

University of California, Merced

Appendices to the Capacity and Preparatory Review Report

Appendix 1.1.1

[UC Merced's Strategic Academic Vision](#) [3] (Spring 2009) affirms the university's commitment to our mission, including a commitment to diversity through our [service to the multicultural Central San Joaquin Valley](#) [8]. As the only public research university in the Valley, UC Merced enrolls the most diverse population of undergraduates in the UC system, including more than 50% who are [first-generation college students](#) [9]. In this rapidly growing area of the state, relatively few college-age students have enrolled in post-secondary education. Our presence in the Valley is beginning to raise their expectations for attending college, matched by our commitment to welcome and support these underrepresented students.

As the 10th campus of the UC system, development of our campus is based in part on the [California Master Plan for Higher Education](#) [10], which offers admission to a UC campus to all high school students who are in the top 12.5% of their class. To maintain the quality of our educational programs for students who excel academically, all academic degree programs are rigorously and systematically reviewed, with reference to similar programs at peer institutions including our sister campuses in the UC system. Consistent with the longstanding tradition of shared governance in this system, our division of the Academic Senate oversees all aspects of curriculum development, implementation and review.

Appendix 1.5.1

The founding Dean of the School of Engineering established diversity as a “[building block for success](#),” [78] a commitment reflected in this School’s [Vision Statement](#) [79] and highly successful recruitment of [women](#) [80] and [minorities](#) [81] relative to faculty diversity at other UCs and select institutions. [Faculty diversity](#) [82], in turn, promotes undergraduate diversity, which simultaneously benefits from successful retention initiatives including [Service Learning](#) [14] and student participation in [professional organizations](#) [83].¹

At the graduate level, the [Division of Graduate Studies](#) [84] employs a full-time “Graduate Diversity and Retention Coordinator” to promote [programs](#) [15] that attract undergraduates, particularly underrepresented students, to participate in research and potentially to pursue a graduate degree at UC Merced. Efforts to increase the size and diversity of the domestic applicant pool, including staff and faculty outreach to graduate preparation programs and professional research societies that specifically cultivate the involvement of unrepresented minorities in research as well as participation in graduate schools fairs, resulted in a nearly 30% increase in applications in Fall 2008, including a 60% increase in Mexican/Mexican American/Chicano and in Latino/Spanish American applicants over previous years [85].

To sustain and extend this principle of diversity in community, the campus has established an [Office of Disability Services](#) [86] to ensure “equal opportunity and inclusion” of all students. In support of this outcome, policies and procedures, including procedures for special accommodations, are publicly available in the [UC Merced Disabilities Service Center Student Handbook](#) [87] and [online](#) [88]. The recently opened [Education Abroad Office](#) [89] encourages our undergraduates to seek an international experience by living and studying in an unfamiliar culture. The principle of community is also supported by our Office of Student Life, which sponsors over 100 [student clubs and organizations](#) [90], many of which feature the remarkable diversity among our student population: Persian-American club, Ballet Folklorico de UC Merced, Disability Student Association, Hip Hop Movement, Muslim Student Association, Nikkei Student Union, National Society of Black Engineers, Vietnamese Student Association, among many other examples. Through [Intercultural Programs](#) [91], Student Life also offers programming designed specifically to promote development of intercultural competencies and awareness.

In service to the local community, the [Center for Educational Partnerships](#) [92] and other campus initiatives such as the [UC Merced Police Mentor Program](#) [93] “address the educational needs of local students, quality of life issues, and community beautification and improvements.” These initiatives address the educational and life skill needs of Valley students, many of whom are at-risk academically, while emphasizing respect, responsibility, and accountability. Similarly, as outreach to underprepared high school students, the university offers Summer Bridge Programs [94] that “introduce (these) students to the demands of University life.” A flourishing [Peer Mentoring Program](#) [95], in concert with numerous [academic support-services](#) [96] offered by the Student Advising and Learning Center, provides continuing support throughout an undergraduate’s education—a key feature of sustaining the vibrant diversity of our campus.

¹ Wright, Jeff, R. “Building the School of Engineering.” [New Directions for Higher Education](#) 139 (2007):49-59.

Appendix 1.7.1

Information regarding the follow resources is available online:

- [financial support](#) [110], including [California residency and fees](#) [111], [a tuition and fee schedule](#) [112], and [refund policy](#) [113]
- [grievance procedures](#) [21]
- [grade appeal policies](#) [106]

Appendix 1.7.2

In each School professional advisors ([Engineering](#), [Natural Sciences](#), and [SSHA](#)) [114] work closely and regularly with students on developing course schedules, assessing progress towards graduation, assisting with the identification of career goals (including facilitating guidance opportunities with faculty and representatives from the Office of the Dean), and monitoring related indices of academic progress. Students who have not declared a major are advised by the [Student Advising and Learning Center](#) [115], offering specific guidance for choosing an appropriate major.

As a standing committee of the Academic Senate, the [Undergraduate Council](#) [116] oversees compliance with UC-system and UC Merced policies governing all aspects of the undergraduate curriculum. The [Graduate and Research Council](#) [117] provides similar oversight for students completing academic, post-baccalaureate degrees.

Through the [Student Handbook](#) [21], [Student Judicial Affairs](#) [118] communicates specific policies and procedures regarding student conduct and appeals, including those related to [Academic Honesty](#) [119]. Fair and equitable treatment of students as research subjects or participants is assured through published policies [120] and standards [121] regarding research, enforced by the [UC Merced Institutional Review Board](#) (IRB) [122]. The UC Merced IRB affirms compliance with Regental policies and state and federal rules and regulations that require fair and equitable treatment of experimental subjects. This is further supported by the Vice Chancellor for Research who serves as the Institutional Officer and has final responsibility for the enforcement of all rules and regulations pertaining to research with human subjects.

Finally, [policies and procedures](#) [123] enabling any student, staff or faculty member to pursue a complaint against a faculty member in violation of the Faculty Code of Conduct are available online. UC Merced has no adverse findings against it with regard to violation of any policies related to student conduct, grievances, humans subjects in research, and refunds.

Appendix 1.8.1

Grievance policies and procedures that include provisions for fair and timely response are available for all [staff](#) [62]. For unionized employees, including lecturers, librarians, teaching assistants and certain staff, these needs are met in [collective bargaining agreements](#) [132] negotiated with the UC system. Human Resources' dedicated [Employee Relations and Labor Relations Unit](#) [133] promotes staff awareness of grievance policies and procedures and provides balanced support to maintain staff and management relationships. Related employment information about UC-system and campus [Policies, Employee and Labor Relations](#) [134] can be accessed through [UC Merced's Human Resources](#) [135] website. The UC Counsel also schedules campus meetings at regular intervals for any UC Merced employee who wants to discuss legal issues regarding UC employment.

[Grievance policies and procedures](#) [136] for Senate faculty are readily available [online](#) [137] including the [grievance form](#) [138]. The [Committee on Privilege and Tenure](#) [137], which is responsible for handling grievances including those resulting from disciplinary actions, held no formal hearings in [2007-2008](#) [139].

Appendix 1.9.1

As a new research university, we recognize that there are ongoing challenges to be faced during an indeterminate period of local, regional, national, and even international uncertainty about financial and social stability. Particularly during these difficult times, our preparation for accreditation review requires an honest assessment of those challenges and a candid response about what we do well, what needs to be improved or what is no longer sustainable.

Also recognizing the need to abide by substantive change policies, the University appointed in January 2009 a Substantive Change coordinator [140] to work with our ALO to facilitate timely, accurate reporting of new or revised academic programs. To ensure compliance, the Undergraduate Council [141], Graduate and Research Council [26, 142] as well as the School of Engineering curriculum committee [143] have adopted policies to trigger substantive change applications as outlined in the WASC Substantive Change Manual. Similar policies are pending for the Schools of Natural Sciences and Social Sciences, Humanities and Arts. All policies specifically require faculty to contact the ALO and Substantive Change Coordinator when substantive change related issues arise. Our commitment to keeping WASC informed about important changes and related concerns is supported by example correspondence and discussions [144].

Thus, our Candidacy and Preparedness report is based on a commitment to seriousness and candor. This report also demonstrates the remarkable progress that UC Merced has made in its formative years, guided in key respects by the WASC review process. We welcome this opportunity to communicate what we have already achieved and henceforth plan to accomplish.

