.html ment.uci.edu/documents/StudentDiversityReport.pdf
1.6 Even when supported by or affiliated with political, corporate, or religious organizations, the institution has education as its primary purpose and operates as an academic institution with appropriate autonomy.	The institution has no history of interference in substantive decisions or educational functions by political, religious, corporate or other external bodies outside the institution's own governance arrangements.	1	С		

Criteria for Review	Guidelines	Self- Review	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Integrity				
1.7 The institution truthfully represents its academic goals, programs, and services to students and to the larger public; demonstrates that its academic programs can be completed in a timely fashion and treats students fairly and equitably through established policies and procedures addressing student conduct, grievances, and human subjects in research and refunds.	The institution has published or readily- available policies on student grievances and complaints, refunds, etc. and has no history of adverse findings against it with respect to violation of these policies. Records of student complaints are maintained for a six-year period. The institution clearly defines and distinguishes between the different types of credits it offers and between degree and non-degree credit, and accurately identifies the type and meaning of the credit awarded in its transcripts. The institution has published or readily-available grievance procedures for faculty and staff. The institution's policy on grading and student evaluation is clearly stated, and provides opportunity for appeal as needed.	2	В	 UCI could do a better job of notifying students of available policies. They are all published in available documents. However, to save printing costs, students need to ask for them. The Division of Undergraduate Education is re-doing the academic dishonesty policies through the Council On Student Experience. The Council on Student Experience establishes policies and procedures related to academic honesty which are published in the UCI Catalogue. Students accused of academic dishonesty may request either mediation or a hearing. The Deans of Undergraduate Education and Graduate Studies coordinate the Hearing Panels and keep records of reported cases of academic dishonesty. http://www.editor.uci.edu/08-09/appx/appx.2.htm#gen0
1.8 The institution exhibits integrity in its operations as demonstrated by the implementation of appropriate policies, sound business practices, timely and fair responses to complaints and grievances, and regular evaluation of its performance in these areas.	The institution's finances are regularly audited by external agencies.	1	С	 Annual University of California Financial Reports are posted annually: http://www.universityofcalifornia.edu/finreports/index.php?file=07-08/welcome.html A representative budget workgroup chaired the Provost is addressing the current budget crisis.
1.9 The institution is committed to honest and open communication with the Accrediting Commission, to undertaking the accreditation review process with seriousness and candor, to informing the Commission promptly of any matter that could materially affect the accreditation status of the institution, and to abiding by Commission policies and procedures, including all		1	С	The campus has taken seriously the need to identify and assess its educational objectives; this is demonstrated by the allocation of resources (a new senior analyst position for DUE, assessment grants, and the renaming of a DUE unit to Assessment & Research Studies). http://www.asessment.uci.edu/ UCI's recent Substantive Change Proposal for the School of Law was considered an exemplary proposal. Note the extensive list of re-accreditation activities listed on

substantive change policies.	UCI's web site devoted to the re-accredita-tion process.
	http://www.accreditation.uci.edu/index.html

Synthesis/Reflections on Standard One

1. After completing this analysis, what are the 2 or 3 most important issues that should be emphasized in the Review under this Standard?

The self review under CFR 1.1 has resulted in a request to the Academic Senate to develop a mission statement that is unique to UCI, and complement the University of California mission statement.

Under CFR 1.2 Data gathering is strong, however, the re-accreditation process is an opportunity to improve our institution's assessment of student learning.

Under CFR 1.7 the Division of Undergraduate Education is re-doing the academic dishonesty policy through the Council on Student Experience.

2. Looking overall at the quality and effectiveness of the institution's data gathering and systems to support the review process, what are institutional **strengths** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

The mission statement of the Office of Institutional Research:

"We perform research, analysis, and reporting that supports campus academic planning, strategic decision-making, enrollment management, and program assessment. Our office collects, analyzes, and interprets a wide variety of data about UC Irvine and its external environment for the purposes of assessing institutional outcomes, measuring institutional performance against strategic planning goals, comparative analysis with peer institutions, and reporting to campus constituencies and external agencies. Our office reports to the Vice Chancellor–Planning and Budget."

This statement characterizes UCI's commitment to the use of institutional data to fulfill our mission as a research institution. At a glance, the OIR web-site (http://www.oir.uci.edu/), displays the wide range of data sets available to the public to evaluate UCI and its place within the University of California and among its comparable institutions in the American Association of Universities.

3. Looking again at the overall quality and effectiveness of the institution's data gathering and systems, what are **areas to be addressed or improved** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

UCI's WASC reaccreditation process will be an opportunity to add additional layers of data and analysis as our institution pushes deeper into the field of assessment of student learning, one of the three themes of our Institutional Proposal.

Standard 2. Achieving Educational Objectives Through Core Functions

The institution achieves its institutional purposes and attains its educational objectives through the core functions of teaching and learning, scholarship and creative activity, and support for student learning. It demonstrates that these core functions are performed effectively and that they support one another in the institution's efforts to attain educational effectiveness.

they support one another in	they support one another in the institution's efforts to attain educational effectiveness.					
0.11	0 11 11	0.15	Importance	Evidence: What is there? (Or needed?)		
Criteria for Review	Guidelines	Self-	to address	Who interprets it?		
		Review	at this time)	How is it used?		
Teaching and Learning	T					
2.1 The institution's educational	The content, length, and					
programs are appropriate in	standards of the institution's					
content, standards, and	academic programs conform to	1	С			
nomenclature for the degree	recognized disciplinary or	'				
level awarded, regardless of	professional standards and are					
mode of delivery, and are	subject to peer review.					
staffed by sufficient numbers						
of faculty qualified for the type						
and level of curriculum offered.						
2.2 All degrees—undergraduate	Competencies required for			With the assistance of DUE's Assessment and Research Studies, most		
and graduate—awarded by the	graduation are reflected in course			departments have identified educational objectives for their		
institution are clearly defined	syllabi for both General Education			undergraduate majors. The Council on Educational Policy (CEP) requires		
in terms of entry-level	and the major.	1	С	that all proposals for new majors and minors include student learning		
requirements and in terms of		'		outcomes.		
levels of student achievement						
necessary for graduation that				http://www.asessment.uci.edu/		
represent more than simply an				Revised Guidelines for New Majors :		
accumulation of courses or				(http://www.senate.uci.edu/Councils/		
credits.				CEP/FINAL%20General%20Education%20SLOs,%20Approved%20by%20		
				CEP%2001-08-09.pdf)		
				Note the choice of Student Learning and General Education as two of		
				the three themes for our re-accreditation efforts.		
				See 2.2b for citations on Leadership Academy comments on this CFR.		
				http://today.uci.edu/facts/rankings.asp		
				http://www.rgs.uci.edu/GRAD/staff/grad_rights.pdf		
				http://www.strategicplan.uci.edu/?p=12		
				http://www.editor.uci.edu/catalogue/		
2.2a Baccalaureate programs	The institution has a program of					
engage students in an	General Education that is			Note that Student Learning and General Education have been chosen as		
integrated course of study of	integrated throughout the			themes for UCI's reaccredita-		
sufficient breadth and depth to	curriculum, including at the upper			tion process.		
prepare them for work,	division level, consisting of a					
citizenship, and a fulfilling life.	minimum of 45 semester units (or			At the request of UC President Richard Atkinson in 2003, Executive Vice		
These programs also ensure	the equivalent), together with			Chancellor Michael Gottfredson formed a joint Senate and Administra-		
the development of core	significant study in depth in a			Tive Task Force on Undergraduate Education to define how the campus		
learning abilities and	given area of knowledge (typically	3	Α	will improve undergraduate education and increase faculty involvement in		
competencies including, but	described in terms of a major).		, ,	undergraduate instruction. (Report of The Task Force on Undergraduate		
not limited to, college-level				Education 2003-2004) This resulted in a revised Council on Educational		
written and oral				Policy plan for General Education. Based on campus feedback, the Council		
communication; college-level				on Educational Policy (CEP) developed a Revised Plan for GE which was		

quantitative skills; information literacy; and the habit of critical analysis of data and argument. In addition, baccalaureate programs actively foster an understanding of diversity; civic responsibility; the ability to work with others; and the capability to engage in lifelong learning. Baccalaureate programs also ensure breadth for all students in the areas of cultural and aesthetic, social and political, as well as scientific and technical knowledge expected of educated persons in this society. Finally, students are required to engage in an indepth, focused, and sustained
required to engage in an in-
program of study as part of their baccalaureate programs.

adopted in 2007 and went into effect in Fall 2008.

Report of the Task Group on Undergraduate Education (http://www.evc.uci.edu/undergrad/tfuged_2003-04.pdf)

Revised CEP Plan for General Education

(http://www.senate.uci.edu/images/policy/updated%2010-26-07%20%20plan-dsa%20approved.pdf)

Learning Outcomes for General Education (http://www.senate.uci.edu/Councils/CEP/FINAL%20General%20 Education%20SLOs,%20Approved%20by%20CEP%2001-08-09.pdf)

The new GE requirements were guided by focus on student learning outcomes in three areas: academic competencies (writing, quantitative reasoning, and foreign language), foundations of knowledge (arts and humanities, science and technology, and social and behavior sciences), and real-world awareness and application (multicultural studies, international/global issues, and lab or performance experiences). In 2008-09 CEP adopted more specific statements of student learning outcomes for each of its nine categories.

The current CEP is committed to reviewing General Education as a component of our re-accreditation process.

Note the extensive involvement by the Academic Senate in issues arising under this CFR. CEP is a standing Senate committee.

Criteria for Review	Guidelines	Self- Review	Importance to address at this time)	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Teaching and Learning 2.2b Graduate programs are consistent with the purpose and character of their institutions; are in keeping with the expectations of their respective disciplines and professions; and are described through nomenclature that is appropriate to the several levels of graduate and professional degrees offered. Graduate curricula are visibly structured to include active involvement with the literature of the field and ongoing student engagement in research and/or appropriate high-level professional	Institutions offering graduate-level programs employ at least one full-time faculty member for each graduate degree program offered, and demonstrate sufficient resources and structures to sustain these programs and create a graduate-level academic culture.	Self- Review	to address at this time)	Who interprets it? How is it used? Note Leadership Academy's citation of relevant documents at UCI: http://today.uci.edu/facts/rankings.asp http://www.rgs.uci.edu/GRAD/staff/grad_rights.pdf http://www.strategicplan.uci.edu/?p=12 http://www.editor.uci.edu/catalogue/ The Senate's Graduate Council and the Provost are the main interpreters of evidence supporting this CFR at UCI.
practice and training experiences. Additionally, admission criteria to graduate programs normally include a baccalaureate degree in an				

appropriate undergraduate			
program.			
2.3 The institution's student learning outcomes and expectations for student attainment are clearly stated at the course, program and, as appropriate, institutional level. These outcomes and expectations are reflected in academic programs and policies; curriculum; advisement; library and information resources; and learning environment.	3	Α	Student learning and assessment have been chosen as theme for the UCI re-accreditation process. With the assistance of DUE's Assessment and Research Studies, most departments have identified educational objectives for their undergraduate majors. The Council on Educational Policy (CEP) requires that all proposals for new majors and minors to include student learning outcomes http://www.asessment.uci.edu/ Revised Guidelines for New Majors (http://www.senate.uci.edu/Councils/CEP/FINAL%20General %20Education%20SLOs,%20Approved%20by%20CEP%2001-08-09.pdf)
2.4 The institution's expectations for learning and student attainment are developed and widely shared among its members (including faculty, students, staff, and where appropriate, external stakeholders). The institution's faculty takes collective responsibility for establishing, reviewing, fostering, and demonstrating the attainment of these expectations.	3	A	Academic program review has been chosen as a theme for the UCI re-accreditation process. With the assistance of DUE's Assessment and Research Studies, most departments have identified educational objectives for their undergraduate majors. The Council on Educational Policy (CEP) requires that all proposals for new majors and minors to include student learning outcomes. http://www.asessment.uci.edu/ Revised Guidelines for New Majors (http://www.senate.uci.edu/Councils/CEP/FINAL%20General %20Education%20SLOs,%20Approved%20by%20CEP%2001-08-09.pdf)

Criteria for Review	Guidelines	Self- Review	Importance to address at this time)	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Teaching and Learning		•		
2.5 The institution's academic programs actively involve students in learning, challenge them to meet high expectations, and provide them with appropriate and ongoing feedback about their performance and how it can be improved.		2	В	The Teaching, Learning and Technology Center (TLTC), a unit within DUE, offers a wide variety of workshops on different pedagogical issues for faculty, instructors and graduate students. TLTCalso offers workshops on teaching well with technology to help instructors make more effective use of technology in the classroom. Their new Learning Studio provides a non-traditional classroom environment where instructors may experiment with the latest innovations in technology and pedagogical practices. Their work is guided by best practices which have been shown to improve student learning, including active learning strategies, setting high expectations for student performance, and providing ongoing feedback to students. Course syllabi are posted online, often with the criteria for assessment in each course. http://www.tltc.uci.edu/https://eee.uci.edu/classes/index.php
				http://www.urop.uci.edu/about.html
				http://www.honors.uci.edu/about.php
2.6 The institution demonstrates that its graduates consistently achieve its stated levels of attainment and ensures that its expectations for student learning are embedded in the standards faculty use to evaluate student work.		3	А	With the assistance of DUE's Assessment and Research Studies, many departments are in the process of developing methods to collect evidence that students are meeting intended learning outcomes.
				http://www.assessment.uci.edu/
2.7 All programs offered by the institution are subject to systematic program review. The program review process includes analyses of the achievement of the program's learning objectives and outcomes, program retention and completion, and, where appropriate, results of licensing examination and placement and evidence from external constituencies such as employers and professional organizations.		2	А	With the assistance of DUE's Assessment and Research Studies, many academic departments are in the process of developing methods to collect evidence that students are meeting intended learning outcomes. Improvement in this CFR has been identified as a theme of UCI's reaccreditation process. http://www.assessment.uci.edu

2.8 The institution actively values and promotes scholarship, creative activity, and curricular and instructional innovations as well as their dissemination at levels and of the kinds appropriate to the institution's purposes and character.	Where appropriate, the institution includes in its policies for faculty promotion and tenure recognition of scholarship related to teaching, learning, assessment, and cocurricular learning.	1	С	
2.9 The institution recognizes and promotes appropriate linkages among scholarship, teaching, student learning and service.		1	С	UCI recognizes the important linkages between research and teaching, which is reflected in the university's academic personnel manual.
				A number of service learning opportunities exist for UCI students through the School of Humanities and Student Affairs
Criteria for Review	Guidelines	Self- Review	Importance to address at this time)	Evidence: What is there? (Or needed?)
Support for Student Learning				
2.10 The institution collects and analyzes student data disaggregated by demographic categories and areas of study. It tracks achievement, satisfaction, and campus climate to support student success. The institution regularly identifies the characteristics of its students and assesses their preparation, needs, and experiences.		1	С	DUE's Assessment & Research Studies routinely collects, disseminates and analyzes student and course enrollment data disaggregated by demographic categories and areas of study. Data is interpreted by Graduate Council, Office of Institutional Research, Division of Undergraduate Education, Associate Deans, Academic Planning Group, and Enrollment Council. Examples include numerous UCUES reports including diversity reports prepared for the Committee on Campus Climate.
				UCI's Office of Institutional Research and the Office of Research and Evaluation collect and analyze student data for use in institutional decision making, much of which is disaggregated by gender and ethnicity. Though not available to the public, the Office of Admissions and Relations with Schools collects data on entering students, their academic preparation and needs.
				The Academic Testing Center administers and scores placement exams to ensure that students are ready to enroll in selected introductory courses in math, chemistry, physics, writing, and foreign language.

2.11 Consistent with its purposes, the institution develops and assesses its co-curricular programs.		2	В	
2.12 The institution ensures that all students understand the requirements of their academic programs and receive timely, useful, and regular information and advising about relevant academic requirements.	Recruiting and admission practices, academic calendars, publications, and advertising are accurate, current, complete, and are readily available to support student needs.	1	С	Through the campus' general catalogue, new student orientation (SPOP), and the academic advising process, students are provided with information about their academic program requirements and given the opportunity to both receive academic counseling and have questions answered regarding degree requirements. http://www.dos.uci.edu/orientation/
2.13 Student support services—including financial aid, registration, advising, career counseling, computer labs, and library and information services—are designed to meet the needs of the specific types of students the institution serves and the curricula it offers.		2	В	The Dean of the Division of Undergraduate Education is reviewing the academic advising program for Undecided/Undeclared students to better meet the needs of this large student population (17% of the freshman class). DUE is working with the associate deans of undergraduate education on the review. DUE is working with the report generated by an outside review team, associate deans of undergraduate education, the faculty board, and a retreat scheduled for June 18, 2009, to help reshape the program.
2.14 Institutions that serve transfer students assume an obligation to provide clear and accurate information about transfer requirements, ensure equitable treatment for such students with respect		2	В	http://www.due.uci.edu/uu/ Transfer Student Services, a unit within DUE, provides programs and services for transfer students so they can quickly locate appropriate resources, advice and other services relevant to their educational and student life needs.
to academic policies, and ensure that such students are not unduly disadvantaged by transfer requirements.				DUE sponsors the Community College Partnership Program with 8 partner colleges in Orange and LA Counties. Counselors from Transfer Student Services visit the college campuses and focus on academic advising and planning for students who are thinking of transferring to a UC. This past year, in concert with CHP and Admissions, the campus added a pilot Transfer Honors Guarantee program for students from these campuses that we expect to expand in future years.
				In addition, DUE created the Transfer Lounge, a place where transfer students can meet and obtain transfer services, and a series of Transfer Student Seminars, similar to Freshman Seminars, to help transfer students with their transition to UCI. Transfer Summer Bridge is DUE's newest program, which will launch this summer to help low income, first generation students move seamless into UCI.

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Synthesis/Reflections on Standard Two

- 1. After completing this analysis, what are the 2 or 3 most important issues that should be emphasized in the Review under this Standard? 2.2a Re-accreditation efforts will focus on improvements General Education at UCI.
 - 2.3 Major strides in establishing learning outcomes will be advanced further through the re-accreditation theme of student learning and assessment.
 - 2.4 Senate efforts have required learning outcomes to be identified in new academic programs.
 - 2.6 Assessment efforts will be enhanced during re-accreditation activities.
 - 2.7 Academic program review is already a strength of the campus, however improving connections to identifying learning outcomes and assessment can be addressed during the re-accreditation process.
- 2. Looking overall at the quality and effectiveness of the institution's data gathering and systems to support the review process, what are institutional **strengths** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

Addressing UCI's commitment to supporting the core functions of undergraduate education is the Office of the Dean of Undergraduate Education.

"The mission of the Division of Undergraduate Education (DUE), led by Dean Sharon Salinger, is to enhance the quality and value of the undergraduate experience for our students. DUE provides leadership for curriculum development, enrollment growth and diversity, and technology and support for teaching and learning. DUE's departments provide academic support services and opportunities for students and faculty campuswide and offer a first-year experience curriculum that includes freshman and transfer seminars and First-Year Integrated Programs (FIP)."

With DUE, the mission of the Office of Assessment and Research Studies explains our institutional commitment and strengths in the identification of student learning objectives and their assessment:

"The Office of Assessment and Research Studies supports excellence in undergraduate education through assessment of student learning outcomes and a comprehensive program of research and evaluation studies related to the undergraduate experience."

The choice of Student Learning, General Education, and Academic Program Review as themes our re-accreditation process will allow us to refine our efforts in these areas.

3. Looking again at the overall quality and effectiveness of the institution's data gathering and systems, what are **areas to be addressed or improved** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

Both the Offices of Institutional Research and Assessment and Research Studies will need to use the re-accreditation process to add additional layers of data collection and analysis to support the growing sophistication of identifying and employing student learning objectives in our curricular efforts. Assessment grants have built a foundation for our institution's addition of assessment as a core function, but are only a beginning in a process that will require enormous effort and resources in the near future.

Standard 3. Developing and Applying Resources and Organizational Structures to Ensure Sustainability

The institution sustains its operations and supports the achievement of its educational objectives through its investment in human, physical, fiscal and information resources and through an appropriate and effective set of organizational and decision-making structures. These key resources and organizational structures promote the achievement of institutional purposes and educational objectives and create a high quality environment for learning.

environment for learning.				
Criteria for Review	Guidelines	Self- Review	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Faculty and Staff				
3.1 The institution employs personnel sufficient in number and professional qualifications to maintain its operations and to support its academic programs, consistent with its institutional and educational objectives.		1	С	UCI maintains a student to regular ranks faculty ratio of 24.
3.2. The institution demonstrates that it employs a faculty with substantial and continuing commitment to the institution sufficient in number, professional qualifications, and diversity to achieve its educational objectives, to establish and oversee academic policies, and to ensure the integrity and continuity of its academic programs wherever and however delivered.	The institution has an instructional staffing plan that includes a sufficient number of full-time faculty with appropriate backgrounds, by discipline and degree levels. The institution systematically engages full-time non-tenure track, adjunct, and part-time faculty in such processes as assessment, program review, and faculty development.	1	С	
3.3. Faculty and staff recruitment, orientation, workload, incentive, and evaluation practices are aligned with institutional purposes and educational objectives. Evaluation processes are systematic, include appropriate peer review, and, for instructional faculty and other teaching staff, involve consideration of evidence of teaching effectiveness, including student evaluations of instruction.		1	С	
3.4. The institution maintains appropriate and sufficiently supported faculty and staff development activities designed to improve teaching and learning consistent with its institutional objectives.	The institution provides training and support for faculty members' teaching by means of technology-mediated instruction.	1	С	

Criteria for Review	Guidelines	Self- Review	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Fiscal, Physical, and Information Resou	rces			
3.5 The institution has a history of financial stability, unqualified independent financial audits and has resources sufficient to ensure long-term viability. Resources are aligned with educational purposes and objectives. If an institution has an accumulated deficit, it has realistic plans to eliminate the deficit. Resource planning and development include realistic budgeting, enrollment management, and diversification of revenue sources.		1	С	
3.6. The institution holds, or provides access to, information resources sufficient in scope, quality, currency, and kind to support its academic offerings and the scholarship of its members. These information sources, services, and facilities are consistent with the institution's educational objectives and are aligned with student learning outcomes. For on-campus students and students enrolled at a distance, physical and information resources, services, and information technology facilities are sufficient in scope and kinds to support and maintain the level and kind of education offered.		1	С	
3.7. The institution's information technology resources are sufficiently coordinated and supported to fulfill its educational purposes and to provide key academic and administrative functions.		1	С	Classroom Technology Support, a unit within DUE, installs and supports instructional technology equipment in all general assignment classrooms where most undergraduate teaching takes place. New equipment and upgrades are based on periodic surveys of the instructional needs of faculty and graduating teaching assistants. http://www.classrooms.uci.edu/

Criteria for Review	Guidelines	Self- Review	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Organizational Structures and Decision-	Making Processes.			
3.8. The institution's organizational structures and decision-making processes are clear, consistent with its purposes, support effective decision making, and place priority on sustaining effective academic programs.	The institution establishes clear roles, responsibilities, and lines of authority which are reflected in an organization chart.	1	С	
3.9. The institution has an independent governing board or similar authority that, consistent with its legal and fiduciary authority, exercises appropriate oversight over institutional integrity, policies, and ongoing operations, including hiring and evaluating the chief executive officer.	The governing body regularly engages in self-review and training to enhance its effectiveness.	1	С	The Univeristy of California Board of Regents has oversight responsibility for the entire, ten campus UC System. http://www.universityofcalifornia.edu/regents/
3.10. The institution has a full time chief executive officer whose primary or full-time responsibility is to the institution. In addition, the institution has a sufficient number of other qualified administrators to provide effective educational leadership and management.		1	С	Each UC campus Divisional Faculty Senate holds shared governance responsibility for input to policy making for their campus. http://www.senate.uci.edu/
3.11. The institution's faculty exercises effective academic leadership and acts consistently to ensure both academic quality and the appropriate maintenance of the institution's educational purposes and character.	The institution clearly defines the governance roles, rights, and responsibilities of the faculty.	1	С	UC Irvine Divisional Faculty Senate http://www.senate.uci.edu/

Synthesis/Reflections on Standard Three

1. After completing this analysis, what are the 2 or 3 most important issues that should be emphasized in the Review under this Standard?

