EXECUTIVE COMMITTEE COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES REPORT TO THE RIVERSIDE DIVISION MAY 24, 2022

To be adopted:

Proposed Change to Department of Earth and Planetary Sciences Majors

PRESENT:

PROPOSED:

Majors

Majors

The Department of Earth and Planetary Sciences offers B.S. degrees in Earth Sciences, Geology and Geophysics. These degree programs are designed for students with a strong interest in acquiring academic understanding and relevant vocational training in the Earth and Planetary Sciences, and for students interested in secondary teaching with a science emphasis. The B.S. programs include fieldwork with field courses, and field trips in all appropriate courses.

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The Department of Earth and Planetary Sciences offers B.S. degrees in Earth and Planetary

Teaching Credential

Teachers in the public schools in California must have a credential approved by the State Commission on Teacher Credentialing. The credential requires an undergraduate major, baccalaureate degree, and completion of a graduate credential program such as that offered by the School of Education at UCR.

Teaching Credential

No Change

Before admission and student teaching in a graduate credential program, the candidate must pass the California Basic Education Skills Test (CBEST) and demonstrate subject-matter proficiency by passing an examination. All candidates for a multiple subject credential to teach in the elementary grades must pass the Multiple Subjects, California Subject Exam for Teachers (CSET). Students are urged to start early, preferably as freshmen, selecting courses most helpful for this career. Details and counseling on the Prepare to Teach Program, a program for the multiple subject credential, are available in the Office of Interdisciplinary Programs, 2417 Humanities and Social Sciences,

No Change

(951) 827-2743. Details and counseling on other programs are available in the Department of Earth and Planetary Sciences or the School of Education.

UCR does not yet have a state-approved subject matter undergraduate program for earth science majors who wish to teach at the secondary level. The Teaching Credential in Science, geoscience authorization, is required for teachers who want to teach earth science/ geoscience in middle school and high school. Students who plan to get this credential must take the CSET exams in Geosciences and should make certain their academic program includes preparatory course work. The examination includes geoscience in depth and general science with introductory, college-level biology, chemistry, physics, and geoscience (geology, meteorology, oceanography, astronomy). CSET test guides are available at cset.nesinc.com.

UCR does not yet have a state-approved subject matter undergraduate program for earth and planetary sciences majors who wish to teach at the secondary level. The Teaching Credential in Science, geoscience authorization, is required for teachers who want to teach earth science/ geoscience in middle school and high school. Students who plan to get this credential must take the CSET exams in Geosciences and should make certain their academic program includes preparatory course work. The examination includes geoscience in depth and general science with introductory, college-level biology, chemistry, physics, and geoscience (geology, meteorology, oceanography, astronomy). CSET test guides are available at cset.nesinc.com.

Further information about courses, requirements, and examinations can be obtained in orientation meetings, the CalTeach-SMI Office (1104 Pierce Hall) and the School of Education (1124 Sproul Hall).

No Change

Earth and Planetary Sciences students interested in a secondary school science teaching career, who intend to obtain a Teaching Credential in Science, geoscience authorization, should pursue both the B.S. in Earth Sciences or in Geology as well as the teaching credential from the School of Education. Students who want to have the option to become either a professional geoscientist or to teach earth science in secondary school should pursue the B.S. in Geology as well as the teaching credential from the School of Education.

Earth and Planetary Sciences students interested in a secondary school science teaching career, who intend to obtain a Teaching Credential in Science, geoscience authorization, should pursue both the B.S. in Earth and Planetary Sciences or in Geology as well as the teaching credential from the School of Education. Students who want to have the option to become either a professional geoscientist or to teach earth science in secondary school should pursue the B.S. in Geology as well as the teaching credential from the School of Education.

Students in CNAS who intend to pursue a Teaching Credential in Science, with authorization in another science, should consider pursuing a minor within Earth and Planetary Sciences.

No Change

Earth Sciences Major

Students who choose Earth Sciences Major study the past, present, and future of our Earth through the interdisciplinary study of its various systems. Earth Sciences majors choose between concentrations in Geosystems, Climate Change, Geophysics, and Geobiology, which are explored from a combination of lab-based, field-based, and computational perspectives.

Earth and Planetary Sciences Major

Students who choose <u>Earth and Planetary</u>
<u>Sciences</u> Major study the past, present, and future of our Earth through the interdisciplinary study of its various systems. <u>Earth and Planetary Sciences</u> majors choose between concentrations in Geosystems, Climate Change, <u>Geobiology</u>, <u>Geophysics</u>, and <u>Planetary Sciences</u>, which are explored from a combination of lab-based, field-based, and computational perspectives.

Justification:

The Department of Earth and Planetary Sciences has implemented numerous changes in recent years to better reflect the broadened scope of research occurring within the department, including the name change for both the department, and for the graduate program. We are continuing this process by adjusting our undergraduate majors programs to better reflect our broader inclusion of planetary sciences in research and instruction, and also to include newly introduced planetary sciences classes that support the changes to the majors.

Approvals:

Approved by the faculty of the Department of Earth and Planetary Sciences: October 20, 2021

Approved by the Executive Committee of the College of Natural and

Agricultural Sciences: March 1, 2022
Approved by the Committee on Educational Policy: March 30, 2022