The 2009-2011 General Catalog contains UC Merced’s official degree and program requirements, as well as campus policies. Its contents apply to you, if you initiated your degree-seeking enrollment at UC Merced during the 2009-2011 academic years.

The purpose of this addendum is to report significant policy changes, additions or changes to majors and minors, fee increases and other important updates that may affect your education if you are a newly arrived student in 2010-11. Please review the section on “Catalog Year” in this document carefully to understand your role in adhering to the published content in your current catalog.

Please note that it is the student’s responsibility to maintain awareness of changes to programs and requirements, and to read all e-mail alerts from University offices. Students are expected to meet with their academic advisor at least once each semester, and to check for updates to the current General Catalog’s content each term at registrar.ucmerced.edu. The 2009-2011 catalog is available on the Registrar’s Office website. See http://registrar.ucmerced.edu/resources/catalog

**CATALOG YEAR**

Official degree and major requirements are listed in the 2009-2011 catalog. Undergraduate and graduate students are subject to requirements based on a particular catalog, referred to as the student’s “catalog year.” The catalog year is determined for new students as the catalog in effect at the time of their initial enrollment in courses at UC Merced, provided there is no break of more than 3 consecutive terms (e.g., 2 semesters and 1 summer) in enrollment. It is campus policy to introduce changes in graduation requirements such that students who began their careers with UC Merced before the change will not be hindered substantially in the orderly pursuit of their degrees. Changes in requirements that increase the number or distribution of courses required normally will not be applied to students with earlier catalog years, provided there is no break in enrollment exceeding 3 terms. The student’s catalog year determines both the major and general education requirements for degree completion. Students may elect to adhere to a different catalog year if they wish to follow the general education and major requirements listed in a catalog published subsequently to that which was in place at the time of their initial enrollment; the student must note this in a petition to his or her School.

Students transferring from other institutions may elect either (1) those major requirements in effect at the time of transfer to UC Merced; or (2) those in effect up to two years prior to matriculation, provided that their transcripts from earlier schools indicate commitment to the major within that period and that they have adequate preparation for upper-division coursework.

**Academic Calendars** (update: page 4)

The Fall Semester 2010 and Spring Semester 2011 calendars have been approved and are considered official.

**Undergraduate Degrees** (update: page 5)

The Anthropology and Sociology majors were officially approved by the Western Association of Schools and Colleges (WASC).

Additional minors were also approved in Chemical Sciences, Chicano/a Studies, Environmental Science and Sustainability, and Public Health.

**Fees and Expenses**

**2010-11 FEE SCHEDULE** Note: Fees shown are per semester

<table>
<thead>
<tr>
<th>Undergraduates</th>
<th>Residents</th>
<th>Nonresidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Fee</td>
<td>$4,701.00</td>
<td>$5,130.00</td>
</tr>
<tr>
<td>Student Services Fee</td>
<td>450.00</td>
<td>450.00</td>
</tr>
<tr>
<td>Health Services Fee</td>
<td>50.00</td>
<td>50.00</td>
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<tr>
<td>Transportation Fee</td>
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<tr>
<td>Student Life Fee</td>
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<tr>
<td>Associated Students Fee</td>
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<tr>
<td>Recreation Fee</td>
<td>146.00</td>
<td>146.00</td>
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<tr>
<td>Student Health Insurance*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Non-Resident Tuition</td>
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<td>11,010.00</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$5,515.18</strong></td>
<td><strong>$16,955.18</strong></td>
</tr>
</tbody>
</table>

**Graduates**

| Educational Fee | $4,701.00 | $4,905.00 |
| Student Services Fee | 450.00 | 450.00 |
| Health Services Fee | 50.00 | 50.00 |
| Transportation Fee | 87.50 | 87.50 |
| Student Life Fee | 15.00 | 15.00 |
| Associated Students Fee | 10.00 | 10.00 |
| Recreation Fee | 146.00 | 146.00 |
| Mandatory Health Insurance* | * | * |
| Non-Resident Tuition | N/A | 7,347.00 |
| **TOTAL** | **$5,459.50** | **$13,010.50** |