Appendix 2.1.1: Standards and Review of UC Merced Educational Programs

UC Merced's inaugural year for undergraduate education was 2005-2006, when 838 undergraduates enrolled in nine degree programs. Nine graduate students were accepted in 2004-2005 into one general program. In 2008-2009 the University enrolled [2,534 undergraduates in 20 degree programs](#) [145] and [184 graduate students in two programs](#) [146] (see Appendix 2.1.5). Plans for offering additional undergraduate majors and several more graduate programs are pending successful review under WASC procedures for substantive change. Also during this four-year period of rapid growth, the University has matched annual enrollment increases by hiring additional faculty each year to maintain an undergraduate student-to-faculty ratio of 14 to 1 [148]. When graduate students are included, our ratio rises to 15:1 tying us with Berkeley for the lowest ratio in the UC [149]. (See Appendix 2.1.3.)

Policies promulgated by the [Undergraduate Council](#) (UCG) [116], a standing committee of the Academic Senate that considers all matters regarding undergraduate curriculum, ensures that new undergraduate degree programs meet high academic standards. As outlined by these policies, proposals for new courses [150] and programs [141] are vetted by several levels of faculty-staffed committees beginning with the Curriculum Committees of each School. Approved proposals are then forwarded to the UCG for university-wide review. To ensure that sufficient resources are available to support a new program, including enough faculty to staff courses each semester so that students can progress in a timely manner towards degree completion, proposals are also evaluated by the Senate [Committee on Academic Planning and Resource Allocation](#) (CAPRA) [151]. Finally, an administrative review of resources is conducted before the Executive Vice Chancellor and Provost provides the final approval for the degree program.

A similar system of review exists for graduate curricular matters with proposals for new courses and programs evaluated for approval by the [Graduate and Research Council](#) (GRC) [117], a standing committee of UC Merced's Academic Senate. As outlined by GRC policy [142], the review process for new programs requires input from [CAPRA](#) [151], the Executive Vice Chancellor and Provost and the graduate Dean. Final campus-level approval rests with the Executive Vice Chancellor and Provost. All new graduate degree programs must also apply for and receive approval from the [Coordinating Committee on Graduate Affairs](#) (CCGA) [152], a standing committee of the UC system-wide Academic Senate composed of faculty from all 10 campuses and the system-wide Provost. All UC graduate programs operate under the aegis of the CCGA and it is the CCGA approval process that ensures that each graduate program meets UC expectations for academic rigor and faculty quality prior to accepting students.

Once established, undergraduate [29] and graduate [30] programs are subject to program review, involving both internal and external review of the curricular quality of the program, the quality of its faculty and students, its success in promoting student learning, and its related assessment processes. Recommendations from this review are used to improve the educational effectiveness of the program.

Appendix 2.1.2: Shared Governance for Academic Review

Under the UC system of [shared governance](#) [153], the University's administration exercises authority for the allocation of University resources in support of the curriculum and co-curricular functions. Working in close collaboration with the Chancellor, the [Executive Vice Chancellor and Provost](#) [154] is the chief academic officer of the University. In addition to overseeing all academic programs, including instruction and research, the incumbent provides leadership for campus administrative operations. As part of shared governance the faculty plan academic initiatives and consult with the Executive Vice Chancellor and Provost on development and implementation of these initiatives, as well as the infrastructure to support related academic objectives. These objectives are formally stated in the University's [Strategic Academic Vision](#) [3] for an academic plan and carefully reviewed by [faculty](#) [155] and other constituents for endorsement.

Appendix 2.1.3: Academic Programs and Instructional Faculty

At the undergraduate level, our campus officially offers 18 individual majors and 18 minors. The unofficial number of majors and minors varies slightly from these totals because when the campus opened most degrees were offered as part of generic programs such as 'World Cultures and History' and 'Behavioral, Social and Cognitive Sciences'. See Appendix 2.1.5 for an explanation of how these early majors have evolved into separate degree programs.

Several proposed new majors are in planning stages, with one major in Anthropology having already undergone successful WASC substantive-change review pending official final approval by the WASC Commission. Faculty have used a variety of resources to inform program development, including comparable programs at other UC campuses as well as similarly exceptional research institutions, broadly recognized emerging research and application trends, field-specific professional publications, and disciplinary standards established by professional societies or accrediting agencies, for example the American Chemical Society and ABET, Inc. Together with faculty experience, these resources ensure that programs conform to recognized professional and disciplinary standards.

The School of Engineering offers five undergraduate Bachelor of Science [major degrees](#) and no minors [156]. They are Bioengineering; Computer Science and Engineering; Environmental Engineering; Mechanical Engineering; and Materials Science and Engineering. Strategic planning has been focused on recruiting faculty to support high quality multidisciplinary research and instruction.

The School of Natural Sciences offers five undergraduate Bachelor of Science major degrees and three minor degrees. The [majors](#) [157] are Applied Mathematical Sciences; Biological Sciences; Chemical Sciences; Earth System Science; and Physics. The [minors](#) [157] are Natural Science Education, Applied Math and Physics.

The School of Social Sciences, Humanities and Arts (SSHA) offers eight official undergraduate [majors](#) [158] degrees and 15 [minors](#) [159]. Cognitive Science awards a Bachelor of Arts or Bachelor of Science degree and Management awards a B.S. only. Economics, History, Literatures and Cultures, Political Science, Anthropology and Psychology award B.A.s. The 15 minors are American Studies, Anthropology, Arts, Cognitive Science, Economics, History, Literatures and Cultures, Management, Philosophy, Political Science, Psychology, Services Science, Sociology, Spanish, and Writing.

The selection of current undergraduate majors reflects careful attention to enrollment at other University of California campuses to identify fields in high demand in recent years. As UC Merced grows, it will continue to add core humanities, arts, social sciences, sciences and engineering degrees, building each additional program in depth to sustain its academic excellence.

As of Fall 2008, UC Merced had 112 [ladder-rank faculty](#) [147] in the academic senate whose primary responsibilities were student instruction and research plus 90 non-senate [instructional staff](#) [147]. All but one of the ladder-rank faculty members had earned a Ph.D. or terminal Master's degree (e.g., M.F.A.). Among the non-senate faculty, 52% had earned a Ph.D. or terminal Master's degree, 39% had earned academic Master's degrees, and 9% had earned Bachelor's degrees. The School of Social Sciences, Humanities, and Arts, which enrolls the largest number of majors (918) [160], has the greatest number of faculty (104) [161]. It has the highest proportion of non-senate to senate faculty (1.6 to 1) because it provides the most lower-division service courses required of all undergraduates (e.g., Writing 1, Writing 10, and Core 1). The School of Natural Sciences, which enrolls the second

largest number of majors (802) [160], has the second highest number of faculty (68) [162]. Because it provides lower-division service courses in mathematics for most undergraduates and in the natural sciences for (predominantly) science and engineering majors, it has the second highest proportion of non-senate to senate faculty (0.5 to 1). The School of Engineering, which enrolls the least number of majors (493) [160], has the lowest number of faculty members (31) [163]. Because it offers a relatively low number of lower-division courses, it has the lowest proportion of non-senate to senate faculty (0.1 to 1). In each of the three schools, at least half of the non-ladder faculty have earned a Ph.D. or a terminal Master's degree. In addition, many of those with academic Master's degrees – who primarily teach courses taught by TAs at most other colleges - are working on their doctoral dissertations.

Plans exist to grow Senate faculty numbers in each major and are being implemented as possible given economic conditions.

The strategy for developing master's and doctoral education has been to open with a single Individual Graduate Program, with a series of interdisciplinary emphases supervised by Graduate Groups of faculty from multiple disciplines (see Appendix 2.1.5). In 2007 [Environmental Systems](#) [164] became our first stand-alone graduate program. Psychology is currently preparing to become the next stand-alone graduate degree, tentatively scheduled to start in Fall 2010, pending CCGA and WASC substantive change approval. We anticipate several others will follow shortly thereafter.

Group emphases within the Individual Graduate Program offer M.A. or M.S. and Ph.D. degrees in the following areas: [Applied Mathematics](#), [Biological Engineering and Small-scale Technologies](#), [Electrical Engineering and Computer Science](#), [Mechanical Engineering and Applied Mechanics](#), [Physics and Chemistry](#), [Quantitative and Systems Biology](#), [Social and Cognitive Science](#), and [World Cultures](#) [165].

To encourage broad-based interest in post-baccalaureate education, with particular attention given to underrepresented students, [Graduate Division](#) [84] sponsors or co-sponsors several programs for our undergraduates. These include the [UC AGEF \(Alliance for Graduate Education and the Professoriate\)](#) [166], [UC LEADS \(Leadership Excellence through Advanced Degrees\)](#) [167], and the [Ronald E. McNair Scholars Program](#) [34].

Appendix 2.1.4: Undergraduate Student to Faculty Ratio

In AY 2008-2009 the state and national recession resulted in a hiring freeze at all UC campuses. This has not yet affected our undergraduate student to faculty ratio, which remained at 14:1 for AY 2008-2009 [148]. When graduate students are included, our ratio rises to 15:1 tying us with Berkeley for the lowest ratio in the UC [149].

