

2014-2015

**ENVIRONMENTAL SYSTEMS / EARTH SCIENCES
DEGREE CHECK LIST**

LOWER-DIVISION CORE REQUIREMENTS

Biology BILD 3 _____
Math 20A _____ 20B _____ 20C _____ (Math 20D _____ recommended)
Chemistry 6A _____ 6B _____ 6C _____ 7L _____
Physics 2A _____ 2B _____ 2C _____
Economics 1 _____
SIO 50 _____

UPPER-DIVISION REQUIREMENTS

Environmental Systems 101 _____ Environmental Biology
Environmental Systems 102 _____ The Solid and Fluid Earth
Environmental Systems 103 _____ Environmental Challenges: Science and Solutions
Economics 131 _____ Economics of the Environment (Econ 2 prerequisite waived)
Political Science 160AA _____ Introduction to Policy Analysis (PoliSci 10 or 11 prerequisite waived)

Math 183 _____ Statistical Methods (prereq is Math 20C)
SIO 102 _____ Introduction to Geochemistry

Upper-division Earth Sciences Restricted Electives: Students must complete a minimum of four courses selected from the following list:

SIO 100 _____ Introduction to Field Methods	SIO 135 _____ Satellite and Remote Sensing
SIO 103 _____ Introduction to Geophysics	SIO 144 _____ Introduction to Isotope Geochemistry
SIO 104 _____ Paleobiology and History of Life	SIO 150 _____ Whole Earth Geochemistry
SIO 105 _____ Sedimentology and Stratigraphy	SIO 152 _____ Petrology and Petrography
SIO 106 _____ Introduction to Hydrogeology	SIO 160 _____ Introduction to Tectonics
SIO 110 _____ Introduction to GIS and GPS for Scientists	SIO 162 _____ Structural Geology
SIO 120 _____ Introduction to Mineralogy	SIO 199 _____ Independent Study

Upper-division Electives: Students must complete a minimum of three courses selected from the following list: Students may use any additional course(s) from the Earth Science Restricted Electives list (above) as an upper division elective.

SIO 101 _____ California Coastal Oceanography	SIO 172 _____ Physics of the Atmosphere
SIO 111 _____ Introduction to Ocean Waves	SIO 180 _____ Communicating Science to Informal Audiences
SIO 115 _____ Ice and the Climate System	SIO 182 _____ Environmental and Exploration Geophysics
SIO 117 _____ The Physical Basis of Global Warming	ESYS 120 _____ Science and Environmental Writing
SIO 119 _____ Physics and Chemistry of the Ocean	Chemistry 171 _____ Environmental Chemistry
SIO 138 _____ Coral Reef Environments	Chemistry 173 _____ Atmospheric Chemistry
SIO 141 _____ Chemical Principles of Marine Systems	
SIO 143 _____ Ocean Acidification	
SIO 170 _____ Introduction to Volcanology	

Other courses may be substituted by petition

ENVIRONMENTAL SYSTEMS SENIOR INTERNSHIP AND PROJECT (required of all majors)

ESYS 190A _____ Integrative Project (8 units)
ESYS 190B _____ Senior Seminar (4 units)