*As a non-academic condition of enrollment, undergraduate and graduate students must purchase the Student Health Insurance Plan (SHIP) or request a waiver of this fee. The Fall undergraduate health insurance fee provides coverage from August through December; the Spring fee provides coverage from January through August. As the Addendum goes to print, the cost of Undergraduate and Graduate Health Insurance (USHIP/GSHIP) for 2010-11 is not yet available. As soon as the costs are determined, they will be available on the Health Services website: health.ucmerced.edu. Graduate students who wish to cover spouses, domestic partners or children should contact Health Services at health@ucmerced.edu for rates.

**FEE DISCLAIMER** The amounts shown in this document represent fees as currently approved. However, all University fees are subject to change, and the fee amounts billed for this period may be adjusted at a future date. Detailed information regarding on-campus room and board charges is available at housing.ucmerced.edu. Detailed information regarding parking fees, regulations and rules is available at taps.ucmerced.edu.

**Undergraduate Admissions**

**CREDIT FOR AP/IB EXAMS** (update: page 38)

AP Language Other Than English

Chinese Language: 5.3 Units: Score of 5 on Chinese language exam exempts CHIN 004.

French Language: 5.3 Units: Score of 5 on French language exempts FREN 004.

Japanese Language and Culture: 5.3 Units: Score of 5 on Japanese language and culture exempts JPN 004.

Spanish Language: 5.3 Units: Score of 5 on Spanish language exempts SPAN 004/SPAN 011.

**Academic Policies and Procedures**

**REPETITION OF COURSES** (update: page 45)

A revision of this policy is currently under consideration by the Academic Senate. Once the change is approved, the updated policy will be available on the Registrar’s Office website http://registrar.ucmerced.edu/policies/course-repetition.

**MULTIPLE MAJOR POLICY** (addition: page 46)

A student in good academic standing who wishes to declare more than one major must petition the undergraduate School(s) responsible for
the majors and receive School Dean's (Deans') approval. A School Dean may deny the petition for the additional major(s) if it is determined by the School(s) that there is too much overlap in the proposed coursework to justify allowing the student to receive the additional major(s).

No more than 12 upper-division units (excluding units required for School and university-level general education) may be used to satisfy requirements for all majors simultaneously, whether these units are explicitly required by the majors or count as electives toward the majors.

Students must satisfy all requirements for each major, including general education requirements across Schools, if applicable. Coursework for the majors must be completed in 165 semester units or 11 semesters, whichever is greater, from the onset of college work, including AP and transfer credit.

Majors earned will be noted on the student's transcript and diploma. If the majors lead to different degrees (B.A. and B.S.), that fact will be noted on the transcript and the two-degree designations will appear on the diploma. A student who has declared multiple majors may choose to graduate with fewer majors, but if so may not continue at the University to complete any remaining major(s).

School of Engineering

**SCHOOL OF ENGINEERING REQUIREMENTS**
(addition: page 61)
Students in the School of Engineering cannot repeat a course for the third time after receiving a grade of D+, D, D-, F, U, or Not Passed for the course two times. See [https://eng.ucmerced.edu/soe/acad-prog/addendum2010](https://eng.ucmerced.edu/soe/acad-prog/addendum2010)

School of Natural Sciences

**SCHOOL OF NATURAL SCIENCES REQUIREMENTS**
(update: page 75)
All courses required for completion of a major (or minor) in Natural Sciences must be passed with a grade of C- or better, not to include general education courses taken outside of Natural Sciences and Engineering. Students must maintain a minimum cumulative 2.0 GPA in all major coursework.

**NATURAL SCIENCES EARLY PROGRESS POLICY**
(addition: page 75)
 Majors in the School of Natural Sciences are competitive and space is limited. Students must make appropriate degree progress to remain in any Natural Sciences major. Students in the Natural Sciences must meet the following requirements to continue in the School:

All students must pass the following courses with a C- or better, prior to the start of the third regular (Fall/Spring) semester. If they fail to do this, they are ineligible for continued enrollment in a Natural Sciences major and are moved to undecided status.