Appendix 2.1.5 Number of Undergraduate Majors and Graduate Programs

As described in a clarifying document to WASC [168], UC Merced opened to undergraduates in 2005 with nine undergraduate majors of which World Cultures and History and Behavioral, Social and Cognitive Sciences were offered as “umbrella” programs with the intention of splitting off more specific programs when enough faculty were hired to support them. The Graduate division began similarly, although with only a single, degree-granting umbrella program designated as the Individual Graduate Program (IGP) supporting emphasis tracks. In Fall 2007, one of these emphasis areas, Environmental Systems (ES), was granted full degree-granting status to produce two graduate groups, ES and the IGP, the latter with eight emphases areas.

Currently, two of the University's official 20 degrees (World Cultures and History, and Behavioral, Social and Cognitive Sciences) are legacy majors that have no enrolled students. A third major, Anthropology, has recently (May 2009) undergone substantive change review and has been approved pending final endorsement by the WASC Commission. Depending on which majors are being noted, the total will be variously cited as 20 (with legacy majors), 18 (without legacy majors but including Anthropology), or 17 majors (excluding legacy majors and Anthropology).

Appendix 2.2.1: Competencies in Major-Program Curricula and Syllabi

CFR 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, college-level 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 program also ensure breadth for all students in the areas of cultural and aesthetic, social and political, as well as scientific and technological 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).

Starting in AY2007-2008, the campus reinvigorated efforts to develop course-level student learning outcomes (SLOs) to support student achievement of Program Learning Outcomes (PLOs) in undergraduate and graduate curricula including General Education. In AY 2007-2008, approximately 10% of syllabi contained SLOs [173, slide 13]. By Fall 2008, 24% of undergraduate syllabi in the School of Engineering [174: Table A], 76% in School of Natural Sciences [174: Table C], and 73% in the School of Social Sciences, Humanities and Arts [SSHA; 174: Table E] contained SLOs based on a syllabus submission rate of 98%. (Syllabi were submitted for 193 of the 197 undergraduate courses for which they were expected.) By Spring 2009, undergraduate numbers had increased to 31% [174: Table B), 92% [174: Table D] and 82% [174: Table F] respectively, again with a 98% faculty syllabus submission rate. SLO compliance rates at the graduate level were less consistent across semesters with 27 of 37 or 73% of syllabi containing learning outcomes in Fall 2008 and 18 of 28 or 64% in Spring 2009 with faculty submission rates of 88% and 82% respectively [174: Tables G-L]. By Fall 2009, we intend undergraduate and graduate submission and compliance rates to increase to 100%. The School of Engineering in particular has developed a data base system (see Appendix 2.2.2) to support ABET and WASC accreditation that includes a tool for developing syllabi with learning outcomes. All Engineering faculty will be expected to use this system to develop their syllabi beginning in Fall 2009. To ensure that SLOs are a standard component of all new courses, SLOs are required for new course approval as per Academic Senate policy at undergraduate [150] and graduate levels [26]. For courses meeting General Education requirements, the new course request also must describe how the course satisfies three or more of the Guiding Principles of General Education [150].

Alignment of SLOs with PLOs has been initiated with curriculum maps provided in 92% [175: Table B] of submitted Faculty Accreditation Reports [28, Section III of reports]. These alignments will be refined over time using annual assessment results. Similarly, institutional alignment is being assessed by mapping PLOs onto the institutional principles of general education [12] and by reviewing links between our mission as a “student-centered research university” and the research opportunities and expectations afforded by our programs. These analyses are also available in Section III of the Faculty Accreditation reports. Across all schools and degree levels, the [Center for Research on Teaching Excellence](#) [35] is supporting this work through workshops, consultations and on-line resources, including SLO [176] and [PLO development](#) and refinement [441], [student-centered syllabus development](#) [177], [assessment planning](#) [178] and implementation with a focus on using results to improve practices for ‘closing the loop’.

Appendix 2.2.2: School of Engineering Accreditation System

The School of Engineering Accreditation System (SOEAS) is a database driven system intended to facilitate the collection of curriculum and assessment information within the School of Engineering (syllabus, learning outcomes, and student surveys) to be used on accreditation processes (ABET and WASC). The system also helps the school's academic support group in generating printed and electronic versions of syllabi for all Engineering classes and the distribution of this information to students, faculty, staff and the general public by feeding in real time the School of Engineering websites as information becomes available.

The system is designed for ultimate use by the School of Engineering faculty and staff, with operational oversight and future design enhancements guided by the School of Engineering Curriculum Committee. The intent is for this system and its features to evolve to meet the ongoing needs of the School of Engineering academic community. The content of this system will provide evidence of data for use in developing the accreditation processes.

It is important to recognize that the SOEAS is designed to ensure that faculty involvement in the accreditation process is maximized at all levels, from the determination of the program learning outcomes (PLOs), to the course learning outcomes (SLOs), all the way to important components of the institutional assessment process. After the PLOs have been determined by the faculty of a particular program, all faculty submit data on the ways that their respective courses contribute to the PLOs. Each instructor also defines the SLOs for their own classes, and through the "Faculty Contributions to the Program Mission" forms, each faculty is also responsible for an important component of the assessment effort. The results of this assessment process are compiled instantly in graphic form, and all faculty have access to the results, and therefore can collaborate on the discussions for continuous improvement of the academic programs across the campus.

Use and access to specific data and functionality will depend on the user role, and associated permissions and access authority. After a user logs in, his/her access and edit authority will be immediately available based on the role that has been assigned to a user.

Appendix 2.2.3: General Education

CFR 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, college-level 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 program also ensure breadth for all students in the areas of cultural and aesthetic, social and political, as well as scientific and technological 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).

The [Guiding Principles for General Education](#) [11] inform a curricular program designed to ensure that students complete at least 45 semester credit hours of [general education](#) [179]. As noted in the UC Merced Catalog [180], these 45 units enable our undergraduates to broaden their educational experience by “Strengthening [their] abilities in quantitative reasoning and written, oral and other communication skills; and introducing and teaching [them] to integrate broad domains of knowledge: arts and humanities; social and cognitive sciences; natural sciences; and technologies and engineering methods.”

All undergraduates must complete four units of general education by enrolling in Core 1 their freshman year; during their junior year, all undergraduates, including transfers, must also take four units of Core 100 or the equivalent units in a comparable course. These two Core courses specifically address the eight guiding principles for general education that our campus adopted in 2003. As noted in our 2006 [Educational Effectiveness report](#) [181, p.51] the Core Sequence is “ambitiously experimental,” especially to scale up these two courses for large numbers of students. In addition to the Core curriculum, development of college level writing and quantitative skills is supported through Writing 1 (Academic Writing) and Writing 10 (College Reading and Composition), and in mathematics and quantitative reasoning requirements addressed in Math 5 (Preparatory Calculus) and Math 21 (Calculus of a Single Variable) [182].

The delivery of the Core Sequence (Core 1 and 100) has been difficult to sustain because it can divert a significant number of faculty from offering courses in their major and minor programs. Under these circumstances, in Fall 2008 the Academic Senate convened an ad hoc committee [183] to consider alternative means of offering the Core Sequence, or if necessary, to propose another system for delivering upper-division general education. The committee’s final report [184] notes three possible configurations of Core 1 and two options for Core 100. Review toward endorsing specific forms of delivery for the Core Sequence will occur in Fall 2009. During this time of curricular review, students will continue to satisfy Core 1 as it has been offered since 2005; students will fulfill the Core 100 requirement by taking a prescribed upper-division course such as WRI 100, which also fulfills all eight guiding principles of general education.

In addition to completing Core 1 and Core 100 (or its equivalent), students must finish a School-specific curriculum [185] for general education, typically taking elective courses outside their major.

These additional courses broaden a student's exposure to different modes of inquiry while strengthening the interdisciplinary emphasis that distinguishes general education at UC Merced.

In Fall 2008, the university appointed a [Vice Provost for Undergraduate Education](#) [186]. Among other responsibilities, the VP of UE's office will assist in delivery of general education while coordinating faculty discussion of the preferred administrative structure for that delivery. The Office of Undergraduate Education has now replaced College One for administration of general education.

Other notable features of general education at our campus are [freshman seminars](#) [187] and related opportunities for undergraduate research. Although restricted by workload demands at a start-up research university, our faculty have consistently offered enough one-credit freshman seminars each year to meet student demand. In these small seminar sections, freshmen study a topic in depth under the guidance of a faculty member who has relevant expertise for that topic. They also establish an association with peers and the instructor that can last throughout their four years of college.