UCI and the University of California have a commendable record in this area and will place more emphasis on improvements in Standards 1 & 2.

2. Looking overall at the quality and effectiveness of the institution's data gathering and systems to support the review process, what are institutional **strengths** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

Key resources and organizational structures are in place within UCI to manage effective use of resources to provide planning and to achieve institutional purposes and educational objectives. The Office of Institutional Research (OIR) is utilized to provide data and analysis to key advisory bodies such as: Chancellor's Advisory Council, Dean's Academic Council, Provost's Management Group, Budget Workgroup, Enrollment Council, and Academic Planning Group. The Office of Assessment and Research Studies will oversee the comprehensive development of learning objectives and the subsequent assessment of their effectiveness, with a goal of making this data available to the public through the OIR website.

3. Looking again at the overall quality and effectiveness of the institution's data gathering and systems, what are **areas to be addressed or improved** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

Embedding the process of developing learning objectives and advancing their assessment will need to integrated within the organizational structure described above and compete for sufficient priority among the many demands on the institution during the most challenging budget crisis ever faced by the University of California.

Standard 4. Creating an Organization Committed to Learning and Improvement

The institution conducts sustained, evidence-based, and participatory discussions about how effectively it is accomplishing its purposes and achieving its educational objectives. These activities inform both institutional planning and systematic evaluations of educational effectiveness. The results of institutional inquiry, research, and data collection are used to establish priorities at different levels of the institution, and to

revise institutional purposes, structures, and approaches to teaching, learning, and scholarly work.

revise institutional purposes, structures, al	The approaches to teaching, learn	ing, and scri	Importance	Evidence: What is there? (Or needed?)
Criteria for Review	Guidelines	Self-	to address at	Who interprets it?
Strategic Thinking and Planning		Review	this time	How is it used?
4.1. The institution periodically engages its multiple constituencies, including faculty, in institutional reflection and planning processes which assess it strategic position; articulate priorities; examine the alignment of its purposes, core functions and resources; and define the future direction of the institution. The institution monitors the effectiveness of its plans and		1	С	UCI published its Strategic Plan in 2005-2006. It is posted along with each school's strategic plan at: http://www.strategicplan.uci.edu/
planning processes and revises them as appropriate. 4.2. Planning processes at the institution define and, to the extent possible, align academic, personnel, fiscal, physical, and technological needs with the strategic objectives and priorities of the institution. 4.3. Planning processes are informed by		1	С	The Council on Educational Policy (CEP) routinely requests data and analysis on various educational issues and policies. Assessment and Research Studies provides CEP with analytical reports on issues such as the quality of summer courses and academic advising. To ensure that new majors focus on student learning outcomes, CEP recently adopted new policies requiring proposals for all new majors and minors to state their learning outcomes and to describe how those outcomes will be assessed. http://www.assessment.uci.edu/ http://www.assessment.uci.edu/academicunit.htm l Academic Planning Group, Enrollment Council, Graduate Council, Council on Educational Policy, Council on Planning and Budget (all Senate standing committees) regularly analyze data and advise on University governance. The annual 5 Year Perspective for Academic Programs serves the Office of the President for purposes of academic program planning.
appropriately defined and analyzed quantitative and qualitative data, and include consideration of evidence of educational effectiveness, including student learning.		1	С	

4.4. The institution employs a deliberate set of quality assurance processes at each level of institutional functioning, including new curriculum and program approval processes, periodic program review, ongoing evaluation, and data collection. These processes include assessing effectiveness, tracking results over time, and using comparative data from external sources and improving structures, processes, curricula, and pedagogy.		1	С	Office of Institutional Research data is well organized and publicly displayed. http://www.oir.uci.edu/ UC's Accountability Framework is new in 2009 and publicly posted:
		2	В	http://www.universityofcalifornia.edu/accountabilit y/ UCI has chosen Student Learning and Assessment as a theme for its re-accreditation efforts.
Criteria for Review	Guidelines	Self- Review	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Commitment to Learning and Improvement				
4.5. The institution has institutional research capacity consistent with its purpose and objectives. Institutional research addresses strategic data needs, is disseminated in a timely manner, and is incorporated in institutional review and decision-making processes. Included in the institutional research function is the collection of appropriate data to support the assessment of student learning. Periodic reviews are conducted to ensure the effectiveness of the research function and the suitability and usefulness of data.		1	В	Responsibility for appropriate data to support assessment of student learning is a shared responsibility between the Office of Institutional Research and the office of Assessment and Research Studies. http://www.oir.uci.edu/
4.6 Leadership at all levels is committed to improvement based on the results of the processes of inquiry, evaluation and assessment used throughout the institution. The faculty takes responsibility for evaluating the effectiveness of the teaching and learning process and use the results for improvement. Assessments of the campus environment in support of academic and co-curricular objectives are also undertaken and used, and are		1 2	C A	The campus conducts various assessments of the campus environment, including annual surveys of graduating seniors and the biennial UC Undergraduate Experience Survey. Both surveys are used to gauge student satisfaction with academics and student services. Another example is the Committee on Campus Work Group which has analyzed numerous sources of data to better understand and improve the campus climate for diversity. http://www.oir.uci.edu/http://www.assessment.uci.edu/UCUESindex.html
incorporated into institutional planning.		3	Α	The chosen themes for UCI's re-accreditation efforts include Academic Program Review and

				General Education devoted to addressing the 2A rating on the second statement of CFR 4.6 A Senate committee, the Campus Climate Workgroup is addressing the 3A rating for the third statement of CFR 4.6
4.7. The institution, with significant faculty involvement, engages in ongoing inquiry into the processes of teaching and learning, as well as into the conditions and practices that promote the kinds and levels of learning intended by the institution. The outcomes of such inquiries are applied to the design of curricula, the design and practice of pedagogy, and to the improvement of evaluation means and methodology.	Periodic analyses of grades and evaluation procedures are conducted to assess the rigor and effectiveness of grading policies and practice.	2	A	A number of academic units have revised their first year courses based on ongoing inquiry regarding the teaching and learning process; examples include first year courses in chemistry, physics, and the biological sciences. DUE provides funding for the First Year Integrated Program, a 3 course sequence in which faculty teach interdisciplinary programs plus writing, and conducts quarterly teaching evaluations of the FIP courses with feedback to the instructors. In addition, DUE sponsors the Departmental Assessment Grant Program which provides seed funds for departments with undergraduate majors to identify and assess their student learning outcomes. To date, 12 such grants have been awarded. Each grant include the collection and analysis of data to determine how well their programs are helping students learn important outcomes. http://www.assessment.uci.edu/Assessment/Index.html

Criteria for Review	Guidelines	Self- Review	Importance to address at this time	Evidence: What is there? (Or needed?) Who interprets it? How is it used?
Commitment to Learning and Improvement				
4.8. Appropriate stakeholders, including alumni, employers, practitioners, and others defined by the institution, are regularly involved in the assessment of the effectiveness of the educational programs.		1	С	External stakeholders, including employers, practitioners, and alumni, are regularly involved in the assessment of educational programs as required for professional accreditation for programs such as engineering, nursing, business, and medicine.
				http://www.eng.uci.edu/about/mission http://www.cohs.uci.edu/nursing/ http://www.merage.uci.edu/ Engineering (ABET), Law (ABA), Medicine and Nursing all receive regular and systematic assessment of the effectiveness of the educational programs.

Synthesis/Reflections on Standard Four

- 1. After completing this analysis, what are the 2 or 3 most important issues that should be emphasized in the Review under this Standard?
- 4.4 The choice of student learning and assessment for the re-accreditation process will assist with improvements in this area.
- 4.6 UCI has identified student learning and academic program review for improvements in this area.
- 4.7 Efforts to award and follow-up on assessment grants from Undergraduate Ed. To departments will be improved during during re-accreditation.
- 2. Looking overall at the quality and effectiveness of the institution's data gathering and systems to support the review process, what are institutional **strengths** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

The Office of Institutional Research (OIR) currently informs decision making for key policy input bodies throughout the University. With leadership by the Office of Assessment and Research Studies, the framework is in place to produce the evidence based data that can be developed to summarize UCI's success at identifying and assisting students with accomplishing learning objectives. FTE within Assessment and Research Studies already have awarded Assessment Grants and assisted numerous departments with pioneering efforts in this area.

3. Looking again at the overall quality and effectiveness of the institution's data gathering and systems, what are **areas to be addressed or improved** for the Capacity & Preparatory Review? For the Educational Effectiveness Review?

Although the key personnel are located and the organizational framework in place to accomplish improvements in the identification and assessment of learning objectives, this process will have to be integrated within the university structure during a time of severe budgetary constraints.

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NIIM	mative		CTIONS
Juli	HILLING	· Quc.	3110113

1. Who participated in preparing this self-inventory? What approach was used in completing the worksheet?

Input from eight pivotal campus constituencies was summarized in the Self Review Under the WASC Standards and displayed on a spreadsheet attached as Appendix 5 to this proposal. The Steering Committee employed this input to perform this self-inventory, teasing out themes for the Institutional Proposal over several working sessions.

2. What areas were identified as issues or concerns to be addressed before the review?

With the emphasis on learning outcomes that has developed since our previous re-accreditation process in 2001, it was felt that learning outcomes would be an important emphasis for this review process.

3. What areas emerged as either institutional strengths or topics for further exploration that might be targeted as themes or topics to be explored in the review?

General Education and the Academic Program Review process were already institutional strengths. Incorporating the process of learning outcomes and assessment in each of them developed as logical themes for our re-accreditation experience.

4. What are the next steps in preparing for the accreditation review?

Theme development will take place in the Division of Undergraduate Education for General Education, within the Academic Senate for Academic Program Review, and within the Office of Assessment and Research Studies for Student Learning in the Major.

WASC Institutional Proposal Appendix 4B University of California, Irvine Self-Review Under the WASC Standards 2008-09 Responses to Campuswide Survey

WASC Standard 1. Defining Institutional Purposes and Ensuring Educational Objectives

The institution defines its purposes and establishes educational objectives aligned with its purposes and character. It has a clear and conscious sense of its essential values and character, its distinctive elements, its place in the higher educational community and its relationship to society at large. Through its purposes and educational objectives, the institution dedicates itself to higher learning, the search for truth, and the dissemination of knowledge. The institution functions with integrity and autonomy.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
Institutional Purposes								
1.1 The institution's formally approved statements of purpose and operational practices are appropriate for an institution of higher education and clearly define its essential values and character.	The institution has a published mission statement that clearly describes its purposes. The institution's purposes fall within recognized academic areas and/or disciplines, or are subject to peer review within the framework of generally recognized academic disciplines or areas of practice.	http://www.chancellor.uci.e http://www.strategicplan.uci .edu/?p=19 http://www.abs.uci.edu/dept s/vcabs/goals.html http://www.universityofcalifo rnia.edu/aboutuc/mission.ht ml	In order for learning standards and outcomes to be successfully assessed by WASC, UCI needs to have an explicit Mission Statement that is easy to find on several UCI websites, including the Chancellor's website.		The purpose as directed by the campus' strategic plan and also outlined to the faculty, students and staff per the UCI Catalogue appropriately defines the campus as an institution of higher education.			As part of the UC system, UCI abides by the University of California's statement of purpose. In addition, UCI's institutional purpose and values are reflected in its strategic plan, displayed on the Chancellor's webpage, and applied on the website for administrative and business services.
1.2 Educational objectives are clearly recognized throughout the institution and are consistent with stated purposes. The institution develops indicators for the achievement of its purposes and educational objectives at the institutional, program, and course levels, as appropriate. Evidence of student achievement addresses retention, completion, and student learning. This evidence is made public in a manner determined by the institution.		http://www.strategicplan.uci .edu/?p=19 http://www.oir.uci.edu/ http://www.ore.uci.edu/ http://www.strategicplan.uci .edu/			The Common Data Set through the Office of Institutional Research is a means by which staff access, assess and understand the student demographic. Student and instructional data is also readily accessible.	Graduate students feel this is inconsistent across disciplines, departments and even individual labs. Some programs seem unclear on the criteria required for graduation (Business PhD's, Bio Sci PhD's) and faculty advisors often seem unaware of requirements for graduation. Often differing NTTD understanding between faculty in same departments and emphasis on timely completion varies widely. Students often unaware of published NTTD expectations and advised to disregard. See Associated Student Comments on CFR 2.2b	Retention/ Completion Do a good job keeping students in the university. Fair policies for academic probation and useful services to support students who are struggling. Depends on the school/department. Student Learning Classes are too big freshman year. Quality depends on department. Some professors don't care and are too focused on research. Science departments simply push people through the system. Educational quality improves as your grade-level increases. Writing is not taught enough. Resources outside of class to help develop writing skills are lacking. See Associated Student Comments on 2.2a	UCI's educational objectives are clearly outlined within the campus' strategic plan document. Two offices, Institutional Research and Research & Evaluation, collect data about student achievement and the student experience at UCI; this data is widely shared with the campus and available to the public.

¹ Comments developed by a subgroup of the 2007-08 Leadership Academy. The Leadership Academy is a year-long preparation program designed to prepare current UCI staff to move into critical university leadership positions.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
1.3 The institution's leadership creates and sustains a leadership system at all levels that is marked by high performance, appropriate responsibility, and accountability.		http://www.strategicplan.uci .edu/ http://www.senate.uci.edu/s enateweb/default.asp http://www.policies.uci.edu/ pps/pps23.html			Staff Assembly runs under the support of the Executive Vice Chancellor's office and meets regularly with other campus leadership including the Chancellor, EVC and Academic Senate leaders. The Chancellor also supports accountability to staff through the Chancellor's Advisory Committee on the Status of Staff.			UCI's strategic plan reflects the institution's leadership, and the campus' goals for sustained leadership. UCI's Academic Senate, a key location for institutional leadership, delineates the locations for educational responsibility and the systems that ensure accountability. The university's staff personnel procedures detail performance expectations.
Integrity								
1.4 The institution publicly states its commitment to academic freedom for faculty, staff, and students, and acts accordingly. This commitment affirms that those in the academy are free to share their convictions and responsible conclusions with their colleagues and students in their teaching and in their writing.	The institution has published or has readily available policies on academic freedom. For those institutions that strive to instill specific beliefs and world-views, policies clearly state how these views are implemented and ensure that these conditions are consistent with academic freedom. Due process procedures are disseminated, demonstrating that faculty and students are protected in their quest for truth.	http://www.vcsa.uci.edu/FreeSpeech http://www.ucop.edu/acadadv/acadpers/apm/apm-015.pdf http://www.ucop.edu/acadadv/acadpers/apm/apm-140.pdf http://www.senate.uci.edu/senateweb/default2.asp?activepageid=745 http://atyourservice.ucop.edu/employees/policiesemployee labor relations/personnel policies/index.html http://www.students.uci.edu/judicial/uci_policy.php http://www.chancellor.uci.edu/hate_speech_060530.shtml http://www.dos.uci.edu/judicial/principlesofcommunity.php	Criterion 1.4 concerns whether "The institution publicly states its commitment to academic freedom for faculty, staff, and students, and acts accordingly. This commitment affirms that those in the academy are free to share their convictions and responsible conclusions with their colleagues and students in their teaching and in their writing." The Cabinet agreed that the recent legal case involving Professor Juan Hong has been widely interpreted, correctly or not, as an important stance by UCI lawyers against academic freedom for its faculty.		UCI fully supports academic freedom for faculty, staff, and students, and acts accordingly. Staff is encouraged to offer anonymous feedback electronically through Staff Assembly. This feedback is then routed to the most appropriate entities that may be able to respond to the staff concern. Where possible, we notify those involved of any actions that have arisen from their feedback.			UCI places a high value on academic freedom for faculty, staff, and students. There are numerous policies which detail the rights and responsibilities associated with academic freedom in the performance of work and the dissemination of knowledge.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
1.5 Consistent with its purposes and character, the institution demonstrates an appropriate response to the increasing diversity in society through its policies, its educational and co-curricular programs, and its administrative and organizational practices.	The institution has demonstrated institutional commitment to the principles enunciated in the WASC Statement on Diversity.	http://www.eod.uci.edu/ http://www.dos.uci.edu/judic ial/principlesofcommunity.p hp http://www.uci.edu/diversity/ index.php http://www.rgs.uci.edu/grad/ diversity/ http://www.universityofcalifornia.edu/diversity/ http://www.universityofcalifornia.edu/diversity/reports.html http://clubs.uci.edu/s4s/files/12%20Diversity%20&%20 Employee%20Wellbeing.pdf http://www.ccc.uci.edu/ http://paid.uci.edu/			The Chancellor's Advisory Committee on Status of Staff (CACSS) maintains a standing committee that addresses staff issues with regards to diversity at UCI and the UCI Medical Center. In addition, UCI's Dean of Students have support staff- faculty affinity groups such as the Asian Pacific Staff Association and the Black Faculty and Staff Association.	UCI atypical with majority Asian population in undergrads. Black students are underrepresented at both undergrad and graduate levels. UCI appears to lack socio-economic diversity. Much focus on international students which only represent small percentage of undergraduates and only 23% of graduate students. Very few graduate events with a diversity theme offered.	Ethnic representation is not representative of the state of California. Caucasians are underrepresented. Caucasian students are not given event flyers and a lot of clubs and organizations are for specific ethnic groups. Mexican Americans and African Americans are underrepresented on campus. Student body does a good job of respecting diverse students and creating a safe environment on campus. Have excellent campus resources for diversity issues.	A number of offices and programs exist at UCI to support diversity initiatives for the campus constituents. The university shows a high level of commitment to diversity through its efforts around student recruitment & retention, faculty/staff recruitment & support and community outreach.
1.6 Even when supported by or affiliated with political, corporate, or religious organizations, the institution has education as its primary purpose and operates as an academic institution with appropriate autonomy.	The institution has no history of interference in substantive decisions or educational functions by political, religious, corporate or other external bodies outside the institution's own governance arrangements.	http://www.uadv.uci.edu/centers/government.asphttp://www.ota.uci.edu/http://www.ucop.edu/services/conflictofinterest.htmlhttp://research.uci.edu/ora/sp/tobacco.htmhttp://www.ucop.edu/research/policies/ucpols.html						Although UCI is not affiliated with any particular political, corporate, or religious organizations, policies abound to ensure that relationships with outside organizations, as a function of fundraising or research, do not impinge upon the university's character or autonomy.
1.7 The institution truthfully represents its academic goals, programs, and services to students and to the larger public; demonstrates that its academic programs can be completed in a timely fashion and treats students fairly and equitably through established policies and procedures addressing student conduct, grievances, human subjects in research and refunds.	The institution has published or readily- available policies on student grievances and complaints, refunds, etc. and has no history of adverse findings against it with respect to violation of these policies. Records of student complaints are maintained for a six-year period. The institution clearly defines and distinguishes between the different types of credits it offers and between degree and non-degree credit, and accurately identifies the type and meaning of the credit awarded in its transcripts. The institution has published or readily-available grievance procedures for faculty and staff. The institution's policy on grading and student evaluation is clearly stated, and provides opportunity for appeal as needed.	http://www.editor.uci.edu/ca talogue/ http://websoc.reg.uci.edu/p erl/WebSoc http://www.senate.uci.edu/s enateweb/9 IrvineManual/3 ASMAppendices/Appendix0 8.html http://www.ombuds.uci.edu/ http://apps.research.uci.edu /tutorial/ http://www.dos.uci.edu/judic ial/uci_policy.php http://www.rgs.uci.edu/grad/ academic/time_to_degree.p df http://www.humanities.uci.e du/undergrad/response/tim etodegree.html http://www.reg.uci.edu/facn et/gradingpolicy.html https://www.fs.uci.edu/stud ents/Withdraw.htm			Through both the UCI Website and Catalogue, the university's academic goals, programs, and services to students and to the larger public. Central campus communications also share stories and respond to press requests in an effort to provide proactive transparency to external constituents.	Expectations of student conduct and avenues of grievance may be posted in the on-line grad handbook, but Grad Students are often not made aware of this handbook's existence and it is not always easily found online. Graduate students have no clear avenues for grievances and often fear retaliation. Many of the STEM students work under a single faculty (Principal Investigator) who determines continued funding. Complaints about conduct, grading, etc. could result in reduced funding or even dismissal. Graduate division should be the contact for concerns and grievances, but due to the decentralized model at UCI, most graduate students are unaware of this resource. Better effort at educating graduate students on the correct avenues for filing grievances and better protections from faculty retaliation are needed.	Truth in Advertising Had low expectations of the school coming in-students didn't know anything about UCI coming in. Policies and Procedures Policies are extremely complicated. Resources for adjudicating grievances are not well known/advertised. No one knows about appealing to the Office of the Ombudsman.	Through the university catalogue and various websites, UCI represents its academic goals, programs and services to students and the general public, its commitment to providing access to policies and procedures for addressing grievances, the awarding of grades, the management of research resources, and the addressing of student of conduct.