- Either MATH 005 or MATH 011 or MATH 021
- Either CHEM 001 or CHEM 002

Students may repeat a course only one time (for a total of two attempts to earn a C- or better).

If students do not complete these requirements, they may take these courses at another institution and petition to be readmitted to the School of Natural Sciences.

Students who have been removed from the major for academic reasons must meet the following requirements in order to petition to be re-admitted to the School of Natural Sciences:

- Cumulative University of California grade point average of at least 2.0
- Current semester grade point average of at least 2.0
- Major grade point average of 2.5
- Completion of all lower division courses with grades of C- or higher

Natural Sciences Majors

**APPLIED MATHEMATICAL SCIENCES MAJOR**
(update: page 76-81)

**PHYSICS MAJOR**
(update: page 96-100)
Update to Biophysics Emphasis Track and Mathematical Physics Emphasis Track. See [http://naturalsciences.ucmerced.edu/students/undergraduate/addendum2010](http://naturalsciences.ucmerced.edu/students/undergraduate/addendum2010)

**NATURAL SCIENCES EDUCATION MINOR**
(update: page 101)
See [http://naturalsciences.ucmerced.edu/students/undergraduate/addendum2010](http://naturalsciences.ucmerced.edu/students/undergraduate/addendum2010)

**CHEMICAL SCIENCES MINOR**
(new: page 101)
Chemistry is often known as “the central science” because of the key position it occupies in modern science and engineering. Most phenomena in the biological and earth sciences can be described in terms of the chemical and physical behavior of atoms and molecules, and chemical principles also underlie much progress in medicine and engineering. For these reasons, chemistry is a natural and useful minor for students majoring in other science and engineering disciplines. The Chemical Sciences minor allows students to pursue interests in chemistry in some depth without requiring the breadth of course work and extensive laboratory time required for the Chemical Sciences major.

**Program Learning Outcomes for the Chemical Sciences Minor**
Students are able to describe the major concepts and theoretical principles in chemistry. They can identify the central ideas underlying the principal subfields of chemistry—analytical, inorganic, organic, and physical chemistry—as well as the broader interdisciplinary subfields of biological, environmental and materials chemistry. Students are able to operate modern chemical instrumentation, perform chemical syntheses and carry out other essential chemical experiments with strict adherence to sound laboratory techniques as well as good safety and hygiene practices. They know how to use modern web-based methods to effectively search the scientific literature.

**Requirements for the Chemical Sciences (CHEM) Minor**
To receive a minor in Chemical Sciences, a student must complete the following requirements:

- Required Lower Division Chemistry Course (4 units):
  - CHEM 10: General Chemistry II [4]
- Required Upper Division Chemistry Courses (4-5 units):
  - CHEM 100: Organic Synthesis and Mechanism [3]
  - CHEM 100L: Organic Chemistry Laboratory [1] or CHEM 101L: Advanced Synthetic Laboratory [2]
- Additional Upper Division Chemistry Courses (9-12 units):
  - Any three additional upper division CHEM courses, other than research and independent study, each worth at least 3 units. Graduate level CHEM courses may be substituted with instructor approval.
  - All of these courses must be taken for a letter grade. At least four of these courses must be unique to the CHEM minor, i.e. they may not also be used to satisfy a major requirement. If more than one of the required courses for the CHEM minor is also needed to satisfy major requirements, one or more additional upper division or graduate CHEM courses (worth at least 3 units) must be completed.

**ENVIRONMENTAL SCIENCE AND SUSTAINABILITY MINOR**
(new: page 101)
Environmental science is an interdisciplinary academic field that focuses on application of concepts and methods from the physical, chemical, biological, and social sciences to the study of the natural environment, and seeks solutions to environmental problems. Sustainability science aims to improve the quality of human life within the carrying capacity of supporting ecosystems. The Environmental Science and Sustainability minor at UC Merced allows students from diverse academic backgrounds...
to pursue interests in earth and environmental sciences in some depth without requiring the breadth of course work and extensive laboratory and field time required for the Earth System Science major.

