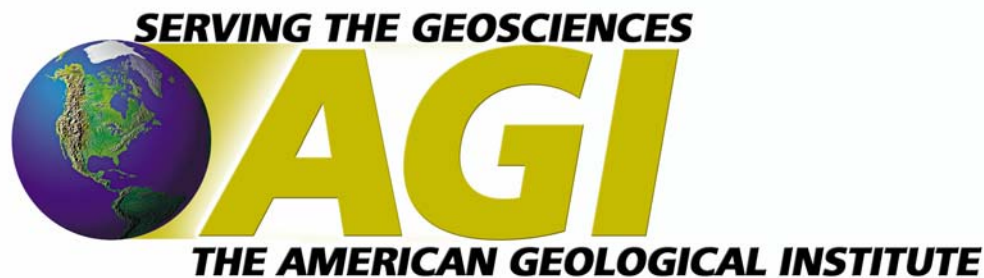


# Introductory Geoscience Enrollment in the United States

Academic Year 2004-2005



Report by the American Geological Institute, Geoscience Workforce Program  
<http://www.agiweb.org>

Report by Cindy Martinez and Margaret Anne Baker  
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## **Summary**

The American Geological Institute conducted a survey to determine the number of students enrolled in introductory geoscience courses during the 2004-2005 academic year. For this survey, 312 departments reported enrollment of 191,778 students in three categories of courses: physical geoscience-type courses, environmental geoscience, and classes on the geoscience of National Parks or public lands.

The 2004-2005 estimated total enrollment in introductory geoscience courses is 403,200. This estimate represents the upper bound of the population, as non-responding departments would probably have a higher rate of zero enrollments with the expected bias towards a non-response for departments without introductory courses. The National Center for Education Statistics reports that the national enrollment for undergraduate students in both 2-year and 4-year degree-granting schools for the 2004-2005 academic year is 14.8 million. Taken in this context, the estimated total enrollment in introductory geoscience courses represents 2.7% of the undergraduate population.

The total estimated enrollment for introductory geoscience courses is slightly higher in this report than in the 2003-2004 report. The 2004-2005 estimates shows a 3% increase for the enrollment in Physical Geology courses, and an 18% increase for the enrollment in Environmental Geology courses, but an 18% decrease for the enrollment in National Parks/Public Lands courses.

## Introduction

Introductory geoscience courses in higher education are a major source of public exposure for the geosciences and anecdotally are cited as an important source for recruiting geoscience majors. The number of geoscience majors has been decreasing since a peak in the 1980s, and because of this decrease in the number of majors, some geoscience departments have been under pressure by their institutions to increase the number of students taking introductory geoscience courses. This increase in introductory geoscience courses, however, has not translated into an increasing number of majors for most of these departments.

The American Geological Institute (AGI) first surveyed introductory geoscience course enrollments for the 2003-2004 academic year in order to establish a baseline for introductory geoscience courses. Some of the dynamics sought include: total enrollment numbers, average course enrollments, and the student load at different types of degree-granting institutions. This report for the 2004-2005 academic year represents the second survey, and provides a preliminary elucidation of trends in enrollment statistics for these courses.

The survey was sent in October 2005 to 676 active geoscience departments that offer courses and/or degrees at the undergraduate level. Of these, 312 departments completed the survey for a response rate of 46%. A total of 297 departments reported that they offer some type of introductory geoscience courses, and 15 departments reported that they offer no such courses. Of the schools that responded for 2004-2005, 50% of them had responded to last year's survey. The data from these departments that responded across both years of surveying have allowed for a more precise forecasting model than the linear extrapolation model used in the 2003-2004 report.