¹ Comments developed by a subgroup of the 2007-08 Leadership Academy. The Leadership Academy is a year-long preparation program designed to prepare current UCI staff to move into critical university leadership positions.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
1.8 The institution exhibits integrity in its operations as demonstrated by the implementation of appropriate policies, sound business practices, timely and fair responses to complaints and grievances, and regular evaluation of its performance in these areas.	The institution's finances are regularly audited by external agencies.	http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=745 http://www.policies.uci.edu/adm/procs/700/700-18.html http://www.policies.uci.edu/adm/procs/700/700-18a.pdf http://www.abs.uci.edu/http://www.policies.uci.edu/adm/pols/710-11.html http://www.audit.uci.edu/mission.html http://www.pb.uci.edu/			UCI proactively addresses issues to ensure that administrative and business practices are performed with integrity. Staff are offered training courses such as the Business Officer Institutes, Leadership Academy, Education and Enrichment Forums, as well as Training Certificates from HR.			UCI has a number of channels by which it addresses and responds to complaints and grievances. Procedures are thoroughly outlined to ensure that administrative and business practices are performed with integrity.
1.9 The institution is committed to honest and open communication with the Accrediting Commission, to undertaking the accreditation review process with seriousness and candor, to informing the Commission promptly of any matter that could materially affect the accreditation status of the institution, and to abiding by Commission policies and procedures, including all substantive change policies.		http://www.accreditation.uci .edu/ http://www.ore.uci.edu/Asse ssment/Index.html			UCI's commitment to the openness with the accreditation process is demonstrated through this exact exercise of soliciting feedback from all university communities.			UCI is committed to the accreditation review process. To that end, UCI has developed a website detailing the accreditation process, and has developed resources to ensure the success of this process and the engagement of the UCI community in accreditation.

WASC Standard 2. Achieving Educational Objectives Through Core Functions

The institution achieves its institutional purposes and attains its educational objectives through the core functions of teaching and learning, scholarship and creative activity, and support for student learning. It demonstrates that these core functions are performed effectively and that they support one another in the institution's efforts to attain educational effectiveness.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
Teaching and Learning								
2.1 The institution's educational programs are appropriate in content, standards, and nomenclature for the degree level awarded, regardless of mode of delivery, and are staffed by sufficient numbers of faculty qualified for the type and level of curriculum offered.	The content, length, and standards of the institution's academic programs conform to recognized disciplinary or professional standards and are subject to peer review.	http://www.senate.uci.edu/senateweb/ default2.asp?active_page_id=616 http://www.senate.uci.edu/senateweb/ default2.asp?active_page_id=621 http://www.senate.uci.edu/images/sen ate_docs/tracy/joint_review_may_2005 _procedures_final.pdf http://www.senate.uci.edu/senateweb/ default2.asp?active_page_id=374						All academic programs at UCI regularly undergo the program review process initiated by the Academic Senate, which includes an external peer review.
2.2 All degrees—undergraduate and graduate—awarded by the institution are clearly defined in terms of entry-level requirements and in terms of levels of student achievement necessary for graduation that represent more than simply an accumulation of courses or credits.	Competencies required for graduation are reflected in course syllabi for both General Education and the major.	http://www.senate.uci.edu/images/polic y/updated%2010-26-07%20%20plandsa%20approved.pdf http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=703 http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=681 http://www.editor.uci.edu/catalogue/#gen2 http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=121 http://www.senate.uci.edu/4_SenCom/CEP/CEP Docs/Goals for Breadth Requirements.htm http://www.rgs.uci.edu/grad/academic/index.htm				Most programs have comprehensive exams required sometime in the first 3 years for all graduate students. These exams range in type and level of secrecy and often have an extremely subjective nature to them. More transparency of procedures and required content should be available as these exams are part of the department requirements for graduation from a graduate program. Some programs have large class sizes that make quality interaction and discussion at the graduate level difficult. Faculty often teach their interest rather than broader base as outlined in the syllabus. Thus, transcripts may reflect a course taken but does not mean content taught is a match.		UCI recently modified its general education requirements to more effectively capture the institution's expectations for learning and student achievement in the undergraduate program. Entry-level requirements for undergraduate and graduate programs are outlined in the university catalogue and the department and school web pages.

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
2.2a Baccalaureate programs engage students in an integrated course of study of sufficient breadth and depth to prepare them for work, citizenship, and a fulfilling life. These programs also ensure the development of core learning abilities and competencies including, but not limited to, collegelevel written and oral communication; college-level quantitative skills; information literacy; and the habit of critical analysis of data and argument. In addition, baccalaureate programs actively foster an understanding of diversity; civic responsibility; the ability to work with others; and the capability to engage in lifelong learning. Baccalaureate programs also ensure breadth for all students in the areas of cultural and aesthetic, social and political, as well as scientific and technical knowledge expected of educated persons in this society. Finally, students are required to engage in an in-depth, focused, and sustained program of study as part of their baccalaureate programs.	The institution has a program of General Education that is integrated throughout the curriculum, including at the upper division level, consisting of a minimum of 45 semester units (or the equivalent), together with significant study in depth in a given area of knowledge (typically described in terms of a major).	http://www.editor.uci.edu/08- 09/intro/intro.13.htm#gen0 http://www.senate.uci.edu/images/appr oved%20revised%20guidelines%20for %20establishing%20undergraduate%2 0majors.doc http://www.senate.uci.edu/images/sen ate_docs/molly/final_handbook_10-30- 06.pdf (Appendix O) http://www.urop.uci.edu/		The UCI Libraries support the development of core learning abilities and competencies in information literacy by offering workshops, tutorials, and instruction sessions in partnership with baccalaureate programs.			Course requirements are clearly defined It is easy to check degree progress using Degree Audit. Students are not aware of the petition options to ask that certain requirements be waived or courses count for other classes	UCI's new general education requirements reflect a commitment to providing students with an academic experience that allows for the development of academic competencies, provides foundations of knowledge, and a real-world awareness and opportunities to apply that knowledge. The nine general education categories are: writing (3 courses), science and technology (3 courses), social and behavioral sciences (3 courses), arts and humanities (3 courses), quantitative, symbolic, and computational reasoning (3 courses), a language other than English (3 courses in the same language), multicultural studies (1 course), international/global issues (1 course), and laboratory or performance (1 course). While all undergraduate programs differ in their major requirements, all encourage students to participate in research on campus, as is evident by the numerous research programs and opportunities available to our undergraduates. Undergraduate majors are reviewed as part of the external peer review process of the Academic Senate. In addition, general education categories and courses are reviewed periodically by the Academic Senate.
2.2b Graduate programs are consistent with the purpose and character of their institutions; are in keeping with the expectations of their respective disciplines and professions; and are described through nomenclature that is appropriate to the several levels of graduate and professional degrees offered. Graduate curricula are visibly structured to include active involvement with the literature of the field and ongoing student engagement in research and/or appropriate highlevel professional practice and training experiences. Additionally, admission criteria to graduate programs normally include a baccalaureate degree in an appropriate undergraduate program.	Institutions offering graduate-level programs employ at least one full-time faculty member for each graduate degree program offered, and demonstrate sufficient resources and structures to sustain these programs and create a graduate-level academic culture.	http://today.uci.edu/facts/rankings.asp http://www.rgs.uci.edu/GRAD/staff/gra d_rights.pdf http://www.strategicplan.uci.edu/?p=12 http://www.editor.uci.edu/catalogue/						Details about the various graduate programs available at UCI can be accessed through the Office of Graduate Studies as well as through individual department and school web pages. Graduate programs are included in the external peer review process of the Academic Senate. Faculty associated with each degree program are listed in the UCI general catalogue.

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
2.3 The institution's student learning outcomes and expectations for student attainment are clearly stated at the course, program, and as appropriate, institutional level. These outcomes and expectations are reflected in academic programs and policies; curriculum; advisement; library and information resources; and the wider learning environment.		http://www.due.uci.edu/uu/generaleducation_2008.pdf http://www.eng.uci.edu/about/mission http://www.eng.uci.edu/chems/chemecore http://undergraduate.eng.uci.edu/degreeprograms/biomedical/mission http://undergraduate.eng.uci.edu/degreeprograms/civil/mission http://undergraduate.eng.uci.edu/degreeprograms/civil/mission https://eee.uci.edu/programs/comp/39 B/objectives.htm https://eee.uci.edu/programs/comp/39 C/studentgoals.html http://www.due.uci.edu/fip/FIPSLOs.htm	With regards to WASC Learning Outcomes, individual departments need to define and promote learning outcomes for majors. The strategic plans for learning outcomes of each major, department and School should be tied into UCI's Mission Statement. Currently the Division of Undergraduate Education (DUE) is assisting departments with design of mission statements and learning outcomes that conform to WASC standards. Adequate resources to properly complete this task should be considered.	Librarians are assigned liaison duties with academic departments to ensure that the Libraries' resources and collection development activities are supportive of department level student learning expectations.				Student learning outcomes are not consistently defined or assessed at either program level or course level, with the exception of the School of Engineering. This is an area of growth for UCI.
2.4 The institution's expectations for learning and student attainment are developed and widely shared among its members (including faculty, students, staff, and where appropriate, external stakeholders). The institution's faculty takes collective responsibility for establishing, reviewing, fostering, and demonstrating the attainment of these expectations.		http://www.due.uci.edu/uu/generaleducation_2008.pdf http://www.eng.uci.edu/about/mission http://www.eng.uci.edu/chems/chemecore http://undergraduate.eng.uci.edu/degreeprograms/biomedical/mission http://undergraduate.eng.uci.edu/degreeprograms/civil/mission						Student learning outcomes are not consistently defined or assessed at either program level or course level, with the exception of the School of Engineering. This is an area of growth for UCI.
2.5 The institution's academic programs actively involve students in learning, challenge them to meet high expectations, and provide them with appropriate and ongoing feedback about their performance and how it can be improved.		https://eee.uci.edu/classes/index.php http://www.urop.uci.edu/about.html http://www.honors.uci.edu/about.php						Through course syllabi, most of which are available via the web, course requirements and the means by which students are evaluated are shared with students.
2.6 The institution demonstrates that its graduates consistently achieve its stated levels of attainment and ensures that its expectations for student learning are embedded in the standards faculty use to evaluate student work.								There does not appear to be any documentation available on the website that addresses this issue.
2.7 All programs offered by the institution are subject to systematic program review. The program review process includes analyses of the achievement of the program's learning objectives and outcomes, and, where appropriate, results of licensing examination and placement and evidence from external constituencies such as employers and professional organizations.		http://www.senate.uci.edu/images/senate_docs/mia/joint%20review%20may%202005%20procedures-final.pdf http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=374 http://www.urop.uci.edu/aboutUROP/Final%20Report5.doc						All academic program reviews are initiated by UCI's Academic Senate. The guidelines for this review process are extensive and include an analysis of the program's learning outcomes, its curriculum and resources, and involve the use of external reviewers.
Scholarship and Creative Activity								

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
2.8 The institution actively values and promotes scholarship, creative activity, and curricular and instructional innovation, as well as their dissemination at levels and of the kinds appropriate to the institution's purposes and character.	Where appropriate, the institution includes in its policies for faculty promotion and tenure recognition of scholarship related to teaching, learning, assessment, and co-curricular learning. Along with scholarly publications, such policies recognize forms of dissemination appropriate to various types of scholarly and creative expression.	http://www.senate.uci.edu/senateweb/ 5 FacAwards/PastSenateAwards.html http://www.urop.uci.edu/frame_opportu_nities_researcher.html http://www.cfep.uci.edu/ http://www.ags.uci.edu/awards/mentori_ng-awards/nominations-for-ags-graduate-student-mentoring-awards http://www.tltc.uci.edu/			UCI supports innovation and collaboration through staff recognition programs such as Living our Values and Excellence in Leadership award programs. In addition, UCI recently hosted a campus-wide leadership summit that sought to collect and assess staff success and concerns.			UCI actively encourages and rewards scholarship and innovation in curricular and instructional activity. Outstanding faculty members and students are recognized for their creative work yearly through various awards programs, including that of the Academic Senate, undergraduate research and the teaching learning and technology center.
2.9 The institution recognizes and promotes appropriate linkages among scholarship, teaching, student learning and service.		http://www.gse.uci.edu/PDF/Noyce%2 008 09%20Announcement.doc http://www.ucop.edu/acadadv/acadper s/apm/apm-283.pdf http://www.ore.uci.edu/documents/Ser vice learning courses July2007.pdf http://www.humanities.uci.edu/hot/prog ram/servlearn.html http://www.volunteer.uci.edu/		The UCI Libraries promote linkages among scholarship, teaching, and student learning by offering a forum and facilitating campus discussions on the scholarly communication issues that are developing from the expansion beyond the traditional print formats.	The Dean of Students regularly recognizes instructors annually for achievement in scholarship, teaching and service. As well, school's such as the Bren School of ICS have Dean's Award categories in the same areas.	The teaching requirement for graduate students is minimal (often 1 quarter) and is often seen as interfering with the student's research. Service outside of one's department is not promoted and often discouraged by faculty advisors as it can be a distraction to the research a student is conducting. Few institutional civic-engagement programs exist that target Graduate Students.		UCI recognizes the important linkages between research and teaching, which is reflected in the university's academic personnel manual. A number of service learning opportunities exist for UCI students through the School of Humanities and Student Affairs.
Support for Student Learning								
2.10. The institution collects and analyzes student data disaggregated by demographic categories and areas of study. It tracks achievement, satisfaction, and campus climate to support student success. The institution regularly identifies the characteristics of its students and assesses their preparation, needs, and experiences.		http://www.ore.uci.edu/UCUES/UCUESindex.html http://www.ore.uci.edu/students.html http://www.oir.uci.edu/ http://www.testingcenter.uci.edu/				Beyond demographic, graduation and program statistics there is very little assessment of graduate students'. We are unaware of any recent data on graduate student needs or experiences that has been collected by UCI nor is much attention paid to graduate student satisfaction.		UCI's Office of Institutional Research and the Office of Research and Evaluation collect and analyze student data for use in institutional decision making, much of which is disaggregated by gender and ethnicity. Though not available to the public, the Office of Admissions and Relations with Schools collects data on entering students, their academic preparation and needs.
								The Academic Testing Center administers and scores placement exams to ensure that students are ready to enroll in selected introductory courses in math, chemistry, physics, writing, and foreign language.
2.11 Consistent with its purposes, the institution develops and assesses its co-curricular programs.		http://www.strategicplan.uci.edu/unitpl ans/?p=29 http://www.dos.uci.edu/ http://www.strategicplan.uci.edu/unitpl ans/?p=28						Co-curricular programs at UCI reflect the institution's purposes and the experiences of its students. While efforts to assess these programs exist, this evidence is not available on the UCI web pages.

¹ Comments developed by a subgroup of the 2007-08 Leadership Academy. The Leadership Academy is a year-long preparation program designed to prepare current UCI staff to move into critical university leadership positions.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly	Associated Graduate Students	Associated Students UCI	Leadership Academy ¹ Comments
2.12. The institution ensures that all students understand the requirements of their academic programs and receive timely, useful, and regular information and advising about relevant academic requirements.		http://www.editor.uci.edu/07-08/ http://www.ps.uci.edu/~stuaff/ac.html http://www.reg.uci.edu/registrar/service s/major.html http://www.due.uci.edu/paap/index.htm l http://changeofmajor.uci.edu/ http://www.dos.uci.edu/orientation/			Comments	Comments	Comments Orientation Having SPOP be mandatory is a good thing. Orientation gives students a very good idea of the resources available on campus. Academic Advising Most peer advisors are useful; academic advisors are knowledgeable but they are inaccessible and there are not enough advisors It depends on the major-Bio School advisers are very inaccessible	Through the campus' general catalogue, new student orientation, and the academic advising process, academic students are provided with information about their academic program requirements and given the opportunity to both receive advising and get their questions answered about degree requirements.
including financial aid, registration, advising, career counseling, computer labs, and library and information services—are designed to meet the needs of the specific types of students	Recruiting and admission practices, academic calendars, publications, and advertising are accurate, current, complete, and are readily available to support student needs.	http://www.ofas.uci.edu/content/ http://www.uci.edu/prospective.shtml http://www.due.uci.edu/paap/index.htm [http://www.transfercounseling.uci.edu/ http://www.due.uci.edu/uu/ http://www.career.uci.edu/Students/students_counseling_career.aspx http://www.vcsa.uci.edu/ http://www.dos.uci.edu/index.php http://www.saas.uci.edu/ http://www.larc.uci.edu/ http://www.chs.uci.edu/		Librarians are assigned liaison duties with academic departments to ensure that the Libraries' resources and collection development activities are appropriate for the types of students served by the University.		Most of the services listed primarily support undergraduate students. Talks have begun on how to improve the services offered to graduate students and it is hoped that greater access to student support services for grads will result.	There are lots of different resources on campus but they do not receive adequate funding Alumni services are weak	UCI's student support services functions strive to meet and reflect the needs of undergraduate and graduate students.
2.14 Institutions that serve transfer students assume an obligation to provide clear and accurate information about transfer requirements, ensure equitable treatment for such students with respect to academic policies, and ensure that such students are not unduly disadvantaged by transfer requirements.		http://www.admissions.uci.edu/admissions_info/transfer_admission/index.htm						UCI has an extensive array of transfer student services and programs. Transfer are a priority for admissions and are served well by the Division of Undergraduate Education and Student Affairs.

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WASC Standard 3. Developing and Applying Resources and Organizational Structures to Ensure Sustainability

The institution sustains its operations and supports the achievement of its educational objectives through its investment in human, physical, fiscal and information resources and through an appropriate and effective set of organizational and decision-making structures. These key resources and organizational structures promote the achievement of institutional purposes and educational objectives and create a high quality environment for learning.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
Institutional Purposes								
3.1 The institution employs personnel sufficient in number and professional qualifications to maintain its operations and to support its academic programs, consistent with its institutional and educational objectives.		http://www.ucop.edu/ucophome/uwnews/stat/ http://www.ap.uci.edu/review/review.html http://www.ap.uci.edu/APP/1-12 access.html	One relevant measure of sufficient personnel is the ratio of students to faculty. Data on this ratio are provided in Section 7.6 of the UC Accountability Framework. CPB observes that, over the last five years, UC Irvine has had a ratio of about 23, the second worst of the UC system, and well above the UCLA ratio of about 16 or the UC Berkeley ratio of about 17.5. Withy UCl's significant overenrollment that is not fully funded by the UC system for the 2008-2009 academic year, it is likely that UC Irvine now has the worst ratio in the UC system. Given these facts, it may be difficult to make a persuasive argument that UCI employs personnel sufficient in number to support its academic programs.		UCI supports personnel staff in areas ranging from faculty support, research administrators to media relations and finance specialists in order to support its academic programs, consistent with its institutional and educational objectives.			The university's personnel processes and procedures are designed to ensure that sufficient academic and administrative personnel support UCI's academic programs and help to further the institution's educational goals and objectives.
3.2 The institution demonstrates that it employs a faculty with substantial and continuing commitment to the institution sufficient in number, professional qualifications, and diversity to achieve its educational objectives, to establish and oversee academic policies, and to ensure the integrity and continuity of its academic programs wherever and however delivered.	The institution has an instructional staffing plan that includes a sufficient number of faculty with appropriate backgrounds by discipline and degree levels. The institution systematically engages full-time non-tenure track, adjunct, and part-time faculty in such processes as assessment, program review, and faculty development and planning.	http://www.oir.uci.edu/employees/fte/ http://www.senate.uci.edu/senateweb/d efault2.asp?active_page_id=554 http://www.uci.edu/experts/ http://www.faculty.uci.edu/ http://www.tltc.uci.edu/Pedagogy.html						UCI takes pride in its faculty and its numerous contributions to the institution, their academic disciplines, and professional associations.
3.3. Faculty and staff recruitment, orientation, workload, incentive, and evaluation practices are aligned with institutional purposes and educational objectives. Evaluation processes are systematic, include appropriate peer review, and, for instructional faculty and other teaching staff, involve consideration of evidence of teaching effectiveness, including student evaluations of instruction.		http://www.ap.uci.edu/index.html http://www.ap.uci.edu/Guides/faculty/TenureHandbook.pdf http://www.eod.uci.edu/ads/index_welcome.html https://eee.uci.edu/news/orientation/http://advance.uci.edu/survey/Report%20on%20UCl%20Faculty%20Survey%200203.pdf http://www.tltc.uci.edu/			Evaluation processes for staff do not include peer review, but do allow for open conversations between employee and supervisor. Employees are encouraged to give responses in the annual evaluation.			UCI's recruitment, orientation, workload, and evaluation practices reflect the institution's commitment to both teaching and scholarship. The academic personnel review process includes student and peer evaluations as well as a review of the faculty member's scholarly contributions made to the discipline.

