**Geosciences (B.S.)**

**Fall 2021**

**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 179: Ocean Instruments and Sensors

\_\_\_\_\_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 112: Computational Tools and Data

Science in Geophysics

\_\_\_\_\_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

**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)

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