Program Learning Outcomes for the Environmental Science and Sustainability Minor
Graduates with a minor in Environmental Science and Sustainability will be able to:

- Use knowledge and techniques from three to four areas of Environmental Science and Sustainability (Earth and Atmospheric Sciences; Environmental Biology; Society and Environment; and Research, Communication, and Design Skills) to gather and report environmental data using appropriate measurement tools.
- Analyze information on environmental quality and recommend appropriate technical, political, or economic solutions to environmental problems.
- Communicate to diverse stakeholders the major concepts and principles of Environmental Science and Sustainability, such as how elements of the Earth system are interconnected, the carrying capacity of natural systems, and how governmental policy and economics can both perpetuate and solve environmental problems.

Requirements for the Environmental Science and Sustainability Minor
To receive a minor in Environmental Science and Sustainability, a student must complete the following requirements.

Below are courses that satisfy requirements for an Environmental Science and Sustainability minor. All of these courses must be taken for a letter grade. At least four of these courses must be unique to the Environmental Science and Sustainability minor, i.e. they may not be also used to satisfy a major requirement. If more than one of the required courses for the Environmental Science and Sustainability minor is also needed to satisfy a major requirement, one or more additional upper division or graduate ESS, ES, ENVE course (worth at least 3 units) must be completed.

Course work requirements*:
1. One lower division core course
2. One upper division core course
3. One upper division course each in at least three of the four areas listed below
   i. One course in the area of Earth and Atmospheric Sciences
   ii. One course in the area of Environmental Biology
   iii. One course in the area of Society and Environment
   iv. One course in the area of Research, Communication, and Design skills

*As new courses become available they will be added as options to the upper division electives. Students may be able to satisfy the requirements for the minor (a) using additional courses with approval or (b) by swapping some of the core upper division and area courses. Students must receive approval for the conditions listed above (a and b) before completion of their course work.

Required Lower Division Core Courses (4 units):
- ESS 002: Sustainability Science [3-4]
- ESS 010: Earth and Society [4]
- ENVE 020: Environmental Science and Technology [4]

Required Upper Division Core Courses (4-5 units):
- ESS 100: Environmental Chemistry [4]

Additional Upper Division Courses (9-12 units):
Choose one from each of three areas
- Earth and Atmospheric Science
  - ESS 103: Geochemistry of Earth Systems [3]
  - ESS 105: Biogeochemistry [3]
- Environmental Biology
  - ENVE 114: Subsurface Hydrology [4]
  - ENVE 176: Water and Wastewater Treatment [4]
  - ESS 134: Air Pollution and Resources [3]
- Society and Environment
  - ENVE 140: Water Resources Planning and Management [3]
  - ECON 120: Economics of the Environment and Public Policy [4]

Research, Communications, and Design Skills
- ENVE 105: Environmental Data Analysis [3]
- ANTH 170: Ethnographic Methods [4]
- ENVE 181: Field Methods in Snow Hydrology [1-3]
- ENVE 183: Field Methods in Subsurface Hydrology [1-3]

School of Social Sciences, Humanities and Arts

SSHA Majors

- **ANTHROPOLOGY MAJOR**
  (update: page 105)
The Anthropology major was officially approved by the Western Association of Schools and Colleges (WASC).

- **COGNITIVE SCIENCE MAJOR**
  Requirements for the B.A. in Cognitive Science (update: page 107)
  Update from MATH 021 to MATH 011 or equivalent. See [http://ssha.ucmerced.edu/addendum2010](http://ssha.ucmerced.edu/addendum2010)

  Requirements for the B.S. in Cognitive Science (update: page 108)
  Update from MATH 021 and MATH 022 to MATH 011 and MATH 012 or equivalent. See [http://ssha.ucmerced.edu/addendum2010](http://ssha.ucmerced.edu/addendum2010)