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
3.4. The institution maintains appropriate and sufficiently supported faculty and staff development activities designed to improve teaching and learning consistent with its institutional purposes.	The institution provides training and support for faculty members teaching by means of technology-mediated instruction.	http://www.ap.uci.edu/employment/PD AFactsheet.pdf http://www.ap.uci.edu/Guides/faculty/2 007TenureHandbook.pdf http://www.tltc.uci.edu/ http://www.ore.uci.edu/ http://snap.uci.edu/viewXmlFile.jsp?res ourceID=327			Staff are offered training courses such as the Business Office Institutes, Leadership Academy, Education and Enrichment Forums, as well as Training Certificates from HR.			The university's Teaching, Learning & Technology Center regularly provides faculty development activities to support faculty in the improvement of teaching and student learning. Assessment training for faculty and staff is provided by the Office of Research and Evaluation. Human Resources offers a variety of workshops and other training activities for staff.
Fiscal, Physical, and Information Resources								
3.5. The institution has a history of financial stability, unqualified independent financial audits and has resources sufficient to ensure long-term viability. Resources are aligned with educational purposes and objectives. If an institution has an accumulated deficit, it has realistic plans to eliminate the deficit. Resource planning and development include realistic budgeting, enrollment management, and diversification of revenue sources.		http://www.budgetoffice.uci.edu/ http://www.audit.uci.edu/mission.html http://www.evc.uci.edu/budget/KNL%2 ONovember%20Regents%2008- 09%20Budget-final-with-notes.ppt#1	UC Irvine sees substantial uncertainties, including considerable midyear declines in revenue, as a result of deficits in the California state budget.					UCI has a history of financial stability. Its financial planning processes and systems, including its auditing functions, are designed to support the institution's educational purposes and objectives. The Office of Planning and Budget is responsible for budget oversight.
3.6. The institution holds, or provides access to, information resources sufficient in scope, quality, currency, and kind to support its academic offerings and the scholarship of its members. These information resources, services and facilities are consistent with the institution's educational objectives and are aligned with student learning outcomes. For both on-campus students and students enrolled at a distance, physical and information resources, services, and information technology facilities are sufficient in scope and kind to support and maintain the level and kind of education offered.		https://eee.uci.edu/ http://www.lib.uci.edu/ http://www.nacs.uci.edu/ http://www.policies.uci.edu/quickviews/ privacy.html		The UCI Libraries provide sufficient access to print and online resources to support the needs of the campus community. Consistent investments in library technology, collections, and facilities continue to expand access to resources and better align learning spaces with the needs of the growing and evolving student population.	Through NACS-Network and Academic Computing Services, and Adcom-Administrative Computing Services, UCI provides its faculty, staff, and students with the information resources needed to support the university's academic mission and values. Faculty, staff, and students have access to all UC Library on-line services and offerings.			Faculty, staff, and students have access to all UC Library on-line services and offerings.

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly	Associated Graduate Students	Associated Students UCI	Leadership Academy ¹ Comments
3.7. The institution's information technology resources are sufficiently coordinated and supported to fulfill its educational purposes and to provide key academic and administrative functions.		http://www.nacs.uci.edu http://www.policies.uci.edu/offsite/infote ch.html https://eee.uci.edu/			Through NACS-Network and Academic Computing Services, and Adcom-Administrative Computing Services, UCI provides its faculty, staff, and students with the information resources needed to support the university's academic mission and values.	The current access to technology is splintered and often difficult to navigate with multiple log-ins required. The new Zot Portal, set to roll out in May 2009, will eliminate much of this. Many labs on-campus either have outdated IT equipment or no IT access and necessary software. Centralized campus computer centers not always best environment for graduate study or lab work. This is generally the responsibility of the individual faculty members not necessarily a campuswide issue. The campus EEE is rather rudimentary in its grade-keeping functions not allowing for easy adjustments and the addition of extra-credit work on an individual basis when faced with large class sizes. Blackboard is an easier system to navigate. The library website can be burdensome to navigate when searching for on-line sources. Information classes are necessary to use properly and are offered periodically.	Need wireless in the dorms. It is taking far too long to set up the student web portal. School websites are outdated. EEE is great. Instructors are not properly trained to use the Smart Classrooms or websites. Professors should be required to have websites.	Through NACS-Network and Academic Computing Services, and Adcom-Administrative Computing Services, UCI provides its faculty, staff, and students with the information resources needed to support the university's academic mission and values.
Organizational Structures and Decision-Making Process								
3.8. The institution's organizational structures and decision-making processes are clear and consistent with its purposes, support effective decision making, and place priority on sustaining effective academic programs.	The institution establishes clear roles, responsibilities, and lines of authority, which are reflected in an organization chart.	http://www.policies.uci.edu/resources/orgcharts.html http://www.policies.uci.edu/resources/opstructure.pdf http://www.policies.uci.edu/resources/aboutpolicies.html#sources http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=598			The university's organizational structure is transparent and posted on org charts publicly available on the Web.			UCI's organizational structures and processes serve to support effective decision making and give primary importance to the university's academic programs.
3.9. The institution has an independent governing board or similar authority that, consistent with its legal and fiduciary authority, exercises appropriate oversight over institutional integrity, policies, and ongoing operations, including hiring and evaluating the chief executive officer.	The governing body regularly engages in self-review and training to enhance its effectiveness.	http://www.policies.uci.edu/adm/procs/ 100/105-10.html http://www.senate.uci.edu/senateweb/default2.asp			UCI's independent governing board is the Board of Regents. In addition to the Board of Regents, UCI's Academic Senate maintains oversight of the academic mission of the university to ensure its integrity.			UCI's independent governing board is the Board of Regents. In addition to the Board of Regents, UCI's Academic Senate maintains oversight of the academic mission of the university to ensure its integrity.

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Students Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
3.10. The institution has a full-time chief executive officer and a chief financial officer whose primary or full-time responsibility is to the institution. In addition, the institution has a sufficient number of other qualified administrators to provide effective educational leadership and management.		http://www.evc.uci.edu/ http://www.pb.uci.edu/ http://www.policies.uci.edu/resources/orgchartia.pdf			The position of chief executive officer is held by Michael Gottfredson, Executive Vice Chancellor and Provost. The position of chief financial officer is held by Roy Dormaier, Vice Chancellor of Planning and Budget.			The position of chief executive officer is held by Michael Gottfredson, Executive Vice Chancellor and Provost. The position of chief financial officer is held by Roy Dormaier, Vice Chancellor of Planning and Budget.
3.11. The institution's faculty exercises effective academic leadership and acts consistently to ensure both academic quality and the appropriate maintenance of the institution's educational purposes and character.	The institution clearly defines the governance roles, rights, and responsibilities of the faculty.	http://www.ap.uci.edu/ http://www.ap.uci.edu/APP/ http://www.senate.uci.edu/senateweb/d efault2.asp?active_page_id=374 http://www.senate.uci.edu/images/asse mbly/adhocreportweb.pdf			UCI's academic personnel policies and procedures delineate the roles, rights, and responsibilities of the faculty in providing academic leadership. Under the leadership of Academic Senate, all academic programs undergo the program review process to ensure the quality of the university's academic offerings.			UCI's academic personnel policies and procedures delineate the roles, rights, and responsibilities of the faculty in providing academic leadership. Under the leadership of Academic Senate, all academic programs undergo the program review process to ensure the quality of the university's academic offerings.

WASC Standard 4. Creating an Organization Committed to Learning and Improvement

The institution conducts sustained, evidence-based, and participatory discussions about how effectively it is accomplishing its educational objectives. These activities inform both institutional planning and systematic evaluations of educational effectiveness. The results of institutional inquiry, research, and data collection are used to establish priorities at different levels of the institution, and to revise institutional purposes, structures, and approaches to teaching, learning, and scholarly work.

WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Student Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
Strategic Thinking and Planning								

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Student Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
4.1. The institution periodically engages its multiple constituencies, including faculty, in institutional reflection and planning processes which assess its strategic position; articulate priorities; examine the alignment of its purposes, core functions and resources; and define the future direction of the institution. The institution monitors the effectiveness of its plans and planning processes, and revises them as appropriate.		http://www.strategicplan.uci.edu/				Student voice is often missing from this process. While this is not an explicit requirement, we would like to point out that the involvement and inclusion of students, both graduate and undergraduate, can offer a unique perspective of those living a strategy often overlooked by those planning it.		The University's Strategic Plan is the strongest example of UCI's engagement of multiple constituencies in institutional reflection and planning.
4.2. Planning processes at the institution define and, to the extent possible, align academic, personnel, fiscal, physical, and technological needs with the strategic objectives and priorities of the institution.		http://www.ceplanning.uci.edu/finallrdp.html						As noted in the Executive Summary of UCI's Long Range Development Plan, "The plan balances program needs and environmental conditions, and acknowledges the importance of implementing campus development in concert with the surrounding community."
4.3. Planning processes are informed by appropriately defined and analyzed quantitative and qualitative data, and include consideration of evidence of educational effectiveness, including student learning.		http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=106 http://www.senate.uci.edu/images/annualreports/annual%20report%2006-07.pdf						The role of the Academic Senate's Council on Planning and Budget is to confer with and advise the Chancellor, the Executive Vice Chancellor and Provost, and campus administrative units on matters of planning, budget, and resource allocations on both short and long-term bases. The Council also initiates studies in planning and budget matters and, if necessary to accomplish such studies, authorizes establishment of ad hoc committees to carry out investigations and make reports. The 2006-2007 CPB report serves to elucidate the scope of the Council on Planning and Budget's work.

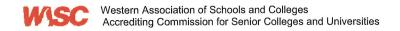
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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Student Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
4.4. The institution employs a deliberate set of quality assurance processes at each level of institutional functioning, including new curriculum and program approval processes, periodic program review, ongoing evaluation, and data collection. These processes include assessing effectiveness, tracking results over time, and using comparative data from external sources, and improving structures, and processes, curricula, and pedagogy.		http://www.senate.uci.edu/senateweb/default2.asp?active_page_id=103 http://www.senate.uci.edu/images/senate_docs/mia/joint%20review%20may%202005%20procedures-final.pdf						The Academic Senate's Council on Educational Policy is responsible for reviewing and approving new curriculum and programs, oversees the academic program review process, and oversees the general education program.
Commitment to Learning and Improvement								
4.5. The institution has institutional research capacity consistent with its purposes and objectives. Institutional research addresses strategic data needs, is disseminated in a timely manner, and is incorporated in institutional review and decision-making processes. Included in the institutional research function is the collection of appropriate data to support the assessment of student learning. Periodic reviews are conducted to ensure the effectiveness of the research function and the suitability and usefulness of data.		http://www.oir.uci.edu/ http://www.ore.uci.edu/						There are two central offices on campus that are responsible for research-the Office of Institutional Research and the Office of Research and Evaluation are the two primary offices at UCI responsible for the collection and analysis of institutional data for use in institutional decisionmaking processes and to support the assessment of student learning.
4.6 Leadership at all levels is committed to improvement based on the results of the processes of inquiry, evaluation and assessment used throughout the institution. The faculty take responsibility for evaluating the effectiveness of the teaching and learning process and use the results for improvement. Assessments of the campus environment in support of academic and co-curricular objectives are also undertaken and used, and are incorporated into institutional planning.	The institution has clear, well- established policies and practices for gathering and analyzing information that leads to a culture of evidence and improvement.	http://www.ore.uci.edu/UCUES/UCUESindex.html http://www.chancellor.uci.edu/values/ http://www.strategicplan.uci.edu/						UCI participates in the UC wide Undergraduate Experience Survey-UCUES. The data collected through UCUES and analyzed and shared with the campus, in addition to the presentation of institutional values on the Chancellor's home page, and UCI's Strategic Plan demonstrate the value assigned to evaluation and assessment in institutional decision making processes

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WASC Criteria for Review (CFRs)	WASC Guidelines	UCI Supporting Documents	Academic Senate Comments	Libraries Comments	Staff Assembly Comments	Associated Graduate Student Comments	Associated Students UCI Comments	Leadership Academy ¹ Comments
4.7. The institution, with significant faculty involvement, engages in ongoing inquiry into the processes of teaching and learning, as well as into the conditions and practices that promote the kinds and levels of learning intended by the institution. The outcomes of such inquiries are applied to the design of curricula, the design and practice of pedagogy, and to the improvement of evaluation means and methodology.	Periodic analysis of grades and evaluation procedures are conducted to assess the rigor and effectiveness grading policies and practice.	http://www.tltc.uci.edu/ http://www.pbl.uci.edu/whatispbl.ht ml http://www.writing.uci.edu/archive.h tml http://www.senate.uci.edu/images/s ha/nov'07callltr.doc http://www.ore.uci.edu/						UCI's Teaching, Learning, and Technology Center provides workshops and activities designed to support inquiry into the processes of teaching and learning. The webpages for the faculty institute on Problem Based Learning, as well as the Campus Writing Coordinator workshops, which are geared towards exposing and exploring teaching methods for the instruction of writing, demonstrate UCI's commitment to engaging in teaching and learning inquiry. UCI's Office of Research and Evaluation conducts research and evaluation studies of academic programs that include impact on student
4.8. Appropriate stakeholders, including alumni, employers, practitioners, and others defined by the institution, are involved in the assessment of the effectiveness of the educational programs.		http://www.ps.uci.edu/physics/news 5/chanan5.html http://alumni.ics.uci.edu/ http://www.evc.uci.edu/undergrad/a ccountability_062304.pdf http://www.its.uci.edu/~mmcnally/d ocs/CE-ABETsurvey-assess- affil.pdf						Individual departments and schools involve stakeholders including alumni, employers, and practitioners in the assessment of the effectiveness of educational programs. In addition, CEP, in its academic program review process, enlists professional colleagues from other institutions in the review process. The CEO Roundtable organized through the Merage School of Business is another example of involving stakeholders in the assessment of the effectiveness of educational programs. All departments in the School of Engineering involve employers, alumni, and other stakeholders in the assessment process.

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WASC Institutional Proposal Appendix 5

Work Plan and Milestones for the Institutional Proposal, Capacity Program Review and Educational Effectiveness Review

Milestones:

Institutional proposal

Proposal is due November 1, 2009 Review by WASC staff Conference call December 15, 2009

Capacity and Preparatory Review

Report due approximately 12 weeks before review, February 15, 2011

WASC Review: May 15, 2011

Educational Effectiveness Review

Report due approximately 12 weeks before review, July 15, 2012

WASC Review: October 15, 2012

Workplan and Milestones

Institutional Proposal (IP)

Capacity and Preparatory Review (CPR)

Spring 2006

- WASC Annual Conference CPR Workshop April 10-16
- Steering Committee convenes for orientation to WASC re-accreditation process. May 24
- Steering Committee meeting. General planning. June 19

Fall 2006

Winter 2007

- WASC Regional Workshop Institutional Proposal and Beyond. January 11-12
- Steering Committee meeting. Task assignments January 25
- All Faculty Memo Instructional Improvement Initiative Announcement February 13
- Steering Committee meeting. Planning, discussion of themes, identification of on-going assessment projects.
 February 22
- Meeting with Associate Deans of Undergraduate Education Mike Clark and Judy Shoemaker WASC review process and an introduction to educational effectiveness. January 29

Spring 2007

WASC Annual Conference – WASC 101 Workshop April 18-23

Fall 2007

- Steering Committee meeting Discussion of themes and approaches for proposal. Review of WASC Inventory
 of Educational Effectiveness. August 20
- Memo to Deans, Assoc. Deans, Asst. Deans General Announcement of Re-accreditation Process September
- WASC Regional Workshop Retreat on Student Learning and Assessment UCI Team: Associate Deans, Rudi Berkelhamer, Michael Leon, James Meeker, Caesar Sereseres, Cathy Palmer. Sharon Salinger, Dean of Undergraduate Education, Judy Shoemaker, Natalie Schonfeld, Zohreh Soltani of Assessment and Research Studies October 18-20
- Meeting with Associate Deans of Undergraduate Education Michael Clark, Judy Shoemaker November 19

Winter 2008

- WASC Regional Workshop The Institutional Workshop and Beyond Hosted at Irvine January UCI Team: Rob Ameele, Michael Poston, Judy Shoemaker January 10-11
- Steering Committee meeting Establishing proposal themes January 25
- Departmental Assessment Grants Program announced by Dean Sharon Salinger to campus community.
 February 1
- Meeting with Associate Deans of Undergraduate Education Michael Clark, Judy Shoemaker. Handed out required data table – Inventory of Educational Effectiveness February 11
- Faculty Workshop on Student Learning in the Major, Winter 2008 Colloquy at the University Club. Introduction to assessment of student learning in the undergraduate major. Information on how to prepare assessment grant proposals. Workshop facilitators: De Gallow, Natalie Schonfeld, Judy Shoemaker February 13
- CFRs sent to campus constituencies for input. March 08 May 09

Spring 2008

- Proposals Due for Departmental Assessment Grants April 11
- Steering Committee meeting Planning for UC Chairs Learning Outcomes Workshop April 23
- Guidance to departments on development of learning outcomes in the major. Apr 08 Apr 09
- WASC Annual Conference The Institutional Proposal and Beyond, CPR, and EER Workshops April 16-19
- Themes Amended Memo to Campus Community from Michael Clark April 28
- WASC Reaccreditation Web-Site Launched Web designers Judy Shoemaker and Sylvia Bass April 28
- Departmental Assessment Grants Awarded Seven Grants Awarded, Average of \$10,000 each. April 28
- Guidelines for Establishing New Majors Revised Proposals for new majors should include educational goals
 and objectives and description of how the curriculum leads to the achievement of the stated learning goals and
 objectives. Approved by Council on Educational Policy. May 1
- Letter to Department Chairs Requesting Student Learning Outcomes for all Undergraduate Majors, from Mike Clark, May 2
- Workshop on Student Learning in the Major for School of Social Science Department Chairs Workshop Facilitators: Judy Shoemaker and Natalie Schonfeld May 6
- Meeting with Associate Deans of Undergraduate Education Data needs of schools discussed. Useful to have annual data reports for each school. Included student success factors such as retention and graduation, selfreported learning gains from UCUES. Presenters: Michael Poston, Judy Shoemaker May 12
- Presentation to Dept. Chairs Student Learning in the Majors: Progress Report Introduction to student learning outcomes assessment. Request that all departments with undergraduate majors submit student learning outcomes by Sept. 15 (Later revised to Dec. 1) Presenters: Judy Shoemaker, Natalie Schonfeld. May 21

Fall 2008

- First draft of Institutional Proposal July 19
- Weekly assessment planning meetings with Judy Shoemaker, Chris Procello, Natalie Schonfeld. Fall Quarter
- Proposals due for Departmental Assessment Grants October 1
- Meeting with Assessment Grantees at University Club Facilitators: Chris Procello, Judy Shoemaker October 7
- Office of Research & Evaluation changes name to Assessment and Research Studies to reflect new focus of the unit. October 10
- WASC Conference Call Discussion on Changes to CFRs and Institutional Review Process September 19

- Proposal Development Workshop for Departmental Assessment Grants, Student Center. Workshop facilitators: Chris Procello, Natalie Schonfeld, Judy Shoemaker October 29
- Meeting with Assessment Grantees at University Club November 4
- UC Dept. Chairs Workshop on Student Learning in the Major Hosted by UCI Focus on five undergraduate majors: biological sciences, chemistry, English, psychology, and theatre/drama. Department chairs from all UC campuses discussed status of identifying and assessing student learning outcomes on their campuses. Group Facilitators: Hilary Baxter, De Gallow, Chirs Procello, Natalie Schonfeld, Judy Shoemaker. November 7
- UCI Departmental Chairs' Retreat, Student Center Reminder about need to produce student learning outcomes for each undergraduate major. Presenters: Michael Clark and Judy Shoemaker November 20
- SLO Progress reports due for each undergraduate major. December 1
- Proposals due for Departmental Assessment Grants December 5

Winter 2009

- Individual meetings with assessment grantees. Chris Procello Winter Quarter
- Weekly assessment planning meetings. Participants: Judy Shoemaker, Chris Procello, Natalie Schonfeld.
 Winter Quarter
- Bi-weekly meetings with NACS regarding campuswide assessment management system; contacted vendors; held demonstrations. Participants: Ray Vadnais, Chris Procello Winter Quarter
- Departmental Assessment Grants awarded. Five grant awards, average \$10,000. January 7
- Student Learning Outcomes for General Education Categories approved by the Council on Educational Policy. Will be published in 2009-2010 General Catalogue. Drafted by Judy Shoemaker. Jan. 8
- UCUES results discussed at meeting with Associate Deans of Undergraduate Education. Provided results from the UC Undergraduate Experience Survey (UCUES), by school and major (with at least 10 majors), upper division students only. Self-assessment of learning gains, level of academic engagement, participation in undergraduate research, post-graduation plans, overall satisfaction with the undergraduate experience. Presentor: John Selegean. January 12
- Meeting with Assessment Grantees at University Club. Facilitator: Chris Procello January 30
- Meeting with Associate Deans for Undergraduate Education. Assessment update from Chris Procello. February
- UCUES results discussed at meeting with Assistant Deans. Provided results from the UC Undergraduate
 Experience Survey (UCUES), by school and major (with at least 10 majors), upper division students only.
 Self-assessment of learning gains, level of academic engagement, participation in undergraduate research,
 post-graduation plans, overall satisfaction with the undergraduate experience. Presentor: John Selegean
 February 12
- Meeting with Professor Emeritus Ross Conner regarding approach to assessment using principles of community building. Natalie Schonfeld, Chris Procello. February 12
- Meeting with department chairs of the School of Social Sciences to discuss learning outcomes and assessment strategies. Facilitator: Chris Procello. February 25
- Meeting with department chairs of School of Social Ecology to discuss learning outcomes and assessment strategies. Facilitator: Chris Procello. March 10
- Development of Academic Program Review Process theme with Senate Chair of Academic Program Review March/April

Spring 2009

- Weekly assessment planning meetings. Participants: Judy Shoemaker, Chris Procello, Natalie Schonfeld.
 Spring Quarter
- Individual feedback to departments on student learning outcomes. Facilitator: Chris Procello Spring Quarter
- WASC Annual Conference April
- Development of Student Learning theme with Division of Undergraduate Education April/May
- Meeting with Assessment Grantees at University Club. Facilitator: Chris Procello May 22
- Departmental Assessment Grant Program, 2009 Colloquy, Student Center. Panel discussions of successes and challenges of assessment grants, small group discussions. Participants: Assessment Grantees. Organizer: Chris Procello May 27
- Development of General Education theme with Division of Undergraduate Education May/June
- Second draft of Institutional Proposal June 25

Workplan and Milestones

Capacity and Preparatory Review (CPR)

Educational Effectiveness Review (EER)

Fall 2009

- Institutional Proposal Draft submitted to campus constituencies for final review. Sept.
- · Campus review response due. October 15
- Submit Institutional Proposal by November 1, Review by WASC staff, Conference call with Proposal Review Committee, December 15 (est.)
- · Appoint Assessment Committee. October
- Appoint GE Review Committee. October
- Associate Deans analyze disaggregated data on student success. October/November
- Assessment Committee collects and analyzes Year
 1 evidence of impact of assessment on learning and best practices, and distributes results to all deans and departments. October/November
- Faculty workshop on assessment. October
- Pilot test of online assessment management system. November

Winter 2010

- Approval of Institutional Proposal by Commission. January/February
- Steering Committee reviews and analyzes WASC's standards, Data Portfolio and other Exhibits. February/March
- Training for faculty and staff on how to use online assessment management system. March
- Call for assessment grant proposals. December/January
- 2 members of GE Review Committee attend AAC&U assessment conference. February

Spring 2010

- Assessment Committee and GE Review Committee draft reflective essays, incorporating plans for EER. March - May
- Associate deans draft report on student success data and its implications. March - May
- Steering Committee drafts Capacity Report. April -May
- Campus-wide forum on assessment activities and best practices. May
- UC Undergraduate Experience Survey (UCUES) administered to all UCI undergraduates. May - July
- All departments enter their student learning outcomes and assessment plans for undergraduate major into the online assessment management system by July 1.
- · New assessment grants start July 1.

