



# Geography, B.S. *major*

## Earth Science Emphasis

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Required Credits: 48  
 Required GPA: 2.25

### I REQUIRED CORE COURSES

Complete the following courses:

- BUAD 2231 Business Statistics I (3 credits)  
*or* PSY 3401 Basic Statistics for Research (4 credits)  
*or* STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)  
*or* ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3410 Geography of North America (3 credits)  
*or* GEOG 3800 Regional Geography (1-3 credits)  
*or* GEOG 3810 Geography of Europe (3 credits)  
*or* GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)  
*or* GEOG 3840 Geography of Africa (3 credits)  
*or* GEOG 3850 Geography of the Middle East (3 credits)  
*or* GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- *or* GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

### II EARTH SCIENCE EMPHASIS

#### REQUIRED EMPHASIS CORE

Complete the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4910 Directed Independent Study (3 credits)  
*or* GEOG 4970 Internship (3 credits)  
*or* GEOG 4990 Thesis (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)

#### EARTH SCIENCE ELECTIVES

Select 3 courses from the following, or related upper division courses as approved in advance by advisor:

- BIOL 3120 Soils (4 credits)  
*or* GEOL 3120 Soils (4 credits)
- BIOL 3361 Limnology (4 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3840 Wetlands Ecology (3 credits)
- BIOL 4623 Forest Ecology (4 credits)
- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3630 Conservation Biology (3 credits)  
*or* BIOL 3630 Conservation Biology (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)

- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)

### III SPATIAL METHODS ELECTIVES

Select 1 of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- STAT 3610 Time Series Analysis (3 credits)