This freshman seminar experience is one example among many that promote early and sustained interest in undergraduate research opportunities. Through direct and frequent contact with faculty, UC Merced students gain firsthand knowledge of opportunities to participate in on-site field work, laboratory research, archival studies, and similar research activities. Modeled on the service-learning program at Purdue University, the School of Engineering's [Service Learning Program](#) [14] has engaged undergraduates in diverse and rewarding research projects with practical consequences for the campus and nearby community. Examples of student-research initiatives supervised by faculty include a [history](#) of the campus, a Mark Twain [exhibit](#) at the Angels' Camp Museum, a microscopic [analysis](#) of hippo sweat, and a study of [wind power](#) in Denmark [188].

As a "student-centered research university," UC Merced has consistently and successfully encouraged undergraduates to take advantage of research opportunities. The Office of Institutional Planning and Analysis has reported that "68% of [UC] Merced seniors have assisted faculty with research or creative projects." [42, p.3]. In recognition of this important aspect of their general education, UC Merced sponsors a [Research Week](#) [189] each spring that includes a [poster session](#) [190] to share undergraduate and graduate research with the broader community. Our university also supports a student edited [Undergraduate Research Journal](#) [16] that publishes outstanding examples of undergraduate scholarship and creative work.

Appendix 2.2.4: Graduate Education

CFR 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 practice and training experiences. Additionally, admission criteria to graduate programs normally include a baccalaureate degree in an appropriate undergraduate program. Guideline: 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.

As the only public institution endowed by the State of California's Master Plan for Higher Education with the authority to grant doctoral degrees, the University of California maintains a rigorous, multi-level system of review to ensure the quality and integrity of both proposed and existing graduate-degree granting programs. Requirements for new graduate degree programs are set by the [Coordinating Committee on Graduate Affairs](#) (CCGA) [152], a committee of the system-wide Academic Senate composed of faculty from all 10 campuses, the Campus Provost and the system-wide Provost. This committee also coordinates the final review, which includes external review, of all proposed graduate degrees or schools and offers final approval. Proposals are forwarded to the CCGA following campus-level academic and budget reviews by the [Graduate and Research Council](#) [117], the Graduate Dean, the Committee on Academic Planning and Resource Allocation ([CAPRA](#)) [151], and the Executive Vice Chancellor. Currently, UC Merced has two CCGA approved, doctoral degree granting programs, Environmental Systems and the Interim Individual Graduate Program (IIGP), an umbrella program for eight additional graduate emphasis areas (See Appendices 2.1.3 and 2.1.5). It is expected that Psychology along with one or two other graduate emphasis areas will apply for CCGA approval in AY2009-2010, submitting substantive change applications to WASC concurrently, with a number other applications following in subsequent years.

The stand-alone Environmental Systems program and each graduate emphasis within IIGP average 19 faculty members per group with no group having fewer than 9 participants [191]. Faculty workload for teaching at UC Merced varies among the Schools but does not officially exceed three courses annually, a workload that enables a graduate-level academic culture for research as well as teaching. Evidence of [workload requirements](#) [192] is submitted annually to the Committee on Academic Planning and Resource Allocation.

Admissions and degree requirements are outlined in each group's Policies and Procedures document [101], including expectations of a [baccalaureate degree for admission](#) [169] and engagement with research to produce "an original contribution of knowledge in his or her chosen field of study" The latter includes the generation of peer-reviewed, publishable quality research for graduation. Along with the General Catalog, the information provided in a Policies and Procedures document serves as the official description of admission and graduation expectations for matriculating students. This key document is available from each School's Graduate Student Program Coordinator. The [Graduate Advisor's Handbook](#) [193] describes for new and continuing faculty and students essential policies and procedures related to graduate student admissions, funding, employment, enrollment, academic standards, and degree requirements. The UC Merced Graduate Student Handbook [194] offers similar information from a student perspective.

Faculty FTEs are allocated in keeping with the strategic plans of graduate groups [195], the Schools, and the institution as described in the UC Merced [Strategic Academic Vision](#) [3]. This process ensures alignment of the graduate programs with the purpose and character of the campus over both short- and long-range planning timescales. All Senate faculty are required to be full time employees and all graduate groups are supported by more than one full time faculty [191]. Bylaws promulgated by each graduate group [196], and approved by the Graduate and Research Council, articulate the governance structure by which each group administers a program of instruction and research leading to MS and PhD degree, including leadership, committees, student membership and criteria for faculty membership and voting.

Our capacity to support graduate education is demonstrated in the timely progress of graduate students towards completion of their degrees. In 2008, UC Merced awarded seven MA degrees and one doctorate; these completion rates are consistent with the relatively small size of the graduate student population (184 in 2008) [146] and the number of Senate faculty (112 in 2008) [147], which represents an average of about 1.6 graduate students for every faculty member.

An eight year comprehensive cycle of program review [30], involving annual data collection, three year review processes to analyze data, and five years between the closure of each review, ensures the academic, research, resource and fiscal viability of undergraduate and graduate programs being evaluated regularly. Evaluation of student learning assessment is fully integrated into the review. A revised assessment plan is also an expected product of the review. At UC Merced, graduate program review is the responsibility of a Program Review Committee, a standing committee of the Graduate and Research Council. Environmental Systems is anticipated to undergo program review in 2013 [24], with each newly established graduate program expected to enter the program review cycle five years after earning CCGA approval.

Appendix 2.3.1

The library is committed to producing information-literate graduates capable of performing critical analysis of data and argument and, in this way, supports student achievement of the eight guiding principles of generation education. Toward this end, the Library has developed learning outcomes based on the Association of College & Research Libraries "[Information Literacy Competency Standards for Higher Education](#)" [199] and supports [student development](#) [197] in these areas by routinely offering workshops, in-class sessions on effective uses of online data bases, and individualized assignment and research [support](#) [201]. The library began assessing student information literacy outcomes in Fall 2008 using several sources of evidence from [Writing 10](#) [202] student work including post-questionnaires and bibliographies and student self-reporting from UC-wide and national surveys.

Appendix 2.3.2

Through the Sakai course-management system, or [UCMCROPS](#) (similar to Blackboard or Web-CT) [203], all faculty have access to interactive teaching resources such as wikis, chat rooms and blogs. To supplement textbooks and in some instances to serve in lieu of textbooks (e.g., for delivery of Core 1), all required course readings and supplemental materials such as lecture notes or reading guides can be posted on CROPS for student use, thus reducing costs in textbook purchases while also increasing the timeliness of these materials. Through a collaborative initiative, the Instructional Technology group and the Center for Research on Teaching Excellence are sponsoring a [pilot e-portfolio system](#) for faculty and students [200]. When this system is fully operational, it will provide valuable evidence of learning-outcomes for systematic assessment of student learning at course, program and institutional levels.

Appendix 2.4.1 Multi-year Program Assessment Plans

At each level of education, including graduate studies, the faculty have assumed responsibility for their students' academic progress, most recently through development of comprehensive assessment plans that outline annual assessment activities over a five year cycle [28]. Assessment results will enable faculty to restructure the curriculum with the overlapping goals of improving student learning and refining institutional expectations for academic success. Similarly, now that our founding class of 2005 freshmen has graduated in Spring 2009, the University will have its first cohort of four-year degree students to track as they continue for graduate studies, pursue professional careers, or explore other opportunities. This cohort will provide baseline information about the academic achievement of UC Merced students; it will also enable us to learn more about our former students from their employers, parents, colleagues at other universities, and other external stakeholders (See CFR 4.8).

Appendix 2.4.2: Success Workshops

In Spring 2008, the faculty endorsed continuation of mandatory mid-semester grade reporting for first-year courses (listed 001 through 099 in the Schedule of Courses) for an additional five years [218] based on data illustrating the program's efficacy provided by the Student Advising and Learning Center [219]. Initiated in 2005, this program requires freshmen who receive a mid-semester grade below C- to attend "[success workshops](#)," [211] which are open to all other students as well. In these mid-semester workshops faculty, staff, and student-peers meet with small groups of freshmen to discuss the importance of maintaining satisfactory grades and to plan related strategies for being a successful student (e.g., time-management skills, effective study strategies, and the use of academic-support services). Completion of this workshop is a prerequisite to registering for the next semester. Thus, at the start of their education at UC Merced, our first-year students are introduced to the institution's high academic standards but in the context of manageable pathways to success.