Fall 2010

- Steering Committee circulates Draft Capacity Report, including Reflective Essays and Student Success Report, to Academic Senate, Student Associations, Deans, Associate Deans, Academic Councils and Departments for feedback. Sept.
- Campus review due to Committee by Dec. 1.
- Steering Committee writes concluding essay and final Capacity Report. December/January
- Assessment Committee collects and analyzes Year 2 evidence of impact of assessment on learning and best practices, and distributes results to all deans and departments.
- · Faculty workshop on assessment.
- UCUES 2010 findings distributed to associate deans and posted on Website.

Winter 2011

- UCI submits Capacity Report to WASC by February 15 (12 weeks before site visit, 35 pages plus appendices).
- Steering Committee analyzes evidence in updated Data Portfolio. January/February
- Call for assessment grant proposals. April

Spring 2011

- Capacity visit by WASC team, May 15 (est.); UCI responds to report; Commission Action (decision
- Campuswide forum on assessment activities and best practices.

- Associate deans review updated student success data with UCUES data and report on findings and implications for improvement.
- All departments update assessment activities and use of results using the online assessment management system by July 1.
- New assessment grants start July 1.

Fall 2011

- Assessment Committee collects and analyzes Year
 1 evidence of impact of assessment on learning and
 best practices, and distributes results to all deans
 and departments. October/November
- Steering Committee reviews associate dean report on Student Success. November

Winter 2012

- Assessment Committee and GE Review Committee evaluate success of assessment strategies and prepare Theme Essays on EE research questions. January/February
- Steering Committee analyzes evidence in updated Data Portfolio and other Exhibits. January/February
- Steering Committee drafts EE Report. February/March

Spring 2012

- Campuswide forum on assessment activities and best practices. May
- Steering Committee circulates draft Educational Effectiveness Report, including Theme Essays and Student Success Report, to Academic Senate, Student Associations, Deans, Associate Deans, Academic Councils and Departments for feedback. April – May
- Campus review response due to Steering Committee by June 1.
- Steering Committee writes integrative essay and final EE Report. May June
- All departments update assessment activities and use of results using the online assessment management system by July 1.

Summer 2012

• UCI submits Educational Effectiveness Report by July 15 (12 weeks before EE visit, 50 pages plus exhibits and appendices).

Fall 2012

Visit by WASC EER Team, October 15 (est.); UCI responds to report; Commission action.

Appendix 6 Membership of Accreditation Steering Committee

- Administration (Faculty)
 - o Vice Provost for Academic Planning (Chair and co-WASC ALO)
 - o Dean of the Division of Undergraduate Education (co-WASC ALO)
 - o Dean of the Graduate Division
 - Vice Chancellor Student Affairs
 - o Dean of Extension
 - o Representative from the Academic Council (i.e., Deans of the Academic Schools)
 - o Representative from the Undergraduate Council (i.e., Undergraduate Associate Deans in the Schools)

Staff

- Associate Chancellor/Chief of Staff (Staff)
- o Assistant Vice Chancellor for Enrollment Services (Staff)
- o Dean of Students (Staff)
- o Director of the Office of Institutional Research (Staff)
- o Director, Office of Assessment and Research Studies (Staff)
- Assistant Vice Provost for Academic Planning (Staff)
- o Chair of the Staff Assembly (Staff)
- Academic Senate Representatives (Faculty)
 - o Chair
 - o Chair Elect of the Academic Senate
 - Chair of Graduate Council
 - Chair of the Council on Educational Policy
 - o Chair of the Council on Planning and Budget

• Student Representatives

- o President, Associated Students of UCI (undergraduate)
- o President, Associated Graduate Students

Alumni Representatives

- o President Alumni Association
- o Asst. Vice Chancellor Alumni Relations (Staff)

Appendix 7 Schedule for Academic Program Reviews AY 2005-06 through 2015-16 (Transition to a 10-Year Cycle)

X=Review

F=Formal Follow-Up/Status Report Requested (year marked is tentative; initiated 3 years after Review reports are sent to EVCP)

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Claire Trevor School of the Arts	х				F				X		
School of Biological Sciences (includes School of Medicine's Basic Sciences Depts*; MBGB, INP, MCB**)			X			F F					
College of Health Sciences Environmental Toxicology, Genetic Counseling, Pharmacology & Toxicology, Public Health, Nursing Science, Pharmaceutical Sci.				x							
Department of Education				х			F				
Henry Samueli School of Engineering				F							X
School of Humanities			F					Х			F
Donald Bren School of Information & Computer Sciences				F			X			F	
Paul Merage School of Business	×			F						X	
School of Physical Sciences		x			F						
School of Social Ecology			F			х			F		
School of Social Sciences	F				X			F			

^{*}SOM Basic Science Departments=Anatomy & Neurobiology, Biological Chemistry, Microbiology & Molecular Genetics, Pathology and Laboratory Medicine, and Physiology & Biophysics; **MBGB=interdisciplinary graduate program in Molecular Biology, Genetics and Biochemistry; INP=Interdisciplinary Neurosciences Program; MCB=graduate program in Mathematical and Computational Biology.

review schedule through 2016 10-year.doc as of 9/23/2009

Appendix 8

Reassigned Staff and Faculty Service Credit In Support of WASC Review

Data Gathering and Analysis Systems

- o Head:
 - Michael Poston, Director, Office of Institutional Research
- o Groups responsible:
 - Office of Institutional Research
 - Office of Assessment and Research Studies

Coordination of self-study results with themes and specific CFR: Associate Vice Provost Rob Ameele

Development of Mission Statement

- o Head:
 - Academic Senate President
- o Groups responsible:
 - Academic Senate Cabinet and selected Councils to develop draft
 - Faculty, Staff, Administration, and Students to review drafts and adopt a statement for the campus

Themes

- Theme 1: Student Learning in the Major
 - o Head:
 - Sharon Salinger, Dean of DUE
 - Judy Shoemaker, Director of Assessment and Research Studies
 - o Groups responsible:
 - Division of Undergraduate Education
 - Office of Assessment and Research Studies
 - Associate Deans of Academic Schools
 - Departmental Chairs
- Theme 2: General Education
 - o Heads:
 - Chair, Academic Senate Council on Educational Policy
 - Dean Sharon Salinger, Division of Undergraduate Education
 - o Groups responsible:
 - Academic Senate Council on Educational Policy
 - Division of Undergraduate Education
- Theme 3: Academic Program Review
 - o Heads:
 - Michael P. Clark, Vice Provost for Academic Planning
 - Derek Dunn-Rankin, Chair of Academic Program Review Board
 - o Groups responsible:
 - Academic Senate Academic Program Review Board
 - Senate Cabinet, esp. Chairs of CEP and Graduate Council

Appendix 9

Faculty and Staff Administrative Responsibilities for the WASC Review

Administration

Vice Provost for Academic Planning (co-WASC ALO)—Michael Clark Assistant Vice Provost—Rob Ameele

Executive Assistant—Deborah Chennault

Dean of Undergraduate Education (co-WASC ALO)—Sharon Salinger
Director of Assessment and Educational Research—Judy Shoemaker
Principal Administrative Analyst--Chris Procello
Senior Administrative Analyst--Natalie Schonfeld

Director, Office of Institutional Research—Michael Poston

Academic Senate

Chair—Jutta Heckhausen

Chair Elect—Judith Stepan-Norris

Chair, Council on [Undergraduate] Educational Programs

Chair, Graduate Division

Chair, Academic Program Review Board

Additional Officials with specific responsibilities in the review

President, Associated Graduate Students

President, Associated Students of UCI

President, Alumni Association

Executive Director, UCI Alumni Association

Undergraduate Research at UCI

Faculty-mentored research and creative activities have become an integral component of the education an undergraduate expects to receive at the University of California, Irvine (UCI). The uniqueness of this UCI experience comes from one-on-one interaction with world-renowned faculty, applying research methods into real-world applications, and the development of skills and knowledge gained that will lead to successful careers. With its ten undergraduate degree-granting schools (Arts, Biological Sciences, Business, Engineering, Humanities, Information & Computer Science, Physical Sciences, Social Ecology, Social Sciences), UCI has launched and nurtured many department- and school-based programs in support of undergraduate research. Some of these programs receive external funding from corporate sponsors and federal agencies (i.e., National Science Foundation, National Institutes of Health, or the U.S. Department of Education); others are funded locally. In addition, many undergraduates have conducted research under the guidance of faculty members from the School of Medicine. This growing commitment of UCI faculty and administration and support of undergraduate research opportunities has led to the development of a number of centralized undergraduate research programs, including the Undergraduate Research Opportunities Program (UROP) in 1995, and the Summer Undergraduate Research Program (administered by UROP) in 2001.

We believe it is important for undergraduates to gain exposure to the research process regardless of their future career choices. Over the past few years, close to 50% of all students graduating from UCI have participated in independent or group research projects. This engagement can take on different levels of intensity: from learning research methods specific to their discipline, to managing their own projects, to concluding with a presentable or publishable finding. The most common types of projects are individual, followed by laboratory projects; some are driven by a senior thesis or term paper. As you move around the UCI campus in a clockwise direction, you observe creative projects in the Arts, scholarly work in the Humanities, surveys or psychology experiments in Social Ecology and Social Sciences, design projects in Computer Science and Engineering, and basic science or clinical research in the Physical and Biomedical Sciences. Close to 80% of mentoring is done directly by Faculty Members of the Academic Senate, with the remainder done through the involvement of graduate students or post-doctoral fellows.

The benefits of undergraduate research go far beyond the knowledge gained from conducting a research or creative project. Students conducting research projects develop skills—critical analysis, problem solving, and communication skills are only a few—that they will use throughout their lives. In a 2002 survey, faculty members were asked to list areas in which students generally improve as a direct result of their participation in the undergraduate research experience. More than 85% of the responses listed the following:

- Drawing conclusions and critically analyzing information
- Defining and solving problems
- Developing communication skills
- Working independently
- Understanding and applying research methods, ethics and conduct rules

Faculty, as a result, develop a better understanding of the learning styles of students and the training required for students to succeed in their undergraduate research experience.

Launched in 1995, the Undergraduate Research Opportunities Program (UROP) in the Division of Undergraduate Education encourages and facilitates faculty-mentored research and creative activities by undergraduates from all schools and academic disciplines at UCI. UROP is committed to providing a professional environment conducive to research advancement and career skills development. UROP also collaborates with a number of schools and research units to develop specialized research opportunities. Through UROP's various programs, the UROP Team assists students through all phases of the research process, including proposal writing, developing research plans through project management skills, receiving grants to fund research projects, scholarly journal writing through *The UCI Undergraduate Research Journal*, and presenting results of the research or creative project through the UCI Undergraduate Research Symposium.

UROP's demonstrated commitment has grown to support close to 2,000 undergraduates (unduplicated) each year through a variety of programs, including:

• UROP advises close to 1,200 students annually on appropriate research opportunities on and off campus. The UROP Team motivates and encourages students to do their "homework" by reading more about their topic of interest, reviewing faculty research profiles (available at www.faculty.uci.edu or under school and departmental Web sites), and identifying their top three to five potential faculty mentors. Students are then exposed to appropriate protocols on how to contact the mentor, how to engage the mentor in a meeting about project details (a project topic could be proposed by the student), appropriate questions to ask regarding expectations, and what it means to make a commitment considering the student is expected to spend at least 12–15 hours per week working on her/his project. Students receive academic credit for conducting faculty-mentored research or creative projects through the 199-like courses with 1–5 possible graded units per quarter. This is followed by training on how to "Manage the Research Process" and "Responsible Research Conduct." A few students receive payment as compensation for their efforts, but this option is more common in the summer. A student

cannot receive payment and academic credit for the same effort. Students start their projects at different stages in their undergraduate program, but are expected to work on the same project for at least three academic quarters. In addition, UROP maintains a detailed list of close to 400 off-campus research programs at other universities, national research institutes, and corporations.

- UROP Grants & Fellowships: This program provides funding for continuing UCI undergraduates from all disciplines who are conducting research projects or creative activities under the guidance of UCI faculty members. Students may apply for grants during separate Calls for Proposals in the Fall and Spring Quarters of each school year. Grants of up to \$1,000 may be awarded for individual projects, although higher amounts can be awarded for group projects; these funds are to be used to cover research-related expenses. Students need to outline the background on their projects, significance and proposed methods and findings, and an itemized budget. The UROP Faculty Advisory Board makes funding recommendations based on the proposal, faculty mentor's letter of recommendation, student's transcript, and available funds. Proposals that do not require funding or are already receiving adequate funding from other sources may be submitted for an Honorary Fellowship. In 2008-2009, UROP awarded close to \$210,000 in grants/fellowships to more than 600 undergraduates who were mentored by more than 370 faculty members. In addition, 17 students received honorary fellowships (recognition but without funding) for their outstanding research projects. Additional funding details by school since the first Call for Proposals, Spring 1996, are available http://www.urop.uci.edu/grants/grants_fellowships.html.
- Summer Undergraduate Research Program (SURP): Launched in 2001, SURP provides funding for continuing UCI undergraduates from all disciplines who are conducting summer research projects or creative activities under the guidance of UCI faculty members. Students work on their research topics full-time for a ten-week period, or the equivalent of 400 hours. Student applicants need to have been involved in at least one quarter of faculty-mentored undergraduate research or creative activity. SURP Fellows receive up to a \$3,000 stipend for their time and efforts over the summer. Proposals that do not require funding may be submitted for an Honorary Fellowship. For Summer 2009, SURP awarded \$266,000 in grants/fellowships to 147 undergraduates. In addition, 11 honorary fellowships were awarded. Detailed funding information by school is available at: http://www.urop.uci.edu/SURP/Recipients/awardsummary.html.
- Inter-Disciplinary Summer Undergraduate Research Experience (ID-SURE): Funded by the National Institutes of Health, ID-SURE was launched in Summer 2005 as a collaboration between UROP and the Health Promotion Center in the School of Social Ecology. The Program provides funding for continuing UCI undergraduates from all disciplines who are conducting interdisciplinary summer research projects or creative activities related to health promotion and disease prevention under the guidance of UCI faculty members. Students become fully immersed in their research topic full-time for an eight-week period, or the equivalent of 320 hours. Applicants need to have been involved in at least one quarter of faculty-mentored undergraduate research or creative activity. ID-SURE Fellows participate in a preparatory course during Spring Quarter, and are awarded a \$2,400 stipend in support of their time and efforts over the summer. Proposals that do not require funding may be submitted for an Honorary Fellowship. This was one of five programs nationwide funded by the National Institute on Diabetes and Digestive and Kidney Disorders. The program supported 146 UCI undergraduates since Summer 2005. Additional information is available at: http://www.urop.uci.edu/id-sure.html.
- Integrated Micro/Nano Summer Undergraduate Research Experience (IM-SURE): Funded by the National Science Foundation as a Research Experience for Undergraduates (REU) Site, IM-SURE was launched in Summer 2005 as a collaboration between UROP and the Integrated Nanosystems Research Facility of the Henry Samueli School of Engineering. The Program provides a unique ten-week summer research opportunity for non-graduating Science and Engineering juniors and seniors to become fully immersed in cutting edge micro/nano research and applications under the guidance of UCI faculty members. Participants have the opportunity to choose from a variety of challenging research projects in biomedical, physical and engineering micro/nano-technology. In addition to a \$3,000 stipend, students receive free on-campus housing and travel allowance. This is one of two UROP-sponsored program that is open to non-UCI undergraduates. For Summers 2005, 2006, and 2007, the IM-SURE Program supported 66 students from 37 institutions, our of 496 applicants from 186 institutions. Additional information is available at: http://www.urop.uci.edu/im-sure.html.
- Chemistry Summer Undergraduate Research Fellowship (Chem-SURF): Funded by the National Science Foundation as a Research Experience for Undergraduates (REU) Site, Chem-SURF was launched in Summer 2008 as a collaboration between UROP and the Chemistry Department. The Program provides a unique ten-week summer research opportunity for non-graduating science juniors and seniors to become fully immersed in a variety of challenging and original research projects that explore a diverse and exciting range of topics in chemical biology, chemical physics, and analytical, atmospheric, bioinorganic, computational, inorganic, materials, organic, physical, polymer, surface, and theoretical chemistry. In addition to a \$3,500 stipend, students receive free on-campus housing and travel allowance. This is one of two UROP-sponsored program that is open to non-UCI undergraduates. For Summers 2008 and 2009, the Chem-SURF Program supported 31 students nationwide. Additional information is available at: http://www.urop.uci.edu/chem-surf.html.

- Summer Undergraduate Research Fellowship in Information Technology (SURF-IT): Launched in 2005, the SURF-IT Program has been funded by UROP and the California Institute for Telecommunications and Information Technology (Calit2). The Program provides the opportunity for non-graduating UCI juniors and seniors to become involved in IT-related research under the guidance of UCI faculty. Applicants need to have been involved in at least one quarter of faculty-mentored undergraduate research or creative activity. Participants work on their projects full-time for ten weeks during the summer, earning a \$3,500 stipend in support of their time and efforts. Since 2005, the SURF-IT Program supported 54 UCI undergraduates. Additional information is available at: http://www.urop.uci.edu/surf-it.html.
- Symposium: The annual UCI Undergraduate Research Symposium provides an opportunity for undergraduates from all disciplines to present their research results in a professional setting. Fellows supported by UROP-sponsored programs are required to present; however, the Symposium is open to all students. The activities include oral and poster presentations, student performances, a keynote speaker, and an awards ceremony. At the Symposium, recipients of the *Chancellor's Award for Excellence in Undergraduate Research* are recognized. The recipients include one faculty mentor and one student from each school, who are nominated by their Deans and Associate Deans. Everyone is welcome to attend and participate in this celebrated UCI event, to be held this year on May 15, 2010. The Call for Abstracts is announced during the Spring Quarter. Symposium 2009 showcased projects that involved close to 650 UCI undergraduates. Symposium Programs since 1997 are available on the Web at: http://www.urop.uci.edu/symposium.html.
- **Journal:** Launched in 1998, *The UCI Undergraduate Research Journal* is a compilation of outstanding research papers completed by UCI undergraduate students from all schools and disciplines. The UROP Student Editorial Board handles the regulation, initial review of papers, and production of the *Journal*. Final research papers are reviewed and selected by the UROP Faculty Advisory Board. Application packets, with detailed guidelines, are available in the Spring Quarter in the UROP Office and on the UROP Web site. The Call for Papers is held each year in June. Additional details about the *Journal* and copies of previous volumes are available at: http://www.urop.uci.edu/journal.html.

To learn more about these programs, we invite you to browse the UROP Web site: www.urop.uci.edu

It is important to know that research conducted by individuals associated with UCI both on and off campus must adhere to research conduct and safety rules, and demonstrate the highest ethical standards. Undergraduate students are held to the same standards and expectations we have of faculty and other researchers.

UCI faculty mentors play a critical role and they deserve our utmost gratitude. To facilitate their promotion cases, UROP can provide reports of undergraduate research activities mentored by specific faculty mentors or department-wide since 1995. These online reports include detailed information about students and projects, including copies of proposals, abstracts, papers, etc. In addition to the Chancellor's Award, UROP also recognizes one mentor a month, as "Faculty Mentor of the Month," in recognition of excellence in mentoring undergraduate research or creative activities. Various schools and departments at UCI have also recognized faculty who have demonstrated excellence in mentoring undergraduate researchers.

Prepared by: Said M. Shokair, Director, Undergraduate Research Opportunities Program (UROP)

October 22, 2009

Faculty Assessment Survey on Undergraduate Research

University of California, Irvine

I. INTRODUCTION:

According to the Boyer Commission Report, one of the hallmarks of undergraduate education at a research university should be the opportunity for a student to participate in research that is genuine and meaningful and to be actively engaged in the research process under the direction of a faculty mentor. Participating in research is increasingly an integral component of the education an undergraduate receives at the University of California, Irvine. As a Research I University, UCI continues to attract an increasing number of undergraduate students wanting to participate in faculty-mentored undergraduate research projects and creative activities.

UCI with its seven (now eight with Computer Science becoming a school) undergraduate degree-granting schools (Arts, Biological Sciences, Engineering, Humanities, Physical Sciences, Social Ecology, Social Sciences) has launched and nurtured many department-based and school-based programs in support of undergraduate research. Some of these programs receive external funding from corporate sponsors and federal agencies (i.e., National Science Foundation, National Institute of Health, or the U.S. Department of Education). Others are funded locally. In addition, many undergraduates have conducted research under the guidance of faculty members from the College of Medicine, and a few have worked with faculty members from the Graduate School of Management. This growing commitment of UCI faculty and administration to the support of undergraduate research opportunities has led to the development of a number of centralized undergraduate research programs including: the Undergraduate Research Opportunities Program (UROP) in 1995, and the Summer Undergraduate Research Program (administered by UROP) in 2001.

