Geoscientists study the earth

- Soils
- Lakes sediments
- Evidence of ancient oceans
- Rivers
Volcanoes

Fence offset by San Andreas fault

Water quality

Maps
Geoscientists study the ocean

Coastal wetlands

Beaches

San Francisco Bay

Waves
Geoscientists study weather and climate.

- Tornadoes
- Clouds
- Glaciers
Geoscientists use instruments to explore the planet.

- Seismograph to measure earthquakes
- Boat to collect samples
- GPS to measure surface features
Geoscientists use instruments to explore the planet.
Geoscientists travel…

From the desert of Nevada…

…to the Andes Mountains of S. America

…to interesting locations
Geoscientists work in the field... ...

...and in the laboratory
Geoscientists have good job prospects  
(data from U.S. Bureau of Labor Statistics)

“Median annual earnings of geoscientists were $68,730 in May 2004.” In 2005, the average federal salary for hydrologists was $77,182.

“…beginning salary offers in July 2005 for graduates with bachelor’s degrees in geology and related sciences averaged $39,365 a year.”

“…due to the relatively low number of qualified geoscience graduates and the large number of expected retirements, opportunities are expected to be good in most areas of geoscience.”
What's a Bachelor's Degree Worth?
Job offers for 2005-06 graduates

Chemical Engineering
Electrical Engineering
Computer Science
Mechanical Engineering
Geology
Mathematics
Civil Engineering
Accounting
Finance
Business Admin.
Chemistry
Marketing
Environmental Science
Life Sciences

Starting Salary in Thousands

AIP Statistical Research Center compiled from data collected by the National Association of Colleges and Employers.

Salaries rose 9% (on average) in 2006-07; figures do not include signing bonuses, yearly bonuses or benefits.

Data from— http://www.aapg.org/explorer/salarysurvey.cfm

<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
<th>B.S.</th>
<th>M.S.</th>
<th>PH.D.</th>
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<tr>
<td>0-2</td>
<td>$76,500</td>
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<td>3-5</td>
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<td>145,300</td>
<td>148,200</td>
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Salaries are mid-range for experience level, and do not include supplements for achievement. Consulting meteorologists with >25 yr. experience, for example, make $130,000. Media salaries could be much higher in major markets, and much lower in minor markets.
In the Geosciences, students learn skills employers value

- How to work together in a team
- How to collect field and lab data
- How to use quantitative methods
- How to solve real-world problems
- How to present information orally
- How to write technical reports
Consider the benefits of rigorous science training that takes more effort now but that provides skills—valued in the workplace and transferable to many occupations.

Geoscience professor and student with award-winning undergraduate research project.
B.S. in Geology

- Environmental consulting, including hydrogeology and geotechnical fields
- Federal, state, and local government (e.g., U.S. Geological Survey, EPA, Water Quality Control Board, CALTRANS, SF Port, SFPUC)
- Non-governmental organizations (e.g., river restoration, coastal protection)
- Private industry (e.g., energy—petroleum companies—and resources—mining)
- Preparation for graduate school
B.S. in Atmospheric and Oceanographic Sciences

- Consulting services, including weather and marine forecasting
- Federal, state, and local government (e.g., National Weather Service, NOAA, U.S. Navy, State Air Resources Board)
- Non-governmental organizations (e.g., climate monitoring, coastal protection)
- Private industry (e.g., air emissions monitoring/modeling, TV, marine technology)
- Preparation for graduate school
B.A. in Earth Sciences

• Interdisciplinary degree in geology, meteorology, and oceanography
• High school teaching (high demand for science teachers; with earth/planetary science credential, can teach ~50% of science courses in California schools)
• Preparation for continued study in geosciences or fields such as environmental science, law and policy; business analysis and decision making
SF-ROCKS (Reaching out to Communities and Kids with Science in San Francisco)
Minor in Earth Sciences

• Students can emphasize geology, meteorology, or oceanography
• Valuable addition to degrees in geography, archeology, biology, chemistry, civil engineering, business, visual arts, etc.
THE BOTTOM LINE...

Goescientists enjoy their work!

SFSU geology students on a field trip