The survey asked each department to report the number of students enrolled during the 2004-2005 school year in courses that qualified as one of the following three categories (but not limited to specific titles):

- Physical Geology/Geography; Geophysics, Introductory Oceanography, Meteorology, and/or Space Science
- Environmental Geology/Geography/Society and Earth
- Geology of National Parks/Public Lands

These categories were chosen because they represent the major subject lines for textbook publishers and are a first approximation of the breadth of introductory courses offered in the geosciences. Textbook publishers estimate the number of new units sold each year in these categories: 275,000 introductory physical geoscience textbooks, 50,000 environmental geoscience textbooks, and 12,000 books on parks and public lands. In total, the textbook publishers estimate 337,000 textbooks are sold annually for introductory geoscience courses. These numbers are considered reasonably accurate estimates of total enrollments in introductory geoscience courses, however, they do not provide any insight into the dynamics of the course offerings.

## Total Population

For the 2004-2005 study, 676 surveys were sent to geoscience departments and 46% of these departments responded. Of these departments, half of them also provided information on introductory enrollment for the 2003-2004 academic year. The 297 departments that responded this year taught a total 191,778 students, with 78% of these students enrolled in Physical Geology courses, 20% enrolled in Environmental Geoscience courses, and 2% enrolled in National Parks and Geoscience of Public Lands courses.

Table 1 shows the introductory enrollment for geoscience departments for the last two academic years as well as the estimated total enrollments from regressions based on the reported numbers. There is an overall increase of 5% in the estimated total enrollment in all introductory geoscience courses for 2004-2005 than the projection from last year's report. This increase may in part be due to a more precise model than the linear estimate made in the 2003-2004 report. The 2004-2005 estimated total enrollment in introductory geoscience courses is 403,200. This estimate represents the upper bound of the population, as non-responding departments would probably have a higher rate of zero enrollments with the expected bias towards a non-response for departments without introductory courses. A complete list of responding departments is available at the end of this report.

**Table 1. Reported Introductory Geoscience Course Enrollments and Estimated Total Enrollments**

Course Area	Reported Enrollments		Estimated Total		Percent change
	2003-2004	2004-2005	2003-2004	2004-2005	
Physical Geoscience	111,021	149,226	312,000	321,000	+ 3%
Environmental Geoscience	22,568	39,140	63,000	74,000	+ 17%
National Parks/Public Lands	3,591	3,352	10,000	8,200	- 18%
	137,180	191,718	385,000	403,200	+ 5%

Textbook publishers estimate that 275,000 new units of Physical Geology course textbooks were sold during the 2004-2005. AGI's estimate of total enrollments in Physical Geoscience courses represents a 17% premium over this number. This disparity likely represents those textbooks that were reused and the use of self-published or "niche" materials in some courses. There is a similar disparity between the textbook publishers' figures and the AGI estimate for Environmental Geology courses and National Parks/Public Lands courses.

