TO BE ADOPTED:

The Riverside Division of the Academic Senate approves disestablishment of the M.A., M.S. and Ph.D. programs in Geography.

JUSTIFICATION

The Department of Geography was instituted soon after UCR became a general campus in 1954. The philosophy in the department was to produce a broad based education about the world (regional geography) as well as a synthetic understanding of modern earth surface processes (climate, geomorphology, vegetation), and man's impact on the earth. The department sought to teach a remarkable diversity of courses with a limited faculty. In 1971, the Geography Department was shifted to a program status and merged with the Department of Geology and together they became the Department of Earth Sciences. In this new forum, the Geography Program continued its broad approach and indeed there was limited synthesis between it and the Geological Sciences program. Because of having an apparently low profile in society, the number of undergraduate majors in Geography was always low. The Graduate program, however, was very successful in graduating students toward excellent careers.

By the late 1980s, the number of Geography Program faculty declined as the result of retirements, and ultimately a moratorium in admissions was instituted. This was resolved when the administration supported a new academic structure in Geography in which it was proposed that the discipline focus on three subfields: geomorphology, biogeography and urban geography, rather than the catholic approach taken in previous decades. At this time, geography also adopted the graduate program structure of Geological Sciences. However, the ability to teach the more focused geography curriculum was undermined when the newly hired faculty in geomorphology and urban geography simultaneously left UCR in the early 1990s. We have since hired a new geomorphologist whose educational roots tie more strongly to geology than geography.

The proposed discontinuance of the Geography Program will not result in a curricular loss to the campus. This move represents a simplifying reorganization within the Department of Earth Sciences reflecting the realities of faculty and curricular diversity. Geomorphology will still be taught within the new undergraduate course structure that centers on the Geology Core Curriculum. Undergraduate training in biogeography is supported by current Earth Sciences faculty, utilizing the Life Sciences Core Curriculum, as well as being integrated with curriculum in paleontology under the umbrella of “geobiology.” The new course structure in biogeography and geomorphology makes better use of faculty resources on campus and builds an appropriate “vertical” curriculum structure necessary for student training to compete in the job market.

The disestablishment of these programs has the approval of the Dean of the College of Natural and Agricultural Sciences

Werner G. Kuhr, Chair
Graduate Council

Enclosures: Memo from Earth Sciences
February 9, 2000

To: Werner Kuhr  
   Chair, Graduate Council

From: Mary Droser, Graduate Advisor  
   Earth Sciences

   Michael O. Woodburne, Chair  
   Earth Sciences

Re: Proposed discontinuance of the graduate program in Geography

At its faculty meeting of February 9, the Earth Sciences faculty voted unanimously (8 in favor, 0 no, 3 on leave) to recommend discontinuance of the graduate program in Geography. This is in line with the Undergraduate major in Geography having been proposed for deletion by memo of January 18, 2000 to the Executive Committee of CNAS. As explained below both of these actions are taken in the context of a long term diminution of Geography faculty to a single individual (Prof. R.A. Minnich), integration of the equally diminished curriculum in Geography with the Geology core undergraduate program, and focusing the graduate course offering in the area of biogeography as part of the constellation of courses in the general area of evolutionary paleobiology of the Geology Graduate program.

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Present

MAJORS

The Department of Earth Sciences offers Bachelor …  
(No graduate level changes)

The Department of Earth Sciences offers the M.A. and 
M.S. in Geography, the M.S. in Geological Sciences, the 
Ph.D. in Geography, and the Ph.D. in Geological 
Sciences

Program Degrees Available
Geography M.A. M.S. Ph.D.
- Biogeography Option B.A. B.S.
- Geomorphology Option B.A. B.S.
Geology
- General Geology Option B.A. B.S.
- Paleontology Option B.A. B.S.
Geophysics B.S.
Geological Sciences M.S. Ph.D

GRADUATE PROGRAMS IN GEOLOGICAL SCIENCES AND IN GEOGRAPHY

The Department of Earth Sciences offers degrees in Geological Sciences and in Geography. Graduate 
education in the Geological Sciences emphasizes general geology combined with specialization in fields such as 
applied geophysics, geotectonics, crustal processes, 
geochemistry, petrology, geothermal resource 
investigations, groundwater, mineral deposits, 
stratigraphy, sedimentology, basin analysis, carbonate 
diagenesis, evolutionary paleobiology, invertebrate 
paleontology, Quaternary geology, and neotectonics. 
Graduate Education in Geography emphasizes 
geomorphology, neotectonics, landscape ecology, fire 
ecology, natural resource conservation, locational 
analysis, transportation modelling, quantitative 
geographic methods, including GIS. In both degrees, 
integrated field and laboratory studies are encouraged. 
An undergraduate degree in geology, geophysics, 
geochemistry, or geography is the normal preparation 
for graduate work; however, a degree from a related field of science or engineering is often appropriate. 
Applicants to graduate status must supply Graduate 
Record Examination scores for the General Test (verbal, quantitative, analytical) prior to their admission.