- **HISTORY MAJOR**
  (update: page 111-114)
  Update to program requirements and addition of History Honors Program. See [http://ssha.ucmerced.edu/addendum2010](http://ssha.ucmerced.edu/addendum2010)

- **ECONOMICS MAJOR**
  (update: page 110)
  Update from MATH 021 to MATH 011 or equivalent. See [http://ssha.ucmerced.edu/addendum2010](http://ssha.ucmerced.edu/addendum2010)

- **MANAGEMENT MAJOR**
  (update: page 117)
  Update from MATH 021 to MATH 011 or equivalent. See [http://ssha.ucmerced.edu/addendum2010](http://ssha.ucmerced.edu/addendum2010)

- **SOCIOLOGY MAJOR**
  (update: page 122)
The Sociology major was officially approved by the Western Association of Schools and Colleges (WASC).

- **PSYCHOLOGY MAJOR**
  (update: page 121)
  Update to program learning outcomes. See [http://ssha.ucmerced.edu/addendum2010](http://ssha.ucmerced.edu/addendum2010)
Public health can be defined as an approach to promote health, prevent disease, prolong life and improve quality of life through organized efforts of society. Focusing on the health and wellbeing of populations, public health complements medicine's concern for individuals with diseases. Through activities ranging from basic research, to frontline efforts such as vaccination programs, promotion of healthy lifestyles and environments, disease control, and leadership on health policy formation, public health issues and outcomes touch the lives of people throughout the world. Public health is an interdisciplinary field drawing on the natural and social sciences as well as the humanities. One of the most important themes in public health is the disparities in health observed in different groups, for example related to economic resources and race/ethnicity, which is a focus in this curriculum.

- To complete this minor, students must complete a minimum of six courses, at least four of which must be upper division.
- All courses must be taken for a letter grade.
- A minimum overall grade point average of 2.0 (C) in upper division courses is required.
- At least four of the six required courses must be taken at UC Merced.
- Only one course may be used simultaneously to satisfy requirements for two minors.
- Only one course may be used to satisfy both a minor and a major requirement.
- Students must consult the UC Merced General Catalog for prerequisites to required courses.

### Minimum Requirements

**A. PH 100**: Introduction to Epidemiology [4 units]

**B. PSY 124**: Health Disparities [4 units]

**C.** One course providing an overview of mechanisms underlying human health and disease, from the following [4 units]:
- BIO 003: To Know Ourselves: Molecular Basis of Health and Disease
- BIO 161: Human Physiology

**D.** One course addressing statistics, from the following [4 units]:
- BIOL 175: Biostatistics
- ECON 010: Statistical Inference
- MATH 018: Statistics for Scientific Data Analysis
- POLI 010: Analysis of Political Data
- PSY 010: Analysis of Psychological Data
- SOC 010: Statistics for Sociology

**E.** Two courses that address topics in health, disease, and disparities, from among the following [6-8 units]:
- ANTH 005: Introduction to Biological Anthropology
- ANTH 120: Introduction to Medical Anthropology
- ANTH 121: Ethnomedicine
- ANTH 150: Race and Human Variation
- ANTH 142: Archaeology of Colonialism
- ANTH 155: Paleodemography
- BIO 001: Contemporary Biology
- BIO 010: Genetics, Stem Cells and Development
- BIO 050: Human Development
- BIO 051: Cancer and Aging
- BIO 060: Nutrition
- BIO 125: Public Health Threats
- BIO 140: Genetics
- BIO 185: Biomedical Ethics
- COGS 130: Cognitive Neuroscience
- COGS 153: Judgment and Decision Making
- ECON 142: The Economics of Gender and Poverty
- ECON 145: Health Economics
- ES 040: Air Quality, Air Resources and Environmental Health
- HIST 119: Topics in the History of Migration and Immigration
- MGMT 153: Judgment and Decision Making
- POLI 127: Race, Gender, and Politics
- POLI 106: Urban Politics
- PSY 140: Clinical Psychology
- PSY 142: Abnormal Psychology
- PSY 143: Abnormal Child Psychology
- PSY 145: Human Sexuality
• PSY 147: Health Psychology
• PSY 146: Alcohol, Drugs, and Behavior
• PSY 150: Psychological Perspective on Culture, Racial, and Ethnic Diversity
• PSY 151: The Psychology of Stereotyping and Prejudice
• PSY 181: Clinical Neuropsychology
• SOC 030: Social Inequality
• SOC 130: Advanced Social Stratification
• SOC 131: Urban Inequality
• SOC 160: Sociology of Gender
• SOC 161: Sociology of Health
• SOC 180: Advanced Issues in Race and Ethnicity