There has been much discussion throughout the University of California System—on campuses and at the Office of the President—as well as at the national level, about the benefits of undergraduate research. Here we ask: what do faculty perceive as the benefits and barriers to successful undergraduate research experiences, and what educational value and impact do they have on students' development and preparation for future careers?

In Winter 2002, UC Irvine invited its faculty to respond to an assessment survey on the potential benefits of undergraduate research for both students and faculty, on barriers to mentoring, and on the amount of faculty time and effort involved in mentoring undergraduate research projects. This assessment project has captured, from the faculty's point of view, the impact that the undergraduate research experience has had on both students and faculty. We hope results of the survey will be of great value to faculty, Academic Affairs, and schools/departments here on our campus, and the University of California Office of the President (UCOP) in its discussions with the State regarding budget appropriations and faculty workload issues. Specifically, the time faculty use for mentoring undergraduate research projects and creative activities has often been understated due to lack of adequate data. This survey was administered by the Undergraduate

Research Opportunities Program (UROP¹) in the Division of Undergraduate Education, and was approved by the Institutional Review Board (IRB) under protocol #2002-2250.

II. METHODS:

A web-based survey was designed to capture faculty's perceptions about the undergraduate research experience at UC Irvine. At the start of the survey, faculty were asked to indicate if they had directed an undergraduate research project—defined as "any inquiry, study or investigation undertaken by an undergraduate student (or group of students) under the supervision or mentorship of a faculty member that results in an intellectual or creative contribution to an area of study and is shared with others." The survey consisted of 18 primarily multiple-choice questions for faculty who indicated "yes" for mentoring undergraduate research projects or creative activities and two questions for faculty who responded with a "no" to this question.

Questions to faculty who have mentored undergraduate research projects capture faculty's perceptions on the outcomes of the undergraduate research experience for both students and faculty, faculty's time and effort in mentoring undergraduate research projects and creative activities, and ways to improve the overall experience and programs in support of undergraduate research at UC Irvine. Questions to faculty who have not mentored such projects invite faculty's feedback on possible reasons of why they did not mentor undergraduate research projects and creative activities.

To contact faculty, a table was generated that included the names, e-mail addresses, home departments and schools of the faculty, and whether they have ever mentored a UROP or SURP-supported project. Each name was assigned a random code that consists of three letters, which was already imbedded in a clickable web address. This address and other information from the table were merged into a prepared document, so that it could be exported as a personalized e-mail from Professor Meredith Lee, Dean of the Division of Undergraduate Education, to the 1018 faculty members at UC Irvine, inviting them to respond to this web-based survey. The

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¹ UROP, a comprehensive campuswide program, was founded on the principle of supporting and facilitating faculty-mentored research projects and creative activities from all schools and academic disciplines. UROP nurtures students through the entire research process, from the time a student first expresses an interest in participating in a research project and finding a faculty mentor, to planning the research and disseminating the results. UROP advises students on research opportunities on- and off-campus, provides funding through two calls for proposals (Fall and Spring Quarters of each academic year) in support of research-related supplies and expenses, and sponsors the UCI Undergraduate Research Symposium, and *The UCI Undergraduate Research Journal*. In 2001, UROP gave birth to the Summer Undergraduate Research Program (SURP), which provides UCI undergraduates the opportunity to become immersed in a research topic for a full-time ten-week period or the equivalence of 400 hours under the guidance of UCI faculty members, and receive a \$3,000 stipend.

faculty consisted of 968 active members of the Academic Senate (excludes emeriti), plus 50 additional faculty mentors who have mentored a UROP or SURP-supported undergraduate research project but who are not members of the Academic Senate. A hard copy version of the survey is attached, but it can also be viewed online at this website: http://due-web.ugs.uci.edu/UROP/FacultySurvey/tst. All non-respondents were sent two e-mail reminders—about a week apart—encouraging them to complete the survey from: Executive Vice Chancellor Michael Gottfredson, and UROP Director Said Shokair.

III. RESULTS:

UROP received a total of 557 responses (55% response rate), which is outstanding for a faculty survey (**Table 1**). Compared to the faculty at large, survey respondents were slightly overrepresented (biggest difference in percentages between respondents and total population by school) in the Biological Sciences and Social Sciences, and slightly underrepresented (smallest difference between respondents and total population by school) in the areas of Education, Management, and Medicine. Results were not corrected for over/under-representation.

Table 1. Comparison of Survey Respondents to Non-Respondents, by Academic Unit

Academic Unit	Respon	dents	Non-Resp	ondents	Population*	
	N	%	N	%	N	%
Arts	28	5%	23	5%	51	5%
Biological Sciences	62	11%	27	6%	89	9%
Education	0	0%	14	3%	14	1%
Engineering	47	8%	34	7%	81	8%
Humanities	81	15%	76	16%	157	15%
Info. & Computer Science	24	4%	16	4%	40	4%
Management	11	2%	32	7%	43	4%
Medicine	114	20%	142	31%	256	25%
Physical Sciences	72	13%	47	10%	119	12%
Social Ecology	43	8%	16	4%	59	6%
Social Sciences	75	14%	34	7%	109	11%
Total	557	100.0%	461	100.0%	1018	100.0%

^{*}Population = Active members of the Academic Senate, Fall 2001, plus 50 other non-Senate academics who directed UROP/SURP projects.

Of those who responded to the survey, 451 out of 557 (81%) faculty members, indicated that they have directed (now or in the past) undergraduate research projects (**Table 2**). Respondents were probably more likely than non-respondents to be participating in undergraduate research since it is the topic of the survey. Compared to the "no" respondents, the "yes" respondents were much more likely to be from the sciences and Engineering.

Table 2. Comparison of Survey Respondents Who Have (Yes) and Have not (No) Directed Undergraduate Research Projects, by Academic Unit

Academic Unit		Yes		No	Total (Yes + No)	
	N	%	N	%	N	%
Arts	23	5%	5	5%	28	5%
Biological Sciences	58	13%	4	4%	62	11%
Engineering	41	9%	6	5%	47	8%
Humanities	61	13%	20	19%	81	15%
Info. & Computer Science	22	5%	2	2%	24	4%
Management	2	1%	9	8%	11	2%
Medicine	91	20%	23	22%	114	20%
Physical Sciences	53	12%	19	18%	72	13%
Social Ecology	39	9%	4	4%	43	8%
Social Sciences	61	13%	14	13%	75	14%
Total	451	100.0%	106	100.0%	557	100.0%

Survey item: have you directed an undergraduate research project?

For the purpose of this report, all of the faculty responses were further analyzed by academic unit. In the sections that follow, results for all responses are presented, and if there are any significant differences by academic unit, they are also noted.

Part IV (next) presents results found for those who responded "yes"—they have directed undergraduate research projects. Part V presents a brief summary of those who responded "no" and the reasons why they didn't direct undergraduate research projects. Part VI contains conclusions, and Part VII contains acknowledgements.

IV. RESPONSES FROM FACULTY WHO HAVE MENTORED UNDERGRADUATE RESEARCH PROJECTS OR CREATIVE ACTIVITIES:

Faculty who have mentored an undergraduate research project or creative activity were invited to provide feedback to primarily multiple choice questions. Generally, when percentages are reported, they refer to the percent of faculty who actually responded to the item. More detailed data are included in the attached tables (Table A#).

Types of Projects Directed:

The first item asked what types of undergraduate research projects faculty have directed; they were asked to check all that applied (that is, multiple responses were allowed). The most common type of projects was "individual projects," selected by 57%, followed by "laboratory projects" (46%), and "senior thesis/term paper" (37%) (**Table A1**). As might be expected, there

were significant differences by academic unit. The top three categories for each unit are noted in the following table.

Table 3. Top Three Most Common Types of Projects, by Academic Unit

School	Top Three Categories*
Arts	Artistic, Individual, Senior Thesis/ Term Paper
Biological Sciences	Laboratory, Individual, Experiential/ Field Studies
Engineering	Laboratory, Individual, Group
Humanities	Scholarly Work in Humanities, Individual Projects, Senior Thesis/ Term Paper
Information & Computer Science	Individual, Design, Group
Management	Surveys, Senior Thesis, Experiential/ Field Studies
Medicine	Laboratory, Individual, Clinical
Physical Sciences	Individual, Laboratory, Senior Thesis
Social Ecology	Individual, Senior Thesis, Surveys/ Psychology Experiments
Social Sciences	Individual, Senior Thesis, Scholarly Work in Social Sciences

^{*} For additional details, please see **Table A2**.

For this item, the most frequently listed responses under "Other" include: software/computer programming, data/statistical analysis, and ethnographic research (**Table A3**).

Work with Undergraduates or Graduate Students/Post Docs:

The second item asked whether a faculty member has worked directly with undergraduates, or with postdocs or graduate students who work directly with undergraduates. Close to 80% of the 451 respondents to this question have indicated "working directly with undergraduates" as reflected in **Table A4**. There were significant differences by academic unit (**Table A5**), where ninety percent of the faculty in Arts (100%), Humanities (98%), Social Ecology (90%), and Social Sciences (97%) work directly with undergraduate students on their research projects. The two units most likely to work directly with graduate students or post docs, who in turn work with undergraduates, were Biological Sciences (45%) and Medicine (43%).

Importance of Outcomes:

Faculty were asked to rank-order three different outcomes that are frequently said to be important for the undergraduate research experience. The three different outcomes and their rankings are (**Table A6**):

- 1) that students experience research first-hand (ranked first, 78% of those who responded to this item),
- 2) that the experience motivates students to go to graduate school (ranked second, 59%), and
- 3) that the research findings make a contribution to the field (ranked third, 55%).

There were some small differences by academic unit, but the order of choices remains the same (**Table A7**). In addition, most frequently cited outcomes (56 responses) under "Other" were (more details in **Table A8**):

Faculty interaction and access	16%
Real-world application	16%
Expand knowledge of subject matter	13%
Develop important skills	11%

Time Spent on Undergraduate Research Projects:

Faculty were then asked how many hours per week they typically spend on undergraduate research projects this academic year and compared to five and ten years ago. Of those who responded to this item, 22% reported that they currently spend less than one hour per week, 35% spend 1-2 hours, 23% spend 3-4 hours, 9% spend 5-6 hours, 4% spend 7-8 hours, 3% spend 9-10 hours, and 4% spend more than 10 hours per week (**Table A9**).

Compared to five years ago, 34% reported they now spend more time (much or somewhat more), 34% spend about the same amount of time, and the remaining 32% spend less time (less or much less). Compared to 10 years ago, 44% now spend more time (much or somewhat more), 22% spend about the same amount of time, and 34% spend less time (less or much less). Responses of "not applicable" were excluded from the counts and percents (**Table A9**).

Differences between academic units were minimal (**Table A10**). Results were not significantly different when looking at responses of faculty who worked directly with undergraduates and those who worked with grad students.

Number of Undergraduates Mentored:

Faculty were also asked how many undergraduates they mentored/worked with during 2000-2001 academic year (or a recent academic year) and compared to five and ten years ago. Of

those who responded to this item, 8% reported that they did not mentor undergraduates, 40% mentored 1-2 undergraduates, 30% mentored 3-5 undergraduates, 10% mentored 6-10 undergraduates, 5% mentored 11-15 undergraduates, 2% mentored 16-20 undergraduates, 2% mentored 21-25 undergraduates, and 2% mentored more than 25 undergraduates (**Table A11**).

Compared to five years ago, 38% mentor more undergraduates (many or somewhat more), 32% mentor about the same number of undergraduates, and 30% mentor fewer undergraduates (somewhat or many fewer). Compared to 10 years ago, 43% mentor more undergraduates (many or somewhat more), 26% mentor about the same number of undergraduates, and 32% mentor fewer undergraduates (somewhat or many fewer). Responses of "not applicable" were excluded from the counts and percents (**Table A11**).

Differences between academic units were minimal (**Table A12**). Results were not significantly different when looking at responses of faculty who worked directly with undergraduates and those who worked with grad students.

Student Outcomes:

In this section of the survey, faculty perceptions of student outcomes were assessed. Responses of "unable to determine" and those who did not respond to this item were excluded from the counts and percents. The order of outcomes in decreasing order of percentage of agreement (strongly agree or agree) by faculty is as follows (more details in **Table A13**):

Drawing conclusions and critically analyzing information	96%
Defining and solving problems	92%
Communication skills	88%
Working independently	87%
Understanding and applying research methods, ethics, and conduct rules	87%
Understanding the link between academics and their careers	79%
Utilizing technology and computer programs	78%
Innovative thinking	74%
Getting along with people who have different attitudes, opinions, and backgrounds	60%

Results by academic unit show statistically significant differences in the following outcomes: drawing conclusion and critically analyzing information; defining and solving problems; innovative thinking; getting along with people with different backgrounds; understanding research methods, ethics, and conduct rules; and utilizing technology and computer programs (**Table A14**). Table 4 summarizes percentages of respondents who indicated "strongly agree" or "agree" to student outcomes, by academic unit.

Table 4. Student Outcomes by Academic Unit—Percentages of Respondents (*strongly agree or agree only*)

Student Outcome	Arts	Bio	Engr	Hum	ICS	Med	PS	SE	SS
Drawing conclusions and critically analyzing information	95%	98%	93%	95%	90%	96%	98%	98%	98%
Defining and solving problems	90%	95%	89%	89%	71%	95%	94%	91%	95%
Communication skills	95%	88%	90%	90%	71%	83%	92%	86%	91%
Working independently	89%	95%	86%	97%	80%	81%	82%	88%	82%
Understanding and applying research methods, ethics, and conduct rules	78%	92%	78%	84%	63%	93%	91%	100%	85%
Understanding the link between academics and their careers	89%	81%	73%	82%	69%	85%	84%	91%	68%
Utilizing technology and computer programs	50%	89%	95%	53%	68%	87%	81%	83%	62%
Innovative thinking	90%	71%	80%	83%	55%	64%	76%	69%	78%
Getting along with people who have different attitudes, opinions, and backgrounds	88%	62%	77%	49%	38%	78%	45%	54%	43%

Additional student outcomes reported by faculty under "Other" include: self-confidence, communication skills, responsibility, and self-awareness (**Table A15**).

Undergraduate Research Experience—Unique and Valuable:

In response to an open-ended item on what makes the undergraduate research experience unique and valuable, the most frequently cited responses (305 responses) were (more details in **Table A16**):

Faculty access, one-on-one interaction	11%
Real world applications	8%
Get to use research methods	6%
May lead to research careers	5%
Students expand knowledge of subject matter	5%
Hands-on experience	5%

Faculty Outcomes:

This item asked faculty to self-report gains and improvements they made as a result of their involvement in undergraduate research projects. The order of improvements in decreasing order of percentage of agreement (strongly agree or agree) by faculty is as follows (more details in **Table A17**).

Understanding the learning needs of undergraduate students	80%
Understanding the types of preparatory skills and/or courses that students need before doing research	80%
Understanding the importance of undergraduate research as an integral component of the student's education, regardless of her/his career choice	76%
My teaching methods	53%
My own research projects	42%

Results by academic unit showed a few differences (**Table A18**). The following table summarizes percentages of respondents who indicated they "strongly agree" or "agree" to faculty outcomes, by academic unit.

Table 5. Faculty Outcomes by Academic Unit—Percentages of Respondents

Faculty Outcome	Arts	Bio	Engr	Hum	ICS	Med	PS	SE	SS
Understanding the learning needs of undergraduate students	86%	82%	81%	90%	55%	77%	67%	89%	83%
Understanding the types of preparatory skills and/or courses that students need before doing research.	73%	73%	92%	92%	70%	70%	73%	89%	87%
Understanding the importance of undergraduate research as an integral component of the student's education, regardless of her/his career choice	85%	84%	71%	78%	53%	76%	81%	80%	68%
My teaching methods	59%	56%	46%	57%	45%	65%	47%	55%	57%
My own research projects	48%	34%	44%	37%	55%	51%	45%	32%	37%

Most frequent self-reported outcomes by faculty under "Other" (12 responses) include (**Table A19**):

Learned something about students	42%
Gave me ideas for my own research	25%

Barriers & Recommendations:

This open-ended item invited faculty to comment on the barriers to mentoring undergraduate research projects, and provide recommendations for reducing these barriers.

The most frequent barriers cited (318 responses) were (more details in **Table A20**):

Not enough time, too time consuming	43%
Lack of recognition, rewards	24%
Students lack skills, motivation, commitment	19%

The most frequent recommendations cited (143 responses) were (more details in **Table A21**):

Provide more support, resources	33%
Provide more recognition	24%
Give course credit	12%
Improve undergraduate courses	8%
Better preparation for students	6%

Summer Undergraduate Research Projects:

Faculty were then prompted to indicate whether they have directed a summer undergraduate research project during Summer 2001 by indicating a "yes" or "no." If the response was "yes," then the faculty member was invited to comment on the benefits of and obstacles to the summer undergraduate research experience for both faculty and students.

Table 6 summarizes the breakdown of respondents by academic unit of those who indicated that they have directed or have not directed a summer undergraduate research project.

Table 6. Respondents who Indicated "Yes" or "No" to Summer Involvement, by Academic Unit

School	"Yes" Summer Involvement	"No" Summer Involvement
Arts	4	18
Biological Sciences	34	22
Engineering	21	19
Humanities	4	54
Information & Computer Science	6	16
Management	0	2
Medicine	48	40
Physical Sciences	24	28
Social Ecology	11	26
Social Sciences	17	44
Total	169	269

These data reflect that faculty from the sciences are more likely to mentor an undergraduate summer research project than faculty from other units. For those who have directed undergraduate research projects during Summer of 2001: 66% prefer summer; 3% prefer academic year; and 21% have no preference of whether they direct undergraduate research projects during the academic year or summer (**Table A22**).

Final Feedback Item- Undergraduate Research Experience & Programs at UCI:

One final open-ended survey item asked for general recommendations about undergraduate research experiences and programs. In general, faculty members were very pleased with the quality of the programs especially UROP and SURP, and the overall reputation UCI has built for the quality of its undergraduate research programs. Table A23 summarizes the frequency of their responses.

V. FACULTY WHO HAVE NOT MENTORED UNDERGRADUATE RESEARCH PROJECTS OR CREATIVE ACTIVITIES:

Faculty who have indicated a "no" to mentoring undergraduate research projects were asked to provide feedback regarding the reasons that might have prevented them from doing so. Multiple responses were allowed. Based on the responses, the following table lists the reasons in decreasing order by the number of respondents selecting that reason for not mentoring undergraduate research projects.

 Table 7. Reasons for Not Mentoring Undergraduate Research Projects

Reasons		Respondents			
_	N	%			
I just started my faculty career at UCI.	49	41%			
My area of research is not suitable for undergraduate research.	19	16%			
There is not adequate support available at the central or departmental level, or through my own research funds to facilitate undergraduate student involvement with me on research projects.	12	10%			
I do not have any time available in my schedule to mentor undergraduate research projects.	12	10%			
I would rather invest my time working with graduate students.	10	8%			
I do not think there is adequate university recognition of faculty's efforts in mentoring undergraduate research projects.	9	8%			
I do not think undergraduates are adequately prepared to conduct	5	4%			

faculty-mentored research projects.		
Students were not able to make the commitment that I was expecting.	4	3%
Total	120	100%

Some of the responses provided under "Other," include: very busy with an administrative position; nobody has approached me; I primarily work with graduate or professional school students; our department has just started an undergraduate program.

VI. CONCLUSION:

We are very pleased with the response rate and reaction of the faculty from all schools to the survey. Considering the short timeline of less than three weeks for faculty to respond to the invitation and complete the survey, faculty were quite responsive. We also know of at least 97 faculty who participated in UROP/SURP but could not complete the survey in time due to their schedules. Faculty felt the online survey was user-friendly. They did not experience difficulty in completing it using multiple browsers, operating systems, or accessing it from on- or off-campus. The only exception was one faculty member who was using a relatively older computer and browser version, but was accommodated by sending him a copy of the survey attached to an e-mail message for him to complete.

As one might expect, faculty from schools/departments that primarily offer graduate/professional degree programs and those specializing in highly theoretical subjects and languages were less likely to respond to the survey, since there are not many undergraduates involved in their areas of research.

The survey showed that a majority of the faculty work directly with undergraduates, but some rely on graduate students, and others would like the role of graduate students and post docs to be further cultivated in mentoring undergraduates. Most faculty believe in the importance of getting students involved in faculty-mentored research projects and in experiencing the process, regardless of the end result or research gain. There is a general understanding that the multiple benefits gained from engaging undergraduates in research (i.e., knowledge expansion, skills development, building confidence, exposure to careers, etc.) will be of great help in shaping the student's future decisions and ensuring her/his success. Other important outcomes include: engaging students in the research culture by interacting with research personnel, and the opportunity to present and publish research results.

Faculty members are spending more time mentoring more undergraduates compared to 10 years ago than compared to five years ago. Faculty's self-reported improvements following their involvement in mentoring undergraduate research projects include the perception that faculty now have a better understanding of students learning needs and the types of preparatory skills and/or courses that students need to take before conducting research. Faculty also report that

they have a better understanding of the importance of undergraduate research as an integral component of the quality undergraduate education a student would expect to receive at UCI. Some of the major barriers that faculty reported to mentoring undergraduate research projects include: lack of available time, lack of faculty recognition, and inadequate student preparation. To address some of these barriers, faculty would like to see more resources allocated in support of undergraduate research, and for faculty mentoring efforts to play a bigger role in the CAP review process, or for such efforts to be rewarded through department-based or university-wide rewards/awards.

Additional recommendations include the need for higher administration (Chancellor and EVC) to emphasize that faculty are expected to mentor students in conducting research projects, and in effect making it a priority. Some believe in mentoring regardless of faculty recognition; rather, it is their self-satisfaction and observation of the impact such experience will have on students' career that motives them to mentor undergraduates. A few feel that some of their colleagues need to change their expectations and realize student projects will not provide much research gain, and some should be more open to mentoring projects not directly related to their area of research.

Faculty believe that the summer undergraduate research involvement enhances students' learning more evidently than involvement during the academic year. Important benefits include the ability of participants to focus and dedicate the appropriate amount of time working on a project, which provides for better interaction between students and faculty. As a result, comments suggest that participating faculty are very supportive of the summer undergraduate research involvement, and programs that provide students' summer stipends (i.e., SURP)—freeing students from finding a job to support their living expenses. Some of the minor obstacles to summer involvement include: lack of faculty compensation (arts and humanities), possible conflicts with the faculty member's travel or vacation plans, and lack of personnel to build group synergy (sciences).