The outcomes of the required Success Workshops provide a useful and insightful window into the minds of the most at-risk students. Each fall, 42%-56% of freshmen have had at least 1 grade of D+ or lower, and with more than 95% participation in the workshops, the data sample is robust. Findings from these workshops are shared with faculty and lecturers at their orientation sessions in the fall, as well as at Deans and Directors meetings, and at training sessions for staff from different Student Affairs units, such as Admissions. Highlighting the most commonly selected items on the surveys, such as "I have good intentions but do not follow through," "lack of confidence in my abilities," and "easily distracted by friends" helps increase faculty awareness of the sources of students' greatest struggles while providing encouragement to faculty to remember the holistic nature of academic success. In general, approximately 75% of Success Workshop participants complete the semester safe from academic dismissal. In light of the fact that most participants were careening into multiple failing course grades at the time of the mid-semester grades, this is an important rescue mechanism.

Appendix 2.5.1: Capstone Honors Program

For upper-division students who have distinguished themselves as successful learners, the University is now establishing policy for an Honors Program, with potential for an undergraduate thesis requirement. The History major has proposed a preliminary version of this [capstone honors thesis](#) [223]. In this model, faculty work one-on-one with each student to direct a two-semester thesis project. This emphasis on high academic achievement sends an important message to all our students about striving to excel.

Appendix 2.5.2 Science and Math Initiative/Natural Sciences Education Minor

Developed as part of the [Science and Mathematics Initiative](#) (SMI) [225] also known as California Teach (CalTeach) Program, the [Natural Sciences Education Minor](#) (NSED) [226] allows undergraduates students to explore and prepare for careers teaching sciences and mathematics in secondary schools through courses and mentor-supervised instructional fieldwork organized to achieve an explicit set of [outcomes](#) [227] and with the support of academic and career counseling. By facilitating student engagement with science and math in the role of the teacher, this program aims to improve conceptual understanding among participating students while simultaneously preparing them for direct admission into teaching credential programs [228]. As of spring 2009, 18 students had declared the NSED minor, 13 School of Natural Sciences majors and five from the School of Social Sciences, Humanities and Arts. Enrollment in this program has continued to grow since its inaugural year [229].

Appendix 2.5.3 Distribution of Information on Student Learning

Student progress is also supported by the [Registrar's Office](#) [230], which monitors satisfactory progress toward a degree and uses data on midterm and final grades plus time-to-degree to inform students of their academic status. Faculty committees, School Deans, and advisory staff also receive this information, informing discussions of how to improve student performance.

Appendix 2.5.4: Freshman “Bridge” Programs

As one strategy for actively involving our students in learning, the University has launched several learning-community initiatives. In Summer 2008, over 25 “[admission by exception](#)” freshmen [231] participated in an eight week, intensive writing and mathematics summer program [232]. During AY2008-2009, these students were then enrolled as groups of four or five each in required first-year courses (e.g., Math 5, WRI 10, Core 1) with student-peer mentors assigned to support each group. This year-long grouping of at-risk students allows for pro-active responses to their educational needs within a learning community that offers mutual support (see Appendix 2.5.5). The Management program also offers a [summer program](#) [233] for prospective majors.

Appendix 2.5.5: Academic-Support Programs

For similar purposes of improving student achievement, in Fall 2009 the University will begin offering [supplemental instruction](#) [234] in selected required courses, starting with WRI 10 as a comprehensive learning community. Based on results of the pilot project for all students in WRI 10, in subsequent semesters other required courses will be included for supplemental instruction, particularly those that pose significant challenges for large numbers of undergraduates.

In Fall 2008 our campus also opened its first major-specific [living-learning community](#) [235] for freshmen [management](#) [236] and [economics majors](#) [237]. This program encourages students to “share activities that explore their widely divergent interests, foster intellectual growth and discussion, develop student/faculty contacts, and...broaden their horizons.”

Appendix 2.5.6 Health Promotion and H.E.R.E.O.S.

Student Health Services promotes a [holistic approach](#) [238] to student success emphasizing the connections between wellness and educational excellence. The Health Program Coordinator supports student H.E.R.O.E.S. (Health Education Representatives for Opportunities to Empower Students) as they work directly with peers to determine areas of concern and to develop and implement programs that will improve student health and, in turn, support student academic success. Programmatic success is regularly assessed with student interventions constantly being advanced and expanded.

Appendix 2.6.1

UC Merced recognizes the importance of having students apprised of learning outcomes for all programs (PLOs) and for all courses (SLOs). PLOs are published on School and program websites [23], conveyed to new faculty in orientation sessions, and addressed in [accreditation workshops](#) [239] open to all faculty including lecturers. For students, parents and external stakeholders, PLOs will also be included in the pending 2009-2011 university catalog. Appendix 2.2.1 summarizes data describing SLO inclusion in syllabi as well as tools and policies developed to ensure continued, and as necessary increasing, compliance with this expectation.

As a related assessment objective, the WASC Steering Committee has designated Faculty Accreditation Organizers (FAOs), one for each undergraduate and graduate program, and Evidence Providers (EPs), one for each co-curricular unit that has academic-support responsibilities. Under FAO leadership, programs have developed and submitted multi-year plans for assessing learning outcomes in their programs [28, Section II of each report]; they have also indicated how their academic programs support the broader institutional goals of our student-centered research university [28, Section III of each report] and our guiding principles of general education [12; CFR 1.2]. Assessment of PLOs will progressively extend to all undergraduate programs, with a projected completion date of 2010 for our pending Educational Effectiveness report. Implementation of these programmatic assessment plans will promote explicit linkages between student learning outcomes and the standards faculty use to evaluate student work both in concept and in practice. (See CFR 2.4 for an analysis of our assessment capacity.) For initial implementation of program assessment plans, the Provost has allocated resources that will be distributed to FAOs through the [Center for Research on Teaching Excellence](#) [36].

The co-curricular functions of the university have also been initially noted in the data exhibits generated by Evidence Providers (EPs), and as the University Assessment Committee begins operation in Fall 2009, this data will be evaluated to show the integration of academic-support services with institutional expectations for student learning. For example, in collaboration with Institutional Planning and Analysis, Career Services and the Alumni Office have established two surveys, a senior [240] and alumni survey [241], that will provide indirect evidence of student achievement available to the wider community for assessment purposes. The University's Assessment Committee will be charged to consolidate this evidence with other indirect and direct data on student learning in order to conduct institutional assessment of our educational effectiveness.

Appendix 2.7.1

At the graduate level, the 2007 review and endorsement of the Environmental Systems Graduate Group by the UC system's Coordinating Committee on Graduate Affairs (CCGA), including confidential peer review external to the UC, provides evidence of both the system-wide capacity to provide program review as well as our own ability to prepare, through an internal review process, a successful program proposal [246]. As the first stand-alone, degree-granting graduate program to evolve from the Interim Individual Graduate Program, Environmental System's application provides a model for upcoming applications for independent graduate group status. At the undergraduate level, the Anthropology B.A. program became our first new major approved under WASC substantive change review in May 2009² [242].

² Approved by the WASC Substantive Change Review Committee; awaiting Commission ratification.

Appendix 2.7.2

As written, our undergraduate [29] and graduate [30] program review policies attend to the *capacity* implications of the expectations outlined in the WASC *Rubric for Assessing the Integration of Student Learning Assessment into Program Reviews* [244] at developed to highly developed levels. For example, these policies require programs to engage in external review; include at least one reviewer with assessment expertise; engage in and report on annual assessment of learning outcomes including the degree to which programs effectively “close the loop” as well as gain and use annual feedback on assessment methods and outcomes; update assessment plans based on review results; and make comparisons to programs at other universities. Both policies also require programs to examine retention and completion rates. To be clear, we cannot judge fully the degree of development of our Program Review processes because the WASC rubric also evaluates implementation.

Appendix 2.8.1

To encourage faculty engagement in curricular innovation, the Center for Research on Teaching Excellence offers mini-grant and fellowship [awards](#) [36] to faculty and lecturers. In the first year of the Center's operations (Spring 2008 – Fall 2008), five mini-grants have been funded (approximately \$5,000 per award) and one fellowship is scheduled to begin in Fall 2009. Descriptions of [funded projects](#) [248, p.2] are highlighted in [Center Newsletters](#) [249] distributed to the entire campus.

Appendix 2.8.2 Student Assessment on Teaching and Learning (SATAL)

The Center for Research on Teaching Excellence has initiated a pilot program [SATAL](#) (Student Assessment of Teaching and Learning) [250] that trains undergraduates to be assessment assistants (AAs). These AAs work under a faculty supervisor to help design, implement, and review studies of teaching and learning while also maintaining strict confidentiality.

The design of the SATAL program at UC Merced is based on the Students Consulting on Teaching (SCOT) program at Brigham Young University (BYU) sponsored by its Center for Teaching and Learning. Initiated in 1993, the SCOT program currently involves 36 student consultants and over 500 instructors have used its services. At UC Merced, SATAL is assisted by students from the Peer Mentoring Program and supervised by a faculty member.

