

# Geology and Earth Sciences

## Introduction


Geology, the study of the earth, is a firsthand experience at Guilford College. Students are involved in hands-on field experiences in new problems, in laboratory work where answers are not known beforehand, and in undergraduate research, which is presented to regional professional societies or to national conferences on undergraduate research. The program is centered on a core of courses that establish a firm academic foundation in geology as a science. In turn, this foundation serves as a springboard to graduate study, professional geology, teaching, art, environmental science, creative writing, law, resource management, and geography. The department offers an A.B. and B.S. in Geology and Earth Sciences and an A.B. in Earth Studies.


[Guilford Catalog Information](#)

## Related Career Titles for Geology and Earth Sciences Majors

Aerial Photographer	Paleoclimatologist
Agricultural Engineer	Paleontologist
Architect	Park Naturalist
Astronomer	Park Ranger
Cartographer	Parks and National Resource Manager
Computer Analyst	Peace Corps Worker
Consultant	Petroleum Engineer
Cooperative Extension Agent	Petroleum Geologist
Economic Geologist	Petrologist
Environmental Consultant	Planetary Geologist
Environmental Geologist	Pollution Control Specialist
Environmental Lawyer	Pollution Remediator
Environmental Scientist	Prospector
Forest Ranger	Sales Engineer
General Manager—Petroleum/Mining	Scientific Photographer
Geochemist	Sedimentologist
Geodynamist	Seismologist
Geologist	Soil Scientist
Geomorphologist	Stratigrapher
Geophysicist	Structural Geologist
Geophysics Technician	Surveyor
Geo-Technical Engineer	Technical Writer/Communicator
Glacial Geologist	Urban/Regional Planner
Hydrologist	US Foreign Services Worker
Industrial Hygienist	Volcanologist
Instrumental Technician	Waste Management Specialist
Laboratory Technician	Water Quality Control Technician
Landscape/Nursery Manager	Water Remote Sensing Interpreter
Marine Advisor	Well Logging Specialist
Materials Analyst	Staff Geologist
Mathematician	Geological Oceanographer
Medical Doctor	Geodesist
Meteorologist	Forensic Geologist
Mineralogist	Laboratory Manager
Mining Engineer	Land Use Planner
National Park Services Technician	Photographer
Oceanographer	Research Assistant
Paleoceanographer	

## Related Major Skills

 Conduct and explain research

 Acute spatial and form perception

- Ability to work with diverse people
- Physical stamina and manual dexterity
- Knowledge of geological principles
- Enjoy exploration and outdoor work
- Analyzing relationships between factors
- Data collection and comparison
- Developing research ideas and projects

- Establish hypotheses
- View relationships between factors
- Draw meaningful conclusions
- Mathematical modeling
- Identify materials/specimens
- Prepare technical reports
- Inform, explain, instruct

## Related Web Sites

### Job Listings/Job Search

Geoscience Jobs <http://www.geosciencejobs.com/>  
 Mining Job Listings <http://www.infomine.com/careers/positions>  
 Oil and Gas-related Job Listings <http://www.crudejobs.com/>  
 Wetland-related Job Listings <http://www.sws.org/jobs/>  
 Jobs in Groundwater [http://www.groundwater.com/jobs\\_groundwater.html](http://www.groundwater.com/jobs_groundwater.html)  
 The GIS Jobs Clearinghouse <http://www.gjc.org/>  
 National Park Service Employment Information <http://www.nps.gov/personnel/>  
 Geological Engineering and Sciences Career Search Page <http://www.geo.mtu.edu/geojobs/>  
 Jobs for Geologists Links <http://geologylinks.freeyellow.com/jobs.html>  
 Society for Exploration Geophysicists Job Listings <http://www.seg.org/services/employment/job-list/>  
 GeoSearch, Inc.—GIS Recruiting Services <http://www.geosearch.com/>  
 EarthWorks Job Listings <http://www.earthworks-jobs.com/>  
 Syracuse University's Employment Resources in the Earth, Atmospheric, and Oceanic Sciences <http://libwww.syr.edu/research/internet/earth/jobs.html>  
 Links to Careers in Geology <http://www.wmich.edu/geology/careers.htm>

### Career Planning and Information

Geomania <http://jersey.uoregon.edu/~mstrick>  
 Occupation Outlook Handbook—Environmental Scientists and Geoscientists Information <http://stats.bls.gov/oco/ocos050.htm>  
 Princeton University's Outdoor Action Guide to Outdoor and Environmental Careers <http://www.princeton.edu/~oa/jobs/careeroe.html>  
 Saddleback College's Geology Careers <http://server.saddleback.cc.ca.us/faculty/jrepka/career.html>  
 Ohio University's Careers in Geology <http://jupiter.phy.ohiou.edu/Departments/Geology/ugrad/careers.html>  
 University of Waterloo's (Canada) Careers in Geoscience <http://www.science.uwaterloo.ca/earth/geoscience/careers.html>  
 DePauw University's Career Information for Geology Majors <http://www.depauw.edu/admin/career/geology.asp>  
 Oklahoma State University's Career Areas in Geology [http://www.cas.okstate.edu/career/what\\_to\\_do/geology.html](http://www.cas.okstate.edu/career/what_to_do/geology.html)  
 The Geological Society's (UK) Career Information <http://www.geolsoc.org.uk/template.cfm?name=geocareers>  
 Earth Science Careers <http://www.geologynet.com/esa/careers/careers.html>  
 Careers in the Geoscience <http://www.agiweb.org/careers.html>  
 Working Your Degree: Geology [http://money.cnn.com/2000/12/15/career/q\\_degreegeology/](http://money.cnn.com/2000/12/15/career/q_degreegeology/)

### Organizations and Associations

American Geological Institute <http://www.agiweb.org/>  
 Association for Women Geoscientists <http://www.awg.org/>  
 American Institute of Petroleum Geologists <http://www.aipg.org>  
 Geological Society of America <http://www.geosociety.org/>  
 National Park Service <http://www2.nature.nps.gov/grd/>  
 US Geological Survey <http://www.usgs.gov/>  
 American Geophysical Union <http://www.agu.org/>  
 National Association of Geoscience Teachers <http://www.nagt.org/>

### Miscellaneous

Guilford College Geology and Earth Sciences Department <http://www.guilford.edu/geology>

Galaxy Geosciences Links <http://www.galaxy.com/cgi-bin/dirlist?node=51474>

Earth Science on the Web <http://geology.com/>