In addition, faculty have provided positive comments about the different programs in support of undergraduate research. As a catalyst to energizing and supporting the undergraduate research culture at UCI, faculty acknowledged the value of UROP's programs in achieving a successful undergraduate research experience from advising students to providing funding in support of research-related supplies, to sponsoring the Symposium and Journal, and the recent launch of SURP. One faculty mentioned "that it was difficult not to find one thing to criticize about UROP." There remains the perception in some disciplines that UROP is geared more towards the sciences than other sectors of the campus. UROP needs to assure faculty that it is actually providing funding and support almost equally to sciences, on the one hand, and to social sciences, humanities and the arts, on the other.

VII. ACKNOWLEDGEMENTS:

Our gratitude goes to many individuals who have assisted with this project, and have supported the undergraduate research culture at UCI. We especially recognize the time and efforts of our

faculty members not only in completing the survey, but most importantly in mentoring undergraduate research projects and creative activities. Our thanks also go to our undergraduates for being active participants in the research process at UC Irvine. We are also grateful for the support of Chancellor Ralph Cicerone and Executive Vice Chancellor Michael Gottfredson and their commitment to faculty-mentored undergraduate research at UCI. Dean Meredith Lee's leadership and guidance have been crucial to the implementation of this project. Our thanks also go to the following individuals in the Division of Undergraduate Education: Associate Dean Robert Newsom and Assistant Dean Fawzi Hermes for their input, and Director Judy Shoemaker for her extensive work in tabulating the data and overall assistance with this project.

Prepared by:

Said M. Shokair Director, Undergraduate Research Opportunities Program

Winter Quarter, 2002

University of California, Irvine

Faculty Survey

Title: Faculty Assessment of Undergraduate Research at UC Irvine.

Purpose: This web-based survey (due-web.ugs.uci.edu/UROP/FacultySurvey; code = tst) was designed to capture faculty's perceptions about the undergraduate research experience at UC Irvine in terms of the potential benefits of undergraduate research for both students and faculty, barriers to mentoring, and the amount of faculty time and effort involved in mentoring undergraduate research projects. This survey was administered by the Undergraduate Research Opportunities Program (UROP), and was approved by the Institutional Review Board (IRB) under protocol #2002-2250.

Target Population: Administered in Winter, 2002, to include 968 active members of the Academic Senate (excluding emeriti), plus 50 additional faculty mentors who have mentored a UROP or SURP-supported undergraduate research project but who are not members of the Academic Senate.

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Faculty Assessment of Undergraduate Research at UC Irvine

For the purpose of this survey, we define "undergraduate research" as any inquiry, study or investigation undertaken by an undergraduate student (or group of students) under the supervision or mentorship of a faculty member that results in an intellectual or creative contribution to an area of study and is shared with others. The research project may be part of a course (typically, courses numbered 195-199), field study, or an internship (paid or unpaid).

1. H	Iave you directed any undergraduate research projects, as defined above?
	Yes [go to next survey item] No [go to alternate question]
2. V	What types of undergraduate research projects have you directed? (check all that apply)
	Artistic Projects Clinical Projects Design Projects Experiential/ Field Studies Group Projects Individual Projects Laboratory Projects Literature Review & Analysis Scholarly Work in Humanities/ Social Sciences Senior Thesis/ Term Papers Surveys/ Psychology Experiments Other types of research projects (please list)
	When I'm involved in undergraduate research projects, I primarily work:
	directly with undergraduates. with post docs or graduate students who work directly with undergraduates. There are many important outcomes of the undergraduate research experience. Please rank order the
	relative importance of the following outcomes by indicating your first, second, third, and fourth choice (if applicable):
	students get to experience what it is like to engage first hand in the research and discovery process, regardless of the findings of that research experience. the research findings make a contribution to the field of study and can be presented at a conference or published. the research experience motivates the student to attain a higher-level of graduate or professional education or makes a commitment to a research-related career. Other
5. E	Ouring this academic year, I am spending approximately hours per week working with

undergraduate research projects.

☐ 0 ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10 ☐ more than 10
6. Compared to <u>5</u> years ago, I now spend time on undergraduate research projects.
 ☐ Much more ☐ Somewhat more ☐ About the same amount of ☐ Less ☐ Much less ☐ Not applicable
7. Compared to <u>10</u> years ago, I now spend time on undergraduate research projects.
 Much more Somewhat more About the same amount of Less Much less Not applicable
8. During the 2000-2001 academic year, I worked with approximately undergraduates on their undergraduate research projects. (if you <i>had an administrative role or were on sabbatical during 2000 2001, then please use a typical recent year</i>)
☐ 0 ☐ 1-2 ☐ 3-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ more than 25
9. Compared to <u>5</u> years ago, I am now working with undergraduates on their undergraduate research projects.
 Many more Somewhat more About the same number of Somewhat fewer Many fewer Not applicable

11	Son Abo Son Mar Not	ny more newhat more out the same number of newhat fewer ny fewer applicable my experience, students generally implicipation in the undergraduate res	•	_	areas as a	direct re	esult of thei	r
	Stud	lents participating in undergraduate arch generally show improvements in:	Strongly Disagree	ngree, Neutr	nal, Agree	Strongly Agree	Agree. Strongly Agree	Unable to
	A.	their communication skills.						
	В.	drawing conclusions and critically analyzing information.						
	C.	defining and solving problems.						
	D.	innovative thinking.						
	E.	working independently.						
	F.	getting along with people who have different attitudes, opinions, and backgrounds.						
	G.	understanding and applying research methods, ethics, and conduct rules.						
	H.	utilizing technology and computer programs.						
	I.	understanding the link between academics and their careers.						
	J.	other						
12	Wha	general, what makes the undergradua at can they learn or gain that they ma students' special accomplishments)						

13. **As a direct result of my involvement in undergraduate research projects**, I have made improvements in the following areas:

Please use this rating scale: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree.

I hav	re made improvements in the following s:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A.	understanding the learning needs of undergraduate students.					
В.	understanding the types of preparatory skills and/or courses that students need before doing research.					
C.	understanding the importance of undergraduate research as an integral component of the student's education, regardless of her/his career choice.					
D.	my teaching methods.					
E.	my own research projects.					
F.	other			<u> </u>	<u> </u>	

14. What do you see as the primary barriers discouraging some faculty from directing undergraduat research projects, and what recommendations do you have for reducing these barriers (i.e. faculty recognition, additional support for undergraduate research, etc.)?	e
15. During Summer 2001, did you direct summer undergraduate research projects?	
Yes [continue with survey item 16] No [skip survey item 16; go to survey item 17]	
16. How would you compare the summer research experience to one during the academic year? Ple elaborate on the benefits and obstacles of the summer undergraduate research experience for bot and the student.	

17. Please use the following space to make any additional comments regarding the undergraduate research experiences and programs in support of undergraduate research (i.e. UROP, SURP, etc.) at UC Irvine.
Alternate Questions:
QA1. I have not worked with undergraduate research projects because: (check all that apply)
My area of research is not suitable for undergraduate research. I do not think undergraduates are adequately prepared to conduct faculty-mentored research projects. I do not think there is adequate university recognition of faculty's efforts in mentoring undergraduate research projects. There is not adequate support available at the central or departmental level, or through my own research funds to facilitate undergraduate student involvement with me on research projects. I do not have any time available in my schedule to mentor undergraduate research projects. I would rather invest my time working with graduate students. Students were not able to make the commitment that I was expecting. I just started my faculty career at UCI. Other 18 & QA2. If you are interested in having more information about undergraduate research and sources of
support, please provide your e-mail address so we can contact you.
Thank You!
[Submit]
Thank you for taking the time to complete this survey. Your opinion counts with us!
If you have any questions or additional comments regarding undergraduate research, please contact: Said Shokair, Director Undergraduate Research Opportunities Program (UROP) Summer Undergraduate Research Program (SURP) Division of Undergraduate Education

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Type of Project	N	%
Individual projects	258	57%
Laboratory projects	207	46%
Senior thesis/term papers	166	37%
Literature review and analysis	113	25%
Scholarly work in humanities/social sciences	97	22%
Group projects	87	19%
Experiential/field studies	83	18%
Surveys/psychological experiments	50	11%
Design projects	35	8%
Artistic projects	32	7%
Clinical projects	29	6%
Other types of projects	25	6%

Note: Multiple responses allowed on this item.

 Table A2

 Types of Undergraduate Research Projects Directed, by Academic Unit

Type of Project	Arts (N = 23)		Biological Sciences (N = 58)		Engineering (N = 41)		Humanities (N = 61)		ICS (N = 22)		Management (N = 2)		Medicine (N = 91)		Physical Sciences (N = 53)		Social Ecology (N = 39)		Social Sciences (N = 61)	
-	N = .	23) %	N = 1	%	N	41) %	N	%	N = .	<u>~~)</u> %	N N	%	N	% %	N	%	N	% %	N	%
Individual projects**	13	57%	24	41%	31	76%	42	69%	16	73%	0	0%	28	31%	35	66%	26	67%	43	70%
Laboratory projects**	0	0%	49	84%	28	68%	0	0%	3	14%	0	0%	73	80%	33	62%	9	23%	12	20%
Senior thesis/term papers**	11	48%	7	12%	12	29%	40	66%	5	23%	1	50%	6	7%	17	32%	24	62%	43	70%
Literature review and analysis**	0	0%	13	22%	18	44%	19	31%	2	9%	1	50%	14	15%	5	9%	18	46%	23	38%
Scholarly work in humanities/social sciences**	2	9%	0	0%	0	0%	48	79%	0	0%	0	0%	0	0%	0	0%	13	33%	34	56%
Group projects**	4	17%	8	14%	21	51%	7	11%	8	36%	0	0%	11	12%	4	8%	9	23%	15	25%
Experiential/field studies**	0	0%	14	24%	9	22%	5	8%	7	32%	1	50%	7	8%	3	6%	17	44%	20	33%
Survey/psychological experiments**	1	4%	0	0%	1	2%	1	2%	2	9%	1	50%	1	1%	0	0%	21	54%	22	36%
Design projects**	1	4%	0	0%	19	46%	0	0%	9	41%	0	0%	2	2%	1	2%	1	3%	2	3%
Artistic projects**	22	96%	0	0%	0	0%	8	13%	0	0%	0	0%	0	0%	0	0%	1	3%	1	2%
Clinical projects**	0	0%	2	3%	1	2%	0	0%	0	0%	0	0%	23	25%	1	2%	0	0%	2	3%
Other types of projects**	1	4%	2	3%	1	2%	3	5%	4	18%	0	0%	5	5%	3	6%	3	8%	4	7%

Note: Multiple responses allowed on this survey item.

Chi square used to test group differences.

^{**} p < .01

 Table A3

 Other Types of Undergraduate Research Projects Directed

Other Types of Projects	Count	Percent of Total
Software development, computer programming	5	21%
Biology	2	8%
Data analysis	2	8%
Ethnographic research	2	8%
Honors	2	8%
Internships	2	8%
Miscellaneous	2	8%
Performances	2	8%
Archival research	1	4%
Clinical research	1	4%
Field studies	1	4%
Independent studies	1	4%
Psychology research	1	4%
Total	24	100%

Table A4Work Style

Work Style	N	%
Work directly with undergraduates	352	78%
Work with postdocs or graduate students	99	22%
Total	451	100%

Table A5 Work Style, by Academic Unit

	Arts (n = 23)		Biological Sciences (n = 58)		Engineering (n = 41)		Humanities (n = 61)		ICS (n = 22)		Management (n = 2)		Medicine (n = 91)		Physical Sciences (n = 53)		Social Ecology (n = 39)		Social Sciences (n = 61)	
Work Style**																				
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Work directly with undergraduates	23	100%	32	55%	31	76%	60	98%	17	77%	1	0%	52	57%	42	79%	35	90%	59	97%
Work with postdocs or graduate students	0	0%	26	45%	10	24%	1	2%	5	23%	1	0%	39	43%	11	21%	4	10%	2	3%
Total	23	100%	58	100%	41	100%	61	100%	22	100%	2	100%	91	100%	53	100%	39	100%	61	100%

Chi squared used to test group differences.
** p < .01

Table A6Importance of Outcomes

Outcome	N	%
Students experience research first-hand		
1st choice (most important)	348	78%
2nd choice	67	15%
3rd choice	26	6%
4th choice (least important)	4	1%
Total	445	100%
Students are motivated to go to graduate school		
1st choice (most important)	63	14%
2nd choice	259	59%
3rd choice	104	24%
4th choice (least important)	10	2%
Total	436	100%
Research findings make contribution to field		
1st choice (most important)	45	10%
2nd choice	91	21%
3rd choice	238	55%
4th choice (least important)	59	14%
Total	433	100%
Other outcomes (written comments)		
1st choice	17	26%
2nd choice	24	37%
3rd choice	16	25%
4th choice	8	12%
Total	65	100%

Note: "Unable to determine" and missing responses excluded from counts and percents.

Table A7 Importance of Outcomes, by Academic Unit

Outcome	Arts (N = 2		Biolog Scien (N = 5	ces	Engineering (N = 41)		Human (N = 6		ICS (N = 2		Manage (N =		Medicine (N = 91)		Phys Scien (N =	ces	Soci Ecolo (N = 3	ogy	Social Sciences (N = 61)	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students experience research first-hand*																				
1st choice (most important)	15	65%	50	86%	30	73%	50	82%	12	57%	1	50%	67	74%	38	75%	30	79%	55	92%
2nd choice	8	35%	5	9%	5	12%	7	11%	8	38%	1	50%	15	17%	6	12%	8	21%	4	7%
3rd choice	0	0%	3	5%	5	12%	2	3%	1	5%	0	0%	7	8%	7	14%	0	0%	1	2%
4th choice (least important)	0	0%	0	0%	1	2%	2	3%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%
Total	23	100%	58	100%	41	100%	61	100%	21	100%	2	100%	90	100%	51	100%	38	100%	60	100%
Students are motivated to go to graduate school	ol*																			
1st choice (most important)	3	14%	2	4%	7	17%	7	12%	5	25%	1	50%	15	17%	14	27%	7	19%	2	4%
2nd choice	10	45%	40	70%	27	66%	38	63%	11	55%	1	50%	43	48%	28	55%	23	64%	38	67%
3rd choice	9	41%	12	21%	7	17%	12	20%	4	20%	0	0%	30	33%	9	18%	5	14%	16	28%
4th choice (least important)	0	0%	3	5%	0	0%	3	5%	0	0%	0	0%	2	2%	0	0%	1	3%	1	2%
Total	22	100%	57	100%	41	100%	60	100%	20	100%	2	100%	90	100%	51	100%	36	100%	57	100%
Research findings make contribution to field**																				
1st choice (most important)	1	5%	6	10%	4	10%	2	4%	5	23%	0	0%	19	21%	4	8%	2	6%	2	4%
2nd choice	6	29%	11	19%	9	43%	5	9%	2	9%	0	0%	26	29%	15	29%	6	29%	11	20%
3rd choice	9	43%	36	62%	24	114%	37	65%	9	41%	1	50%	38	42%	28	54%	24	114%	32	59%
4th choice (least important)	5	24%	5	9%	4	19%	13	23%	6	27%	1	50%	7	8%	5	10%	4	19%	9	17%
Total	21	100%	58	100%	41	195%	57	100%	22	100%	2	100%	90	100%	52	100%	36	171%	54	100%
Other (written comments)*																				
1st choice	5	83%	1	13%	2	67%	6	43%	0	0%	0	0%	0	0%	1	14%	0	0%	2	25%
2nd choice	0	0%	3	38%	0	0%	5	36%	1	50%	0	0%	7	58%	3	43%	1	25%	4	50%
3rd choice	1	17%	2	25%	0	0%	2	14%	1	50%	1	100%	3	25%	1	14%	3	75%	2	25%
4th choice	0	0%	2	25%	1	33%	1	7%	0	0%	0	0%	2	17%	2	29%	0	0%	0	0%
Total	6	100%	8	100%	3	100%	14	100%	2	100%	1	100%	12	100%	7	100%	4	100%	8	100%

Note: "Unable to determine" and missing responses excluded from counts and percents.

Chi squared used to test group differences.

^{*} p < .05 ** p < .01

Table A8Importance of Outcomes, Under "Other"

Other Important Outcomes	Count	Percent of Total
Faculty interaction, access	9	16%
Real world applications	9	16%
Expand knowledge of subject matter	7	13%
Develop important skills	6	11%
Research methods	5	9%
Decision-making regarding career and grad school	4	7%
Self-confidence	4	7%
Graduate students benefit	3	5%
Active learning	2	4%
Focus on one problem	2	4%
Letters of recommendation for students are easier to write	2	4%
Depends on the student	1	2%
Its fun for faculty	1	2%
Miscellaneous	1	2%
Total	56	100%

Table A9Hours Per Week Spent on Undergraduate Research Projects

Hours Per Week	N	%
This academic year I spent approximately:		
0 hours per week	94	22%
1-2 hours	152	35%
3-4 hours per week	102	23%
5-6 hours per week	41	9%
7-8 hours per week	19	4%
9-10 hours per week	12	3%
More than 10 hours per week	17	4%
Total	437	100%
Compared to 5 years ago, I now spend:		
Much more time	41	11%
Somewhat more time	85	23%
About the same amount of time	123	34%
Less time	83	23%
Much less time	34	9%
Total	366	100%
Compared to 10 years ago, I now spend:		
Much more time	58	21%
Somewhat more time	66	23%
About the same amount of time	62	22%
Less time	55	20%
Much less time	40	14%
Total	281	100%

Note: "Not applicable" and missing responses excluded from counts and percents.

Table A10 Hours Per Week Spent on Undergraduate Research Projects, by Academic Unit

Hours Per Week	Arts (N = 23)		Biolog Scien (N = 5	ces	Engine (N = 4		Human (N = 6		ICS (N = 2		Manage (N =		Medic (N = 9		Physi Scien (N = 5	ces	Soci Ecolo (N = 3	gy	Soci Sciene (N = 6	ces
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
This academic year I spent approximately:*																				
0 hours per week	6	26%	8	14%	3	8%	24	40%	3	14%	1	50%	17	19%	17	33%	1	3%	14	24%
1-2 hours	8	35%	15	26%	21	53%	24	40%	11	52%	1	50%	23	26%	14	27%	16	44%	19	33%
3-4 hours per week	2	9%	20	34%	10	25%	5	8%	5	24%	0	0%	26	30%	11	22%	10	28%	13	22%
5-6 hours per week	4	17%	8	14%	3	8%	5	8%	0	0%	0	0%	8	9%	5	10%	4	11%	4	7%
7-8 hours per week	3	13%	2	3%	1	3%	1	2%	1	5%	0	0%	4	5%	1	2%	4	11%	2	3%
9-10 hours per week	0	0%	1	2%	2	5%	0	0%	1	5%	0	0%	4	5%	1	2%	0	0%	3	5%
More than 10 hours per week	0	0%	4	7%	0	0%	1	2%	0	0%	0	0%	6	7%	2	4%	1	3%	3	5%
Total	23	100%	58	100%	40	100%	60	100%	21	100%	2	100%	88	100%	51	100%	36	100%	58	100%
Compared to 5 years ago, I now spend:																				
Much more time	4	21%	1	2%	3	10%	3	6%	0	0%	0	0%	10	14%	5	11%	7	23%	8	16%
Somewhat more time	6	32%	7	14%	11	35%	14	27%	4	25%	0	0%	10	14%	10	23%	8	27%	15	30%
About the same amount of time	6	32%	22	45%	12	39%	16	31%	7	44%	1	50%	24	32%	13	30%	8	27%	14	28%
Less time	3	16%	15	31%	5	16%	14	27%	4	25%	1	50%	19	26%	13	30%	2	7%	8	16%
Much less time	0	0%	4	8%	0	0%	5	10%	1	6%	0	0%	11	15%	3	7%	5	17%	5	10%
Total	19	100%	49	100%	31	100%	52	100%	16	100%	2	100%	74	100%	44	100%	30	100%	50	100%
Compared to 10 years ago, I now spend:																				
Much more time	7	47%	3	7%	6	24%	5	14%	0	0%	0	0%	16	27%	6	18%	5	23%	10	27%
Somewhat more time	2	13%	9	22%	7	28%	9	26%	3	27%	0	0%	8	14%	8	24%	8	36%	12	32%
About the same amount of time	4	27%	10	24%	3	12%	12	34%	3	27%	1	50%	13	22%	7	21%	3	14%	6	16%
Less time	2	13%	11	27%	7	28%	5	14%	3	27%	1	50%	10	17%	7	21%	3	14%	6	16%
Much less time	0	0%	8	20%	2	8%	4	11%	2	18%	0	0%	12	20%	6	18%	3	14%	3	8%
Total	15	100%	41	100%	25	100%	35	100%	11	100%	2	100%	59	100%	34	100%	22	100%	37	100%

Note: "Not applicable" and missing responses excluded from counts and percents. Chi square used to test group differences.

^{*} p < .05

Table A11Number of Undergraduate Students Directed

Number of Undergraduates	N	%
This academic year I worked with approximately:		
0 undergraduates	37	8%
1-2 undergraduates	178	40%
3-5 undergraduates	133	30%
6-10 undergradautes	43	10%
11-15 undergraduates	22	5%
16-20 undergraduates	8	2%
21-25 undergradautes	9	2%
More than 25 undergraduates	10	2%
Total	440	100%
Compared to 5 years ago, I now work with:		
Many more undergradautes	27	7%
Somewhat more undergraduates	112	31%
About the same number of undergraduates	115	32%
Somewhat fewer undergraduates	68	19%
Many fewer undergraduates	39	11%
Total	361	100%
Compared to 10 years ago, I work with:		
Many more undergradautes	48	17%
Somewhat more undergraduates	75	26%
About the same number of undergraduates	74	26%
Somewhat fewer undergraduates	45	16%
Many fewer undergraduates	47	16%
Total	289	100%

Note: "Not applicable" and missing responses excluded from counts and percents.