SATAL is designed to provide feedback to professors interested in enhancing student learning. Carefully selected and trained UC Merced students respond to professors' invitations to gather data on classroom activities and give them confidential feedback. The program is open to all instructors and is a resource 1) to provide faculty members with feedback that helps them gain a better sense of the student experience in their classes, 2) to foster closer relationships between faculty and students, 3) to allow students to reflect on teaching and learning, and 4) to improve the quality of education at UC Merced. Depending upon their needs, an instructor may request the student consultant to be a 1) recorder/ observer, 2) filmmaker, 3) faux student, 4) class interviewer, 5) primed student, or 6) a proctor of student-course evaluation to read directions and emphasize the importance of this student-assessment activity. Other support services are possible depending on the evaluative feedback the instructor wishes to obtain. SATAL values the voice of the students in their educational development while providing instructors with valuable insights to supplement student evaluations and peer reviews.

Appendix 2.9.1: Research Initiatives for Students

Undergraduate and graduate students have many opportunities to work with faculty on research initiatives sponsored by the [Sierra Nevada Research Institute](#) [253], the [Energy Research Institute](#) [254], and a new [Humanities Research Institute](#) [255]. These institutes and related academic programs also sponsor interdisciplinary lecture series that bring distinguished speakers to campus while providing UC Merced faculty and students an opportunity to publicly report on their own research and creative activities. Some examples of these speaker series include [Mind, Technology and Society](#) [256], [Center for Information Technology Research in the Interest of Society](#) [257], [Write-Look-Listen](#) [258], and [Environmental Systems Seminars](#) [259].

Appendix 2.9.2: Promoting Teaching and Learning

The [mission](#) of the Center for Research on Teaching Excellence (CRTE) [35] specifically “advocates a union of scholarship and instruction that is grounded in the academic principles of research and evidence.” In support of that mission, the CRTE aims to bring together faculty, lecturers, graduate-teaching assistants and administrative staff in order to assess and promote student learning through campus-wide collaboration. The Center’s [newsletter](#) [249], [workshops](#) [260], [grants and fellowships](#) [36], [individual consultations](#) [261] and other services establish a foundation for a “campus-wide culture that values, fosters, and rewards continuous improvement in teaching and learning.”

Other units of the university located off-campus also engage in and promote applied forms of scholarship that interconnect teaching and learning with service. Strategically located in Fresno and the fourth largest K-12 educational district in California, the University’s [Center for Educational Partnerships](#) [262] was established in 2002 “to effect long-range improvement in the education of Central San Joaquin Valley students and ultimately increase the number of area students eligible to attend institutions of higher education.” A consortium of Merced College, California State University-Stanislaus and UC Merced share resources through the Tri-College Center, where [the UC Merced branch of the National Writing Project](#) [263] trains Merced-area teachers to improve writing and learning in local schools. Our Chancellor, Sung-mo “Steve” Kang, chairs the Board of Directors for the [Great Valley Center](#) [264], tasked to “support activities and organizations that promote the economic, social and environmental well-being of California’s Great Central Valley.” Two of the Center’s eight [board members](#) [265] are distinguished professors at UC Merced whose research focuses on environmental stewardship.

Appendix 2.11.1

Among many services available to students, the Office of Student Life offers [workshops](#) [275] that develop students' potential for leadership roles, with attention given to diversity, team building, and lifelong learning. These goals are directly aligned with several Guiding Principles of General Education.

The Student Advising and Learning Center (SALC) conducts recurring [workshops](#) [276] on study skills and student success. In collaboration with faculty, SALC staff also co-teaches Introduction to Undergraduate Studies 10 [210], a new course that helps freshmen adjust to the academic challenges of their first year courses. (See CFR 2.4.)

Appendix 2.11.2: Career Services Center Workshops

To advance student-employment opportunities, the Career Services Center (CSC) schedules a [Speaker's Bureau](#) [277] that brings employers to campus to share their experiences with students. The CSC also sponsors numerous events, workshops and services with joint faculty-staff and student-staff participation.

Appendix 2.11.3: Resident Life Assessment

In collaboration with the Student Advising and Learning Center, Residential Life and the Student Learning and Advising Center have developed a [Peer Academic Advisor \(PAA\)](#) [278] position to coordinate tutoring and academic skill-development workshops for freshman residents. To measure this initiative's success, the PAAs have been assigned to work with freshman residents in the Sierra Terraces complex as a focus group. Residential life uses a variety of other assessment tools to ensure that residents are being well-served.

Appendix 2.11.4 National College Health Assessment Survey

In order to improve health and wellness services for students, the Student Health and Wellness Division participated in its first National College Health Assessment Survey. Together with student program evaluations, the results [279] of this nationally accepted survey provide insight into the strengths and weakness of health programming and will be used to design health promotion initiatives that will support students' academic achievement.

Appendix 2.13.1: Financial Aid Services

Recognizing that UC Merced serves a large first-generation population, the [Office of Financial Aid](#) [110] provides many more print publications than most campuses to ensure that educational materials describing financial aid and scholarships reach prospective students and their families. Publications, including Spanish versions, have also been developed specifically for parents. To help new students transition to managing their affairs entirely online, new undergraduate Bobcats are provided with a hard-copy of their initial offer of financial assistance containing direct-cost calculations and additional information that assist them in navigating the financial aid process. From this point on, communication occurs electronically. Finally, in contrast to other institutions, Financial Aid requires only a single scholarship application, using personnel resources to match students to relevant scholarships.

Appendix 2.13.2 Registration

Registration materials and information, including important [dates](#) [297], [forms](#) [298] and descriptions of [procedures](#) [299] and answers to commonly asked [questions](#) [300] regarding cancellation/withdrawal, enrollment, transcripts fees and grades, are provided in multiple sources and formats, including in the [General Catalog](#) [19, p. 44-48 in 2008-2009], online and in person, for [new](#) [301], continuing, transfer, undergraduate, and graduate students.

Appendix 2.13.3 Advising

UCM provides prospective, new and returning undergraduates and transfers with degree-specific guidance regarding expectations for degree completion including required preparatory courses through the professional advising staff located within each School. An advisor based in the [Student Advising and Learning Center](#) [302] provides equivalent support to undeclared students and integration of advising efforts is supported by regular meetings among advising staff from all Schools and SALC. This academic support is also provided for completion of the University's [general education requirement](#) [179].

Advising at UC Merced is tailored to provide support specifically for first generation and underrepresented minority students. There are several advising mechanisms that have been developed to help these students excel. First and foremost we are the only UC campus to institute mid-term grades for lower division classes (see Appendix 2.4.2). In the School of Engineering, students are encouraged to participate in on campus professional engineering organizations and chapters to foster a sense of camaraderie and mutual support. The Dean's office offers financial support for these organizations to attend conferences, seminars and career fairs. Advisors are in constant email communication with students and provide frequent updates for summer employment, research experiences and internships. Among the many other support services [114], advisors facilitate student/faculty matching for Independent Research projects and lab experiences.

The [School of Natural Sciences Advising Office](#) [114] is responsible for providing education, course information, advocacy, impartial observation, orientations, support and referrals to all undergraduate students majoring in the sciences. NS advisors work closely with the faculty and the Student Advising and Learning Center (SALC) in the planning, development, and the implementation of a comprehensive academic advising program for freshmen and transfer students. The NS Advising Office strives to foster a sense of support and community among the science students. NS advisors also offer several specialized programs:

1. [Pre-Health Advising](#) [303] focuses on advising students interested in health-related fields across campus. The School of Natural Sciences provides the environment to support state-of-the-art science and technology to train the next generation of scientific leaders. Educating future scientists to understand both the scientific disciplines and links among them is a major goal of the School.
2. Our [EXCEL! program](#) [212] recognizes there are many different challenges students will face in adjusting to the rigors of a math and science curriculum. Its mission is to assist students in overcoming these challenges by working with faculty and the Student Advising and Learning Center to help students successfully complete lower division math and science courses.
3. [Workshops](#) [304] such as “Science Survival Tips” are designed to help students struggling with science courses with presentations on a variety of subjects including Math, Chemistry, Biology, and Physics.
4. The NS Advising Office supports science-based student organizations such as the PHPC (Pre-Health Professional Club) and AMSA (American Medical Student Association) student organizations.

The [School of Social Sciences, History and Arts \(SSHA\) Office of Advising](#) [114] strives to provide superior service that meets the academic and social needs of UC Merced students, including identification and intervention for students in academic difficulty and promotion of career exploration through co-curricular opportunities such as research and internships. The Early Alert

Program [305] allows SSHA faculty to identify students in academic distress (demonstrated by poor performance, frequent absences, and other indicators) early in the semester, thereby enabling SSHA advisors to promote student persistence and acquisition of skills necessary for college success. The Special Academic Probation program [306] is a series of intercessions designed for students on academic probation that include academic contracts, learning style assessments and personal counseling for a minimum of one semester. Through our orientation program and individual advising sessions that span a student's academic career, SSHA advisors encourage students to pursue both research and internship opportunities that not only enhance their understanding of their chosen field, but promote exploration of prospects beyond the undergraduate degree.

