

**EXECUTIVE COMMITTEE
COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES
REPORT TO RIVERSIDE DIVISION
MAY 26, 2020**

To be adopted:

Proposed changes to the Geophysics major (B.S.).

Geophysics Major

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The following are major requirements for the B.S. in Geophysics. All students majoring in Geophysics are normally required to take this core curriculum.

No Change

1. Lower-division requirements (52-66 units)

1. No Change

a) GEO 001 and one of GEO 004 or GEO 008

a) No Change

b) MATH 007A or MATH 009A or MATH 009HA, MATH 007B or MATH 009B or MATH 009HB, MATH009C, MATH 010A, MATH 031, MATH 046

b) No Change

c) PHYS 040A, PHYS 040B, PHYS 040C (strongly recommended), or PHYS 002A, PHYS 02LA, PHYS 002B, PHYS 02LB, PHYS 002C, PHYS 02LC

c) No Change

d) ~~CS 010 or CS 030~~

d) CS 009M or CS 009P or CS 010A

CHEM 001A, CHEM 001LA, CHEM 001B, CHEM 001LB, MATH 010B are recommended as prerequisites for upper division electives in geology and geophysics, and for students looking to earn a teaching credential for high school science.

No Change

2. Upper-division requirements (46-~~54~~ units)

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a) GEO 111, GEO 115, GEO 116, GEO 140, GEO 145

a) No Change

b) One of GEO 144 or GEO 147

b) No Change

c) Five of GEO 100, ~~GEO 101~~, GEO 118, GEO 122, GEO 132, GEO 144 ~~OR~~ GEO 147, GEO 157, PHYS 130A, PHYS 130B, PHYS 132 ~~OR~~ PHYS 134, PHYS 135A, PHYS 135B, PHYS 136, PHYS 139L, PHYS 177, MATH 120, MATH 131, MATH 132, MATH 135A, MATH

c) Five of GEO 100, GEO 101A, GEO 101B, GEO 118, GEO 122, GEO 132, GEO 144 or GEO 147, GEO 157, PHYS 130A, PHYS 130B, PHYS 132 or PHYS 134, PHYS 135A, PHYS 135B, PHYS 136, PHYS 139L, PHYS 177, MATH 120, MATH 131, MATH 132, MATH 135A, MATH

135B, MATH 146A, MATH 146B, MATH 146C, MATH 147, MATH 149A ~~OR~~ STAT 160A, MATH 149B or STAT 160B, or STAT 160C, MATH 168, STAT 100A or STAT 155, STAT 100B

135B, MATH 146A, MATH 146B, MATH 146C, MATH 147, MATH 149A or STAT 160A, MATH 149B or STAT 160B, or STAT 160C, MATH 168, GEO 180, GEO 181, STAT 100A or STAT 155, STAT 100B

Students wishing to continue on to graduate school may wish to earn a Minor in Mathematics, Physics, Statistics, or Computer Science, requiring an additional 24 upper division units of study, and/or completion of a Senior Thesis, which includes up to 9 units of independent research.

No Change

Justification:

Replacement of GEO 101 (Field Geology) by GEO 101A and GEO 101B: The Department decided last year to split and augment our previous field geology class into a two-course sequence. We are now updating the curriculum to reflect that change, and the one additional unit that came with it.

Replacement of CS 030 with CS 009M or CS 009P: CS 030 (Introduction to Computational Science) is no longer offered. CS 009M (Introduction to Matlab) or CS 009P (Introduction to Python) are appropriate replacements as introductory computing classes. CS 010 has been renumbered to CS 010A.

Corrected the unit count for the upper division.

Addition of GEO 180 (Exoplanet Detection) and GEO 181 (Exoplanet Characterization) as electives: These are new courses that will be of interest and relevance to students interested in Geophysics.

Approvals:

Approved by the faculty of the Department of Earth and Planetary Sciences:	October 30, 2019
Approved by the Executive Committee of the College of Natural and Agricultural Sciences:	January 14, 2020
Approved by the Committee on Educational Policy:	April 15, 2020