Table A12 Number of Undergraduate Students Worked With, by Academic Unit

Number of Undergraduates	Arts (N = 2		Biolog Scienc (N = 5	ces	Enginee (N = 4		Human (N = 6		ICS (N = 2		Manage (N =		Medic (N = 9		Physi Scien (N = \$	ces	Socia Ecolo (N = 3	gy	Soci Science (N = 6	ces
_	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
This academic year I worked with approximately	r:**																			
0 undergraduates	0	0%	5	9%	2	5%	7	12%	3	14%	1	50%	8	9%	9	17%	1	3%	2	4%
1-2 undergraduates	10	45%	20	35%	8	20%	33	57%	6	29%	1	50%	38	43%	27	52%	11	31%	24	44%
3-5 undergraduates	4	18%	22	39%	22	54%	7	12%	7	33%	0	0%	30	34%	13	25%	14	40%	14	25%
6-10 undergradautes	3	14%	7	12%	6	15%	3	5%	3	14%	0	0%	9	10%	2	4%	4	11%	6	11%
11-15 undergraduates	4	18%	1	2%	1	2%	5	9%	0	0%	0	0%	2	2%	0	0%	2	6%	7	13%
16-20 undergraduates	1	5%	1	2%	0	0%	1	2%	1	5%	0	0%	0	0%	1	2%	2	6%	1	2%
21-25 undergradautes	0	0%	1	2%	2	5%	2	3%	1	5%	0	0%	1	1%	0	0%	1	3%	1	2%
More than 25 undergraduates	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	22	100%	57	100%	41	100%	58	100%	21	100%	2	100%	88	100%	52	100%	35	100%	55	100%
Compared to 5 years ago, I now work with:																				
Many more undergradautes	2	11%	0	0%	2	6%	1	2%	0	0%	0	0%	6	8%	3	7%	4	13%	9	19%
Somewhat more undergraduates	8	44%	10	21%	14	44%	16	31%	6	38%	0	0%	19	26%	15	35%	9	30%	15	31%
About the same number of undergraduates	6	33%	20	42%	10	31%	16	31%	7	44%	1	50%	25	34%	9	21%	11	37%	11	23%
Somewhat fewer undergraduates	1	6%	15	31%	4	13%	9	18%	2	13%	1	50%	15	21%	10	23%	2	7%	8	17%
Many fewer undergraduates	1	6%	3	6%	2	6%	9	18%	1	6%	0	0%	8	11%	6	14%	4	13%	5	10%
Total	18	100%	48	100%	32	100%	51	100%	16	100%	2	100%	73	100%	43	100%	30	100%	48	100%
Compared to 10 years ago, I work with:																				
Many more undergradautes	3	20%	4	9%	7	25%	4	11%	0	0%	0	0%	14	24%	5	15%	3	14%	8	21%
Somewhat more undergraduates	7	47%	7	16%	8	29%	10	27%	3	25%	0	0%	8	14%	10	29%	8	36%	14	37%
About the same number of undergraduates	3	20%	14	32%	7	25%	12	32%	5	42%	1	50%	16	28%	9	26%	3	14%	4	11%
Somewhat fewer undergraduates	0	0%	12	27%	2	7%	3	8%	2	17%	1	50%	9	16%	3	9%	5	23%	9	24%
Many fewer undergraduates	2	13%	7	16%	4	14%	8	22%	2	17%	0	0%	11	19%	7	21%	3	14%	3	8%
Total	15	100%	44	100%	28	100%	37	100%	12	100%	2	100%	58	100%	34	100%	22	100%	38	100%

Note: "Not applicable" and missing responses excluded from counts and percents.

Chi square used to test for group differences.

* p < .05 ** p < .01

Table A13 Student Outcomes

Student Outcome	N	%
Communication skills		
Strongly agree	136	32%
Agree	242	56%
Neutral	45	10%
Disagree	5	1%
Strongly agree	3	1%
Total	431	100%
Drawing conclusions and critically analyzing	ng information	
Strongly agree	192	44%
Agree	229	52%
Neutral	13	3%
Disagree	2	0%
Strongly disagree	1	0%
Total	437	100%
Defining and solving problems		
Strongly agree	176	41%
Agree	218	51%
Neutral	33	8%
Disagree	2	0%
Strongly disagree	2	0%
Total	431	100%
Innovative thinking		
Strongly agree	98	23%
Agree	217	51%
Neutral	98	23%
Disagree	13	3%
Strongly agree	1	0%
Total	427	100%
Working independently		
Strongly agree	162	38%
Agree	209	49%
Neutral	47	11%
Disagree	9	2%
Strongly agree	1	0%
Total	428	100%

Student Outcome	N	%
Getting along with people with different attitu	ides, opinions, b	ackground
Strongly agree	77	19%
Agree	162	41%
Neutral	142	36%
Disagree	16	4%
Strongly agree	2	1%
Total	399	100%
Understanding and applying research metho	ods, ethics, cond	luct rules
Strongly agree	138	32%
Agree	237	55%
Neutral	51	12%
Disagree	4	1%
Strongly agree	0	0%
Total	430	100%
Utilizing technology and computer programs		
Strongly agree	130	32%
Agree	184	46%
Neutral	83	21%
Disagree	6	1%
Strongly agree	1	0%
Total	404	100%
Understanding the link between academics a	and their careers	3
Strongly agree	107	26%
Agree	214	53%
Neutral	72	18%
Disagree	11	3%
Strongly agree	3	1%
Total	407	100%

Note: "Unable to determine" and missing responses excluded from counts and percents.

Table A14Student Outcomes, by Academic Unit

Outcome	Arts (N = 2		Biological Sciences (N = 58)		Engineering (N = 41)		Humanities (N = 61)		ICS (N = 2		Manage (N =		Medici		Physic Scienc (N = 5	ces	Socia Ecolo (N = 3	gy	Soc Scien (N = 0	nces
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Communication skills																				
Strongly agree	11	55%	20	35%	11	27%	26	44%	4	19%	0	0%	24	27%	17	34%	10	29%	13	23%
Agree	8	40%	30	53%	26	63%	27	46%	11	52%	2	100%	50	56%	29	58%	20	57%	39	68%
Neutral	1	5%	6	11%	3	7%	6	10%	4	19%	0	0%	12	13%	4	8%	4	11%	5	9%
Disagree	0	0%	1	2%	1	2%	0	0%	1	5%	0	0%	1	1%	0	0%	1	3%	0	0%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	2	2%	0	0%	0	0%	0	0%
Total	20	100%	57	100%	41	100%	59	100%	21	100%	2	100%	89	100%	50	100%	35	100%	57	100%
Drawing conclusions and critically analyzing	ng information.**																			
Strongly agree	9	45%	29	50%	18	45%	41	68%	3	14%	0	0%	23	26%	20	39%	18	49%	31	52%
Agree	10	50%	28	48%	19	48%	16	27%	16	76%	2	100%	62	70%	30	59%	18	49%	28	47%
Neutral	1	5%	1	2%	2	5%	3	5%	1	5%	0	0%	2	2%	1	2%	1	3%	1	2%
Disagree	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%
Strongly disagree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	20	100%	58	100%	40	100%	60	100%	21	100%	2	100%	88	100%	51	100%	37	100%	60	100%
Defining and solving problems.**																				
Strongly agree	11	58%	25	43%	13	33%	37	62%	7	33%	0	0%	28	33%	13	25%	17	47%	25	43%
Agree	6	32%	30	52%	22	56%	16	27%	8	38%	1	50%	53	62%	35	69%	16	44%	30	52%
Neutral	2	11%	3	5%	3	8%	6	10%	5	24%	1	50%	4	5%	3	6%	3	8%	3	5%
Disagree	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%
Strongly disagree	0	0%	0	0%	0	0%	1	2%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	19	100%	58	100%	39	100%	60	100%	21	100%	2	100%	86	100%	51	100%	36	100%	58	100%
Innovative thinking.**																				
Strongly agree	9	45%	8	14%	10	26%	25	43%	6	30%	0	0%	14	16%	7	13%	7	19%	12	20%
Agree	9	45%	32	57%	22	56%	23	40%	5	25%	0	0%	41	48%	33	63%	18	50%	34	58%
Neutral	2	10%	14	25%	7	18%	8	14%	8	40%	1	50%	26	31%	12	23%	8	22%	12	20%
Disagree	0	0%	2	4%	0	0%	2	3%	0	0%	1	50%	4	5%	0	0%	3	8%	1	2%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	20	100%	56	100%	39	100%	58	100%	20	100%	2	100%	85	100%	52	100%	36	100%	59	100%
Vorking independently.																				
Strongly agree	9	47%	23	42%	15	37%	30	50%	9	45%	0	0%	24	28%	15	29%	13	37%	24	41%
Agree	8	42%	29	53%	20	49%	28	47%	7	35%	2	100%	46	53%	27	53%	18	51%	24	41%
Neutral	2	11%	1	2%	5	12%	2	3%	3	15%	0	0%	11	13%	9	18%	4	11%	10	17%
Disagree	0	0%	2	4%	1	2%	0	0%	1	5%	0	0%	5	6%	0	0%	0	0%	0	0%
Strongly agree	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%
Total	19	100%	55	100%	41	100%	60	100%	20	100%	2	100%	87	100%	51	100%	35	100%	58	100%

Outcome	Arts (N = 2		Biological Sciences (N = 58)		Engineering (N = 41)		Human (N = 6		ICS (N = 2		Manage (N =		Medicine (N = 91)		Physical Sciences (N = 53)		Soci Ecolo (N = 3	ogy	Soc Scien (N = 0	nces
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Getting along with people with different attitud	les, opinions,	background	ds.**																	
Strongly agree	6	38%	18	34%	9	23%	9	19%	0	0%	0	0%	18	21%	8	16%	4	12%	5	9%
Agree	8	50%	15	28%	21	54%	14	30%	8	38%	1	50%	49	57%	14	29%	14	42%	18	34%
Neutral	2	13%	20	38%	7	18%	20	43%	11	52%	1	50%	17	20%	25	51%	13	39%	26	49%
Disagree	0	0%	0	0%	2	5%	4	9%	1	5%	0	0%	2	2%	2	4%	2	6%	3	6%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	1	2%
Total	16	100%	53	100%	39	100%	47	100%	21	100%	2	100%	86	100%	49	100%	33	100%	53	100%
Understanding and applying research method	ls, ethics, con	duct rules.*	*																	
Strongly agree	4	22%	22	39%	9	23%	15	25%	3	16%	1	50%	36	41%	9	18%	19	51%	20	33%
Agree	10	56%	30	53%	22	55%	35	59%	9	47%	0	0%	45	52%	37	73%	18	49%	31	52%
Neutral	4	22%	4	7%	8	20%	9	15%	6	32%	1	50%	6	7%	5	10%	0	0%	8	13%
Disagree	0	0%	1	2%	1	3%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	1	2%
Strongly agree	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	18	100%	57	100%	40	100%	59	100%	19	100%	2	100%	87	100%	51	100%	37	100%	60	100%
Utilizing technology and computer programs.*	*																			
Strongly agree	3	21%	26	46%	17	41%	6	14%	8	42%	1	50%	24	28%	23	44%	14	39%	8	15%
Agree	4	29%	24	43%	22	54%	17	39%	5	26%	1	50%	51	59%	19	37%	16	44%	25	47%
Neutral	7	50%	6	11%	2	5%	20	45%	4	21%	0	0%	11	13%	9	17%	6	17%	18	34%
Disagree	0	0%	0	0%	0	0%	1	2%	1	5%	0	0%	1	1%	1	2%	0	0%	2	4%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	14	100%	56	100%	41	100%	44	100%	19	100%	2	100%	87	621%	52	100%	36	100%	53	100%
Understanding the link between academics ar	nd their caree	rs.																		
Strongly agree	9	47%	20	38%	4	10%	15	27%	2	11%	0	0%	21	26%	14	29%	9	26%	13	24%
Agree	8	42%	23	43%	25	63%	25	45%	11	58%	2	100%	47	59%	27	55%	22	65%	24	44%
Neutral	2	11%	10	19%	9	23%	11	20%	5	26%	0	0%	10	13%	6	12%	2	6%	17	31%
Disagree	0	0%	0	0%	2	5%	5	9%	0	0%	0	0%	1	1%	2	4%	1	3%	0	0%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	1	1%	0	0%	0	0%	1	2%
Total	19	100%	53	100%	40	100%	56	100%	19	100%	2	100%	80	100%	49	100%	34	100%	55	100%

Note: "Unable to determine" and missing responses excluded from counts and percents.

Chi square used to test group differences.

* p < .05

**p < .01

Table A15Student Outcomes, Under "Other"

Other Student Outcomes	Count	Percent of Total
Self-confidence	4	22%
Communication skills	3	17%
Other	2	11%
Responsibility	2	11%
Self-awareness	2	11%
Challenge, excitement of science	1	6%
Faculty interaction	1	6%
Organization	1	6%
Real world applications	1	6%
Subject knowledge	1	6%
Total	18	100%

Table A16Unique & Valuable Undergraduate Research Experience

Unique and Valuable Outcomes	Count	Percent of Total
Faculty interaction, access	35	11%
Real world applications	25	8%
Use research methods, follow research paradigm	18	6%
Leads to careers in academic research	16	5%
Expand knowledge of subject matter	14	5%
Hands-on experience in a lab or with instrumentation	14	5%
Develop independent thinking skills	13	4%
Participate in a research experience	13	4%
Apply the scientific method	12	4%
Enhance career opportunities	11	4%
Focus on one problem, focus on own project	11	4%
Self-confidence	11	4%
Cutting-edge research	9	3%
Research is a complex process	9	3%
Enhance communication skills (speaking, writing)	7	2%
Depends on student	6	2%
Problem-solving skills	6	2%
Excitement of discovery	5	2%
Intellectual challenge	5	2%
Create new knowledge	4	1%
Develop responsibility	4	1%
Teamwork	4	1%
Active learning	3	1%
Apply knowledge	3	1%
Define a problem	3	1%
Learn that faculty are people, too	3	1%
Learn to be creative	3	1%
Motivation	3	1%
Appreciation of the value of research	3	1%
Research takes time	3	1%
Miscellaneous*	22	7%
Not applicable or not responsive to question	7	2%
Total	305	100%

^{*} Comments listed by 2 or fewer respondents

Table A17Faculty Outcomes

Faculty Outcome	N	%
Understanding the learning needs of under	ergraduates.	
Strongly agree	97	22%
Agree	252	58%
Neutral	80	18%
Disagree	7	2%
Strongly agree	1	0%
Total	437	100%
Understanding the types of preparatory sk	kills, courses that st	tudents
need before doing research.		
Strongly agree	90	21%
Agree	258	59%
Neutral	83	19%
Disagree	4	1%
Strongly disagree	1	0%
Total	436	100%
Understanding the importance of undergra	aduate research	
as an integral component of the student's	education,	
regardless of her/his career choice.		
Strongly agree	121	28%
Agree	205	48%
Neutral	88	20%
Disagree	10	2%
Strongly disagree	6	1%
Total	430	100%
My teaching methods.		
Strongly agree	39	9%
Agree	202	46%
Neutral	159	37%
Disagree	33	8%
Strongly agree	2	0%
Total	435	100%
My own research projects.		
Strongly agree	29	7%
Agree	151	35%
Neutral	148	35%
Disagree	78	18%
Strongly agree	22	5%
Total	428	100%

Note: Missing responses excluded from counts and percents.

Table A18
Faculty Outcomes, by Academic Unit

Outcome	Arts (N = 2		Biologi Scienc (N = 5	es	Enginee (N = 4		Humani (N = 6		ICS (N = 2		Manage (N = 2		Medic (N = 9		Physic Scienc (N = 5	ces	Socia Ecolo (N = 3	gy	Socia Science (N = 6	ces
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Inderstanding the learning needs of und	dergraduates.*																			
Strongly agree	6	27%	14	25%	4	10%	18	30%	5	25%	1	50%	18	20%	10	19%	10	28%	11	19%
Agree	13	59%	32	57%	29	71%	36	60%	6	30%	0	0%	51	57%	25	48%	22	61%	38	64%
Neutral	3	14%	10	18%	6	15%	5	8%	7	35%	1	50%	18	20%	16	31%	4	11%	10	17%
Disagree	0	0%	0	0%	2	5%	1	2%	1	5%	0	0%	2	2%	1	2%	0	0%	0	0%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	22	100%	56	100%	41	100%	60	100%	20	100%	2	100%	89	100%	52	100%	36	100%	59	100%
nderstanding the types of preparatory s	skills, courses that s	tudents.**																		
eed before doing research.																				
Strongly agree	4	18%	12	21%	10	24%	18	30%	5	25%	0	0%	9	10%	10	19%	7	20%	15	25%
Agree	12	55%	29	52%	28	68%	37	62%	9	45%	1	50%	53	60%	28	54%	24	69%	37	62%
Neutral	5	23%	15	27%	3	7%	4	7%	5	25%	1	50%	24	27%	14	27%	4	11%	8	13%
Disagree	1	5%	0	0%	0	0%	1	2%	0	0%	0	0%	2	2%	0	0%	0	0%	0	0%
Strongly disagree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	22	100%	56	100%	41	100%	60	100%	20	100%	2	100%	88	100%	52	100%	35	100%	60	100%
nderstanding the importance of underg	raduate research																			
s an integral component of the student	s education,																			
gardless of her/his career choice.																				
Strongly agree	11	52%	22	40%	7	17%	18	31%	2	11%	0	0%	29	33%	9	18%	8	22%	15	26%
Agree	7	33%	24	44%	22	54%	28	47%	8	42%	1	50%	38	43%	32	63%	21	58%	24	42%
Neutral	3	14%	8	15%	11	27%	9	15%	8	42%	1	50%	18	20%	9	18%	6	17%	15	26%
Disagree	0	0%	0	0%	1	2%	3	5%	0	0%	0	0%	3	3%	1	2%	1	3%	1	2%
Strongly disagree	0	0%	1	2%	0	0%	1	2%	1	5%	0	0%	1	1%	0	0%	0	0%	2	4%
Total	21	100%	55	100%	41	100%	59	100%	19	100%	2	100%	89	100%	51	100%	36	100%	57	100%
y teaching methods.																				
Strongly agree	4	18%	6	11%	1	2%	9	15%	1	5%	0	0%	7	8%	4	8%	3	8%	4	7%
Agree	9	41%	25	45%	18	44%	25	42%	8	40%	0	0%	50	57%	20	39%	17	47%	30	50%
Neutral	8	36%	18	33%	16	39%	24	40%	6	30%	1	50%	30	34%	23	45%	11	31%	22	37%
Disagree	1	5%	6	11%	6	15%	2	3%	4	20%	1	50%	1	1%	4	8%	5	14%	3	5%
Strongly agree	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	1	2%
Total	22	100%	55	100%	41	100%	60	100%	20	100%	2	100%	88	100%	51	100%	36	100%	60	100%
ly own research projects.																				
Strongly agree	2	10%	4	7%	3	7%	4	7%	1	5%	0	0%	5	6%	3	6%	2	6%	5	8%
Agree	8	38%	15	27%	15	37%	18	30%	10	50%	1	50%	38	45%	20	39%	9	26%	17	29%
Neutral	8	38%	18	33%	18	44%	20	33%	6	30%	0	0%	29	34%	13	25%	12	35%	24	41%
Disagree	3	14%	13	24%	4	10%	17	28%	2	10%	0	0%	10	12%	13	25%	8	24%	8	14%
Strongly agree	0	0%	5	9%	1	2%	1	2%	1	5%	1	50%	3	4%	2	4%	3	9%	5	8%
Total	21	100%	55	100%	41	100%	60	100%	20	100%	2	100%	85	100%	51	100%	34	100%	59	100%

Note: Missing responses excluded from counts and percents.

Chi square used to test group differences.

^{*} p < .05

^{**} p < .01

Table A19Faculty Outcomes, Under "Other"

Other Faculty Outcomes	Count	Percent of Total
Learned something about students	5	42%
Gave me ideas for my own research	3	25%
Encouraged colleagues to modify classes	1	8%
Opportunity to inspire young people	1	8%
Opportunity for grad students and post docs to act as mentors	1	8%
Miscellaneous	1	8%
Total	12	100%

Table A20Barriers for Faculty to Direct Undergraduate Research

Primary barriers	Count	Percent of Total
Not have enough time, too time-consuming, takes too long to train students	136	43%
No recognition/rewards, not worth the effort/not part of teaching load/not a priority	75	24%
Students lack skills, motivation, commitment	60	19%
Miscellaneous	17	5%
None (no barriers)	8	3%
Conflicts with need to do own research	6	2%
Costs of undergraduate research	6	2%
Not an efficient method of teaching	4	1%
Faculty expectations too high	3	1%
Support	3	1%
Total	318	100%

Table A21Recommendations for Reducing Barriers

Recommendations	Count	Percent of Total
Provide more support, resources	47	33%
Provide more recognition, change the merit review process	35	24%
Give course credit, course release time	17	12%
Improve undergraduate courses	11	8%
Prepare better students	9	6%
Miscellaneous	9	6%
Devise better projects	4	3%
Involve more graduate students	4	3%
Provide leadership	4	3%
Reduce teaching workload	3	2%
Total	143*	100%

 $^{^{\}star}$ Number of respondents = 112. Some comments were coded more than once.

 Table A22

 Comparison of Summer Undergraduate Research Experience to One During Academic Year

Comparison	Count	Percent of Total
Prefer summer	101	66%
Mixed response: both have advantages and disadvantages	20	13%
No preference, no difference	14	9%
Depends on the student	9	6%
Prefer academic year	5	3%
Miscellaneous	5	3%
Total	154	100%

Table A23Additional Comments About Undergraduate Research & Programs

Additional Comments	Count	Percent of Total
General comments	78	40%
Positive = 61		
Negative = 2		
Mixed = 12		
Recommendations = 3		
UROP	46	23%
Positive = 36		
Negative = 0		
Mixed = 3		
Recommendations = 10		
NA/no comment	14	7%
Multiple programs (UROP, SURP, others)	12	6%
More funding needed	9	5%
UROP Symposium	9	5%
Miscellaneous	9	5%
Faculty need recognition	5	3%
More information needed about programs	5	3%
SURP	5	3%
School-based programs	3	2%
REU's	2	1%
Total	197	100%