2.13.4 Career Counseling

In order to accommodate our diverse student population, the [Career Services Center](#) [307] houses a number of resources (online and in our career library) to address career issues faced by minority students. In addition, we have partnered with several offices on campus to provide information to students on how to “come out” in the job search, disclose a disability, and respond to issues facing women at work. Lastly, through one-on-one appointments and workshops, we speak to students about how to “break the news” to their families regarding choices of major and/or career options because for many of our students, the decision to pursue a particular path is a collective rather than individual decision. Thus, we engage them in dialogue about how to research career paths and address cultural issues/concerns that might come up when speaking with their families.

Appendix 2.13.5: Information Technology Services

To improve responsiveness to institutional needs, Informational Technology (IT) has recently conducted a year-long “[listening tour](#)” [308] to determine how its services can be improved in support of all student-users and all other university constituents. Among many outcomes of this tour, IT has modified its web-based architecture to expand email storage for individual accounts, implemented a new webmail client, established email spam filtering and has begun adding an e-portfolio system for students and faculty. In addition, they have surveyed on-campus housing residents each year to evaluate the effectiveness of their services offered and to monitor computer ownership trends that may change their service delivery. Based on the responses received, there has been a steady increase in laptop ownership for on-campus residents from 65% in 2005-06 to 96% in 2008-2009, and the numbers for residents without any computer has dropped from 5% in past years to 1% in 2008-09 [309].

Information Technology also partners with Housing & Residence Life to provide open access computing within several housing commons spaces, to accommodate residents who may not have their own computer, need access to printing services, or prefer an alternate environment for completing their studies. In addition, open access computing is provided in two of the campus’ Windows-based computer classrooms when there are no classes scheduled in them. IT works closely with the Registrar’s office to position classes such that it maximizes open access computing for the students during the day, but these rooms are also available well past normal instructional hours and on weekends. These 60 computers have all of the academic software [310] that the Schools require students to use for their assignments and are also used for instruction. This resource allows students to have access to university-owned software that in some cases would cost them hundreds of dollars to purchase. Due to the increasing number of courses utilizing the computer classrooms for instruction [311], and the equivalent reduction in open access hours, IT recently developed a computer room specifically for student open access use to increase the availability of these required resources.

The Information Technology department also offers general computing support services to students at no cost. These services are invaluable to students who have not had extensive experience using computers, or may not have owned a computer prior to coming to UC Merced. Some of the services provided by the IT Help Desk include, assisting students with issues related to email, webmail, CROPS, and the MyUCMerced portal, troubleshooting and fixing personal computer problems, and configuring student computers to access UC Merced network resources such as wireless networking, VPN, and network file storage.

Appendix 2.13.6: Library Services

In Fall 2008 the University Library initiated a collaborative study with faculty that focuses on information literacy and critical analysis of data. These are specific learning outcomes in a required first-year writing course (WRI 10) with a library-research component. A related goal of this assessment is to determine how well UC Merced students meet the Association of College & Research Libraries (ACRL) “[Information Literacy Competency Standards for Higher Education](#)” [199]. In addition, the UC Merced Library will be conducting focus-group interviews with UC Merced undergraduates and graduate students who are nearing degree completion in order to determine their use of library services, satisfaction with those services, and suggestions for ongoing improvements to support their academic success.

Allowing that over 60% of our undergraduates receive [family-income based grants or scholarships](#) [42, p.2], the Library provides approximately 200 laptops that can be checked out by UC Merced students. These loaner laptops (plus personal laptops users bring with them) work in conjunction with university-wide wireless network access to turn the entire campus into a flexible learning commons in which users can move to wherever they need to be to do their work. The popularity of the loaner laptops is evidenced by laptop circulation statistics:

Table: Laptop Circulation

	Laptops Circulated	Laptop Circulations per FTE
FY 2006–2007	35,579	27.60
FY 2007-2008	46,462	25.97

Appendix 2.13.7 Student Health and Wellness Division

Responding to the needs our uniquely diverse UC student body including a large population of first generation students, [Counseling and Psychological Services](#) (CAPS) [312] provides individual, couples, crisis intervention, consultation and outreach services as well as programs and services that deal with issues such as academic and environmental stressors, alcohol and drug related concerns. In response to student demand, CAPS has added group counseling/therapy sessions to its services.

Appendix 2.13.8 Graduate Division

In 2008, Graduate Division in partnership with Institutional Planning and Analysis conducted a Graduate Student Survey to examine graduate student use of and satisfaction with a range of campus resources. Results [224] will be distributed to resource providers in order to improve service to this clientele.

Appendix 3.2.1

In Fall 2008 the total number of full-time instructional faculty (including lecturers) was [170](#) [325], of which 109 were Senate Faculty and 61 Non-Senate Lecturers. Among the latter, at least half (57% n=35) participated directly in development of program learning outcomes, in assessment of student learning, and in curricular-revision activities conducted routinely as part of the Writing Program's Faculty Instructional Group (FIG) and Curriculum committee meetings. Part-time lecturers have been invited to participate in all of these assessment activities, on an elective basis.

The only documented participation of lecturers occurred in the Writing Program and the Foreign Languages Program. That documentation is represented in financial records of payment for Instructional Workload Credit hours to members of the Writing Program and in payment of grant funds to members of Foreign Languages; additional documentation can be provided in official agendas and minutes [331] of WP meetings that resulted in Faculty Accreditation Reports, grant-funded assessment workshop agendas [332], project results [333] and reports [334], and in grant-funded assessment activity budget summaries for Title V [335] and the Hewlett Foundation [336]. These records of lecturer participation in assessment are extensive, dating back to AY2005-2006.

For our Educational Effectiveness review, we anticipate providing detailed information about participation (or self-elected non-participation) of all UC Merced lecturers in course, program and institutional assessment activities.

Appendix 3.4.1: Information Technology Services

Information Technology provides training on the classroom technology (projectors, microphones, document cameras, etc.) available at UC Merced by participating in new instructor orientations hosted by the Schools, performing Meet and Greets at the start of each class each semester, and also providing one-on-one training to instructors upon request. IT also provides [on-call support](#) [353] throughout the semester if classroom technology issues arise that affect the delivery of instruction. Similar training and support is provided to instructors teaching in the three Windows computer classrooms.

Live, interactive videoconference technology [354] is utilized on a limited basis to allow for instructional opportunities that would otherwise not be possible here at UC Merced. Graduate students participate in lectures, seminars, and journal groups that are offered at other UC campuses. UC Merced faculty who have been unable to be onsite for every lecture, have in some cases utilized videoconferencing to deliver their weekly instruction from an off-site location. In the past, some Summer Session courses taught at UC Merced have been delivered through videoconference to our UC Centers in Fresno and Bakersfield. In cases where there are limited technical requirements, the Information Technology staff provides support for testing, connecting, and disconnecting the videoconference calls, and trains the instructors and participants on the basics of camera control and connecting their devices for display. In the case of Summer Session, where there were greater instructional requirements, Information Technology provided videoconference operators throughout the entire class period to control the content delivery for the instructor, as well as provided tips and training for effective delivery and interaction with the far-site.

Appendix 3.5.1: Audits

University of California publishes a consolidated audited financial report for all campuses and other Regental entities. Audit Reports are delivered to the Office of the President and the Regents. Once received by the Regents this information is [publicly available](#) [362] to any interested party and direct access to the audited financial report for most recent fiscal year and the prior archives are available [online](#) [362]. UC Merced financial activities are included in these reports and archives as one of the campuses.

Currently UC Merced Internal Audit functions are performed by the [University Auditor](#) at UC Office of the President [365]. Most recent schedules and audit reports for the Merced campus are included under the Office of the President Audit Activities on the [website](#) [362]. This practice is standard in the UC system and in line with other educational institutional practices.

While the University Auditor from the Office of the President provides internal audit services and conducts investigation for the campus, UC Merced established its own [Controls & Accountability](#) office [366] in 2007. The Director of Controls and Accountability, in cooperation with the University Controller and other campus leaders, conducts controls assessments, provides training and consultations, establishes guidelines for compliance and risk tolerance with financial management and practices.

Appendix 3.5.2: Fiscal Resources Aligned with Institutional Purposes

Operating Budget

The overall UC operating budget, including special allocations that have funded the planning and opening of UC Merced, can be found in the [UC Budget for Current Operations](#) [367] for 2002-2003 through 2009-2010. Campus Special Legislative Reports are available on UC Merced's web pages under "[Document Archive](#)" [368].