MASTER’S DEGREE

M.S. degrees are offered in Geological Sciences (with 
emphasis in Geology or in Geophysics) and in 
Geography. The normative time to a master’s degree is

Proposed

MAJORS

The Department of Earth Sciences offers Bachelor …  
(No graduate level changes)

The Department of Earth Sciences offers the M.S. and 
the Ph.D. in Geological Sciences

GRADUATE PROGRAM

Graduate education in the Geological Sciences 
emphasizes general geology combined with 
specialization in fields such as evolutionary paleobiology, invertebrate and vertebrate paleontology, 
Quaternary geology, neotectonics, applied geophysics, 
geotectonics, crustal processes, geochemistry, 
geothermal resource investigations, groundwater, 
mineral deposits, stratigraphy, sedimentology, 
sedimentary geochemistry, basin analysis, landscape ecology, fire ecology, natural resource conservation, and 
GIS. Integrated field and laboratory studies are 
encouraged. An undergraduate degree in geology or 
geophysics is the normal preparation for graduate work; 
however, a degree from a related field of science or 
engineering is often appropriate. Applicants to graduate 
status must supply Graduate Record Examination scores 
for the General Test (verbal, quantitative, analytical) 
prior to their admission.

MASTER’S DEGREE

The normative time to a master’s degree is seven 
quaters. In addition to the general requirements listed 
under the Graduate Studies section of this catalog, the
seven quarters. In addition to the general requirements listed under the Graduate Studies section of this catalog, the requirements for the M.S. are as follows:

1. A student is required to make up any deficiency in preparation. The background required is course preparation equivalent to the bachelor’s degree in Geology, Geophysics, or Geography at UCR. Courses taken to remedy background deficiencies are not applicable to the graduate degree. Such courses will be designated in the letter of admissions to the program sent to the student by the Dean of the Graduate Division.

2. Biannual reviews by the departmental Graduate Progress Committee are required for all students. A student’s progress is assessed in these reviews, and the Committee may recommend changes in a student’s plans after these reviews.

3. All students must enroll each quarter in the Graduate Seminar in Geosciences (GEO 250). Students are also required to attend the weekly Hewett Club lecture series.

4. In both Geological Sciences and in Geography, a minimum of 36 units of course work in the major and related subjects and advance approval of a coherent plan of study by the graduate advisor are required.

A maximum of 12 upper-division units beyond the requirements for the bachelor’s degree may be applied to the 36-unit requirement. A minimum of 12 units of graduate courses, which must include at least four graduate-level instructional courses taught by four different faculty members as approved by the graduate advisor, are required. Before the end of the third quarter of study and before embarking on research, a student must submit a written thesis proposal to the departmental Graduate Progress Committee. After approval of the proposal, a thesis based on original work must be submitted to and approved by a thesis committee. A maximum of 12 units of thesis research may be counted toward the 36-unit minimum.

5. A final oral examination will consist of an open research seminar, presented by the candidate and advertised to all the students and faculty in the Earth Sciences Department.

Subject to the approval of the graduate advisor, a limited number of upper-division courses in the major and related sciences, if not required for the bachelor’s degree and not taken previously, may be accepted for graduate credit.
In addition to the general University requirements of the Graduate Division as found in the Graduate Studies section of this catalog, the Ph.D. in Geological Sciences and in Geography normally requires

1. Biannual Reviews. All students meet with the Graduate Progress Committee during their first week at UCR to discuss general interests, goals, and plans. The committee will recommend courses designed to prepare a student for research and to correct deficiencies in background. This committee will also review a student’s progress biannually and may recommend transfer to the master’s program if normal progress is not maintained.

2. All students must enroll each quarter in the Graduate Seminar in Geosciences (GEO 250). Students are also required to attend the weekly Hewett Club lecture series.

3. Course Work. At least four graduate-level instructional courses taught by four different faculty members as approved by the Graduate Advisor are required. Course work used in satisfaction of the M.S. degree may be accepted with the Graduate Advisor’s approval.

4. Language. Depending upon the student’s proposed area of specialization, the student must demonstrate reading knowledge of a foreign language or facility with a computer programming language. In consultation with the student, during the first year of graduate studies, the Graduate Advisor and potential dissertation advisors will determine the language that will be required.

5. Research Proposal. A research proposal must be written by the student while satisfying course work and language requirements. The proposal will be examined by the faculty and, if acceptable, the Department will recommend appointment of the Oral Examination Committee once all other requirements are completed.

6. Oral Examination. An Oral Examination Committee appointed by the Dean of the Graduate Division will examine the adequacy of the student’s preparation to conduct the proposed research. Advancement to candidacy in the Ph.D. program follows successful completion of the oral examination.

7. Dissertation. A dissertation normally evolves from

DOCTORAL DEGREE

In addition to the general University requirements of the Graduate Division as found in the Graduate Studies section of this catalog, the Ph.D. in Geological Sciences and in Geography normally requires

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7. Dissertation. A dissertation normally evolves from
the research proposal. The dissertation must present original scholarly work and be approved by a dissertation committee before the student may take the final oral examination.

8. Final Oral Examination. Satisfactory performance on a final oral examination given by the dissertation committee is required. Major emphasis in this examination will be placed on the dissertation and related topics.

Normative time to the Ph.D. degree from the B.S. degree is 17 quarters.