

# Geosciences (B.S.)

Fall 2021

## Required Lower Division Geosciences Courses (12 units)

- \_\_\_\_ SIO 50: Intro to Physical Geology (6)
- \_\_\_\_ SIO 65: Geosciences Seminar (2)
- \_\_\_\_ SIO 75: Geological History of the Earth (4)

## Required Lower Division Preparatory Courses (36 units)

- \_\_\_\_ Math 20A \_\_\_\_ Math 20B \_\_\_\_ Math 20C
- \_\_\_\_ Chem 6A \_\_\_\_ Chem 6B \_\_\_\_ Chem 6C
- \_\_\_\_ Phys 2A \_\_\_\_ Phys 2B \_\_\_\_ Phys 2C

## Required Upper Division Geosciences Courses (20 units)

- \_\_\_\_ SIO 100: Geological Field Methods \_\_\_\_ SIO 102: Intro to Geochemistry \_\_\_\_ SIO 103: Intro to Geophysics
- \_\_\_\_ SIO 113: Computational & Data Analysis in Geosciences \_\_\_\_ SIO 120: Mineralogy

## Upper Division Electives: Areas of Concentration (7 courses, minimum 28 units)

Students may choose from the following Areas of Concentration. Students are encouraged to take most, if not all, of their elective courses within their chosen concentration (4 minimum required)



### Geology

- \_\_\_\_ SIO 104: Paleobiology (6 units)
- \_\_\_\_ SIO 105: Sedimentology and Stratigraphy
- \_\_\_\_ SIO 106: Hydrogeology
- \_\_\_\_ SIO 110: Intro to GIS and GPS
- \_\_\_\_ SIO 144: Intro to Isotope Geochemistry
- \_\_\_\_ SIO 152: Petrology and Petrography
- \_\_\_\_ SIO 153: Geomorphology
- \_\_\_\_ SIO 155: Whole Earth Geochemistry
- \_\_\_\_ SIO 160: Global Tectonics
- \_\_\_\_ SIO 162: Structural Geology
- \_\_\_\_ SIO 170: Volcanology
- \_\_\_\_ SIO 199: Independent Research



### Geological Oceanography

- \_\_\_\_ SIO 101: California Coastal Oceanography
- \_\_\_\_ SIO 111: Introduction to Waves and Tides
- \_\_\_\_ \*SIO 117: Physical Basis of Global Warming
- \_\_\_\_ SIO 119: Physics and Chem of the Oceans
- \_\_\_\_ SIO 135: Satellite Remote Sensing
- \_\_\_\_ SIO 138: The Coral Reef Environment
- \_\_\_\_ SIO 141: Chem. Principles of Marine Systems
- \_\_\_\_ SIO 143: Ocean Acidification
- \_\_\_\_ SIO 144: Intro to Isotope Geochemistry
- \_\_\_\_ SIO 160: Global Tectonics
- \_\_\_\_ SIO 171: Intro to Physical Oceanography
- \_\_\_\_ SIO 199: Independent Research



### Environmental Geology

- \_\_\_\_ SIO 106: Hydrogeology
- \_\_\_\_ SIO 107: Water Pollution
- \_\_\_\_ SIO 108: Paleoclimatology
- \_\_\_\_ SIO 110: Intro to GIS and GPS
- \_\_\_\_ SIO 115: Ice and the Climate System
- \_\_\_\_ SIO 135: Satellite Remote Sensing
- \_\_\_\_ SIO 144: Intro to Isotope Geochemistry
- \_\_\_\_ SIO 153: Geomorphology
- \_\_\_\_ SIO 162: Structural Geology
- \_\_\_\_ SIO 166: Environmental Archaeology
- \_\_\_\_ \*SIO 182: Envir. and Exploration Geophysics
- \_\_\_\_ SIO 199: Independent Research



### Geophysics

- \_\_\_\_ SIO 110: Intro to GIS and GPS
- \_\_\_\_ SIO 115: Ice and the Climate System
- \_\_\_\_ SIO 135: Satellite Remote Sensing
- \_\_\_\_ SIO 152: Petrology and Petrography
- \_\_\_\_ SIO 155: Whole Earth Geochemistry
- \_\_\_\_ SIO 160: Global Tectonics
- \_\_\_\_ SIO 161: Seismology
- \_\_\_\_ SIO 162: Structural Geology
- \_\_\_\_ SIO 170: Volcanology
- \_\_\_\_ \*SIO 182: Envir. and Exploration Geophysics
- \_\_\_\_ SIO 199: Independent Research

\*NOTE: Courses with an asterisk may have additional Math or Physics prerequisites. Please check the Catalog for details