Capital Improvements Budget

The University of California publishes its system-wide Capital Budgets as approved by The Regents typically in fall each year. The Budgets are submitted to the Governor's Office for consideration. The [Governor's Proposed Budget](#) [369] is provided each January followed by a mid-May Revised Governor's Budget that takes California tax revenues into account. State Legislative Budget Hearings are conducted during spring. The California Legislative Analyst Office typically issues its Budget Analysis after hearings in time for the Legislature to consider the Budget Act. The Budget Act is scheduled to be passed in the summer.

A year-by-year record of operating budget growth aligned with institutional purposes can be viewed in the [UC Merced State Legislative Budget Reports](#) [368] of 2002, 2003, 2004 and 2005.

The University of California's Capital Improvement Program is documented according to [State](#) [370] and [Non-State](#) [371] projects and is detailed in system-wide reports and publications each year. Consolidated [Five-year Capital Program for State and Non-State Funds](#) [372], including UC Merced's, are available on the University of California Office of the President website.

These budgets demonstrate the planning, design and construction of facilities and infrastructure that support the campus mission including its instruction and research programs, student services, and auxiliaries such as housing, dining, recreation, childcare, and parking. [The 2008-18 UC Merced Capital Financial Plan](#) [373] describes a capital program that is essential to building the critical core of a new campus, its relationship to the academic mission and strategic priorities, and the financing strategies that will be used to implement the plan. Moreover, it is consistent with the [Physical Design Framework](#) [374] and the [Long Range Development Plan](#) [375]. This ten-year capital plan provides a framework for the campus to design and build new, energy-efficient facilities, and renew existing aged (leased) buildings and infrastructure and satisfy utility needs in an increasingly sustainable manner.

A description of the capital planning and space management policies and practices in support of the UC Merced State and Non-State Capital programs can be viewed on [Capital Planning](#) web-pages [376] with [detail capital planning information](#) [377] regarding committees and processes also available.

Appendix 3.5.3: Physical Resources Aligned with Institutional Purposes

Long Range Development Plan

In March 2009, the Regents of the University of California adopted UC Merced's [Long Range Development Plan](#) (LRDP) [375] to establish a land use framework for an 815-acre campus that will accommodate 25,000 students at full development. At its core, the LRDP establishes what types of land uses will occur on future development of the campus site. On April 30, 2009 [378], the US Army Corps of Engineering informed Chancellor Kang that the Federal permit required to move forward with long-term development of our campus and associated university community had been granted, is effective immediately, and not subject to additional review.

The UC Merced [Physical Design Framework](#) [374] provides an overview of how the LRDP, campus planning and design principles and development process will integrate with each other over the next decade. The framework

- references UC Merced's Financial Plan which delineates the campus' key academic, strategic, and building program;
- describes the planning and design criteria that guide the siting and development of capital projects;
- provides an overview of the evolving administrative processes that will enable coordinated strategic growth; and
- details the unique infrastructure challenges facing a young and growing campus including the presence of irrigation canals, the lack of existing infrastructure, and funding mechanisms that differ from those in place when sister campuses were constructed.

Appendix 3.6.1: Information Technology Resources and Services

Both print and electronic information resources align with UC Merced's educational objectives and student learning outcomes in that they are acquired with an emphasis on supporting the majors offered at UC Merced and provided at the strength necessary to support the learning and research needs of a major research university. Information acquisition in direct support of instruction is the Library's number-one priority; to date, no direct faculty request for a book related to either instruction or research has been denied by the Library, while student book requests (saving those for required course textbooks) are routinely filled.

Related support includes both instruction in information literacy (see CFR 2.3) and access to information resources. Elements of support for access to information resources include:

- The Library's highly intuitive, search-engine-like [web site](#) [382];
- The UCM Library catalog and single-sign on systems which reduce barriers to accessing information;
- The campus VPN which allows UC Merced Library users to access online information resources from any location at which they have an internet connection;
- The Library's interlibrary-loan system which allows users to electronically initiate unmediated requests for books or articles not otherwise available to UC Merced library users. The no-fee interlibrary loan service is available to all UC Merced faculty, staff, and students (undergraduates as well as graduates).

In addition to the above, it should be noted that the UC Merced Library provides generous loan periods (six months for undergraduates, one year for faculty and graduate students) and does not impose late fees or fines.

The UC Merced Library facilities were intentionally and mindfully designed to support both UC Merced's educational objectives and to create a high quality environment for learning. The many and varied spaces in the Library building are designed to support learning activities ranging from informal collaborative study to group projects to quiet individual study:

- Pervasive wireless access throughout the Library building allows students to use laptops (either their own or laptops borrowed from the Library) wherever they wish to work;
- The Library's wireless network is backed up by convenient wired network drops adjacent to every seat;
- Library tables and carrels provide a generous 48" of width by 30" of depth per seat to accommodate books, backpacks, laptops, and other student gear;
- Library group-study rooms are designed like modern office spaces with rolling chairs, whiteboards, and big-screen displays to which any laptop can be connected to enhance collaboration;
- The Library's instruction rooms are equipped with up-to-date instructional technology including smart boards, a laptop at each student's seat, and digital polling devices that allow instructors to engage students and obtain immediate feedback on student understanding. A Library endowment for instructional technology ensures that Library instruction rooms will continue to offer the newest and best instructional technology;
- Locating books, media, and other non-electronic information resources in the Library is simplified because the entire collection is organized in a single Library of Congress A-to-Z run uninterrupted by special locations (no reference area, no special collections, no media room, no reserve desk, etc.);

- The Library uses digital signage throughout the building to enhance way finding, inform Library users about information resources and services, and to promote campus events and activities;
- The Library currently provides seating for approximately 800;
- The usable square footage of the Library proper is 80,000 square feet.

As mentioned above, the Library’s information resources are chosen to directly support the majors offered at UC Merced. Although UC Merced Library is far from being a electronic-only library, the high percentage of electronic resources comprising the [Library’s collection](#) [380 or see table below] means that these resources are:

- Readily findable through a variety of online tools (UC Merced Library catalog, the UC Melvyl catalog, proprietary databases, and open-access search engines such as Google Scholar);
- Accessible from almost any location at any time of the day or night;
- Accessible by multiple simultaneous users;
- Available in formats conducive to the collaborative, online, totally digital way in which Twenty-First Century students do their work and lead their lives.

As far as the adequacy of the information resources goes, the numbers break down as follows:

Table 1: Information Resources by Format	Number
Print books	78,000
E-books (electronic full text)	540,000
Periodicals (electronic full text)	24,200
Government documents (U.S. Federal Depository)	92,000
Non-Print Media	1,250
Databases (one database can index 100K+ items)	300
Supplemental Course Resources (digital reserves)	918
Digital finding aids - special & archival collections	9,000
Digital archival resources (pages)	50,000
Digital images	1,030,000
UC Library Shared Collection (print volumes)	36,000,000

UC Library digitized print books	1,675,000
UC Library eScholarship repository (faculty papers)	25,739

Appendix 3.7.1 IT and Research

As part of its research functions, UC Merced participates in the Center for Information Technology Research in the Interests of Society ([CITRIS](#)) [391]. This multi-campus initiative promotes collaboration between faculty and administrative staff who share interests in harnessing emerging computer and information systems technologies to find efficient and effective solutions to environmental, energy, infrastructure, and health-care problems facing the nation and the world.

Appendix 3.7.2 IT and Instruction

The newest of the ten campuses of the UC System provides unique opportunities to create novel and innovative pedagogical programs from the ground up. One such effort, the Open Source/Learning Collaboratory [392], consists of economically responsible and energy efficient computer labs developed with the flexibility necessary to accommodate modern teaching needs, particularly in the Computer Science area. Designed and built by the faculty and staff of the School of Engineering, the Collaboratory represents an effort to provide an effective, relevant and flexible environment for educating the next generation of computer literate and technologically confident college graduates.

Appendix 4.2.1 Examples of Campus Planning Committees

- [Campus Physical Planning Committee](#) [432]
- [Chancellor's Advisory Committee on Environmental Sustainability](#) [433]
- Administrative Information Technology Council [434]
- Information Technology Advisory Committee [435]
- Campus Budget Committee [360]
- Planning Workgroup [427]
- Integrated Resources Planning Group [436]
- [UC Merced Academic Senate Committees:](#) [323]
 - [Committee on Academic Personnel](#) [48]
 - [Committee on Academic Planning and Resource Allocation](#) [151]
 - [Committee on Committees](#) [437]
 - [Graduate and Research Council](#) [117]
 - [Undergraduate Council](#) [116]