More course options may be added to this list over time. Please check with the SSHA Advising Office for updates. Substitutions and waivers are subject to approval by the Interdisciplinary Public Health Coordinator.

Graduate Studies

New graduate programs are currently under development; please check the Graduate Division website for more information: http://graduatedivision.ucmerced.edu

Course Descriptions

Below is a list of all new or changed courses. Please see http://registrar.ucmerced.edu/go/addendum2010 for a full listing including course descriptions.


University Administrative Officers (additions/changes: page 196-297)

Mark Aldenderfer, Dean, School of Social Sciences, Humanities and Arts
David Hosley, Interim Vice Chancellor, University Relations
Ben Lastimado, Assistant Vice Chancellor, Human Resources
Mark Matsumoto, Interim Dean, School of Engineering
John O. White, Assistant Vice Chancellor, Capital Development

University Faculty (additions/changes: page 198-203)

MONICA MEDINA Associate Professor, School of Natural Sciences
KEVIN A. MITCHELL Associate Professor, School of Natural Sciences

MARK ALDENDERFER Dean, School of Social Sciences, Humanities and Arts and Professor, School of Social Sciences, Humanities and Arts
B.A., Wake Forest University; M.A., Ph.D., Pennsylvania State University
Comparative archeological anthropology that examines the emergence of social inequality and subsequent long-term cultural transformation of forager societies, and cultural adaptations within high-elevation montane regions

PAUL ALMEIDA Associate Professor, School of Social Sciences, Humanities, and Arts
B.A., University of California, Santa Cruz; M.A., University of New Mexico; Ph.D. University of California, Riverside
Social movement dynamics in historical and comparative perspective, to explain the conditions associated with the levels, forms, and outcomes of social movement activity in lesser-developed countries

HAIFENG HUANG Acting Assistant Professor, School of Social Sciences, Humanities, and Arts
B.A., Zhejiang University, China; M.P.P., University of California, Berkeley; M.A., Ph.D., Duke University
Political roles of new media and central local relations and principal agent problems of authoritarian politics

LAURAHAMILTON Acting Assistant Professor, School of Social Sciences, Humanities and Arts
B.A., DePauw University; M.A., Ph.D., Indiana University
Family and educational systems as factors that shape social stratification processes associated with gender, sexuality, and social class

MICHAEL HOYT Assistant Professor, School of Social Sciences, Humanities and Arts
B.A., State University of New York at Geneseo – Tufts University School of Medicine; M.A., Ph.D., Arizona State University
Health psychology from a biobehavioral perspective, focusing on interactions between psychological, social, and biological influence on adjustment and quality of life in terminal patients

ERIN JOHNSON Assistant Professor, School of Natural Sciences
B.Sc., Carleton University, Ottawa, Canada; Ph.D., Queen's University, Kingston, Canada
Development and application of density-function theory

YUELEI Lecturer, PSOE, School of Natural Sciences
B.S., Peking University, Beijing, China; M.S. California Institute of Technology; Ph.D., Massachusetts Institute of Technology
Low-dimensional topology and geometry, geometric analysis, index theory, eta invariant and its applications

HOLLEY MOYES Assistant Professor, School of Social Sciences, Humanities and Arts
B.A., Florida State University; M.A. Florida Atlantic University; Ph.D., State University of New York at Buffalo
Archaeological anthropology addressing the place of ideology and ritual in the ascendance and decline of elite power and authority