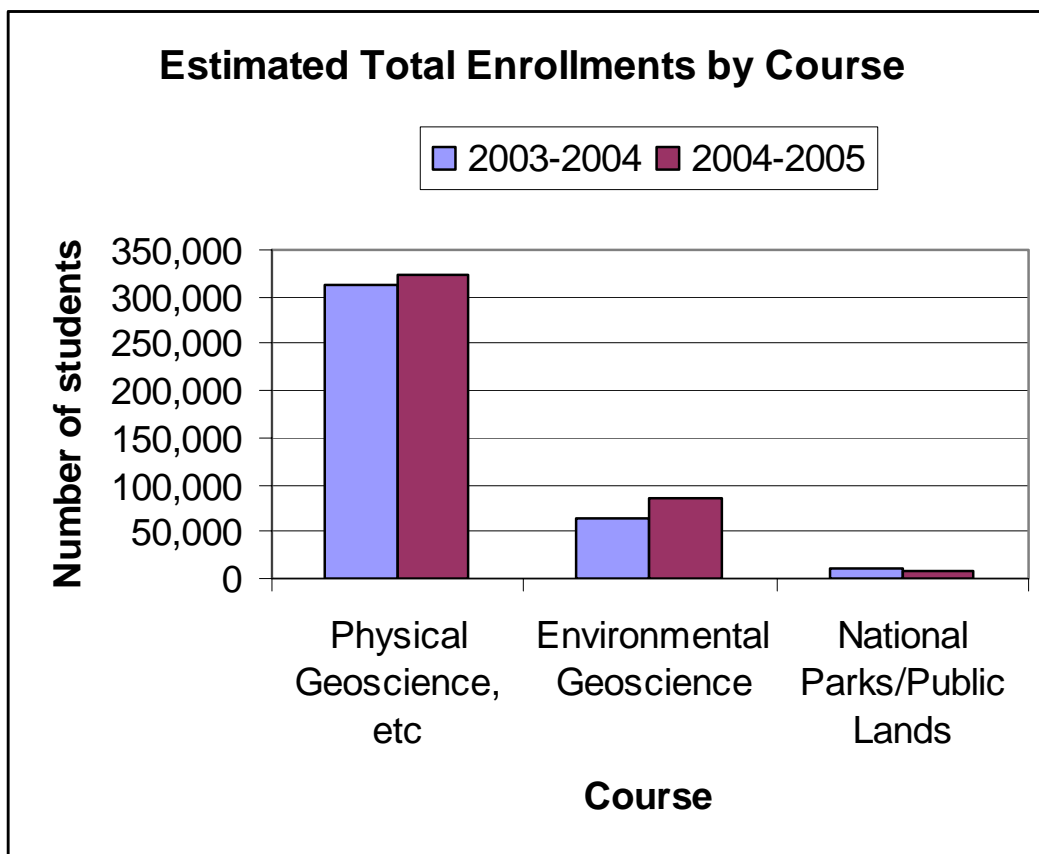
The National Center for Education Statistics (NCES) at the U.S. Department of Education estimates the national enrollment in post-secondary institutions for 2004-2005 to be 17.1 million students. This enrollment level includes both undergraduate and graduate students in all degree-granting post-secondary institutions. NCES reports that the national enrollment for undergraduate students for 2004-2005 is 14.8 million. This figure represents the undergraduate population at 2-year and 4-year degree-granting institutions. Taken in this context, the estimated

total enrollment in introductory geoscience courses represents 2.7% of the undergraduate population.

### Changes in Enrollment Demographics from 2003-2004

The total estimated enrollment for introductory geoscience courses is slightly higher in this report than in the 2003-2004 report. There was a 50% repeat response rate that was used as the basis for the 2004-2005 total introductory geoscience enrollment estimate of 403,200 students. For departments responding to both surveys, they show a 3% increase for the enrollment in Physical Geology courses, and an 18% increase for the enrollment in Environmental Geology courses, but an 18% decrease for the enrollment in National Parks/Public Lands courses. The changes between 2003-2004 and this year's survey are shown in Figure 1.

Figure 1. Estimated Total Enrollments by Course



### Where are the students taught?

The responding departments represent a wide range of geoscience programs in both 2-year and 4-year institutions. Table 2 shows the reported enrollment by introductory course type and academic institution type. Institutions responding to the survey fall into four general categories: non-degree granting programs, 2-Year degree granting programs, Non-PhD granting programs, and Ph.D. granting programs. In these categories, degree granting status is related to geoscience

department not to the institution as whole. Table 3 shows the total enrollments for different program categories and the percent of students enrolled in each type of introductory course.

**Table 2. Reported Enrollments by Subject and Program Profile, 2004-2005**

	Physical Geoscience	Environmental Geoscience	National Parks/Public Lands	Total Departments
Ph.D. Granting	46,438	15,101	1,917	73
Non-PhD. Granting	73,270	19,832	1,302	176
2-Year Degree Granting	25,909	3,758	133	49
Non-degree Granting	3,669	449	0	14

**Table 3. Percentage of students taught by Program Type and Course, 2004-2005**

Institution Type	% of Departments	Total Introductory Geoscience Enrollments	Percent of Total Enrollment in Category		
			Physical Geoscience	Environmental Geoscience	National Parks/Public Lands
Ph.D. Granting	23	63,456	73.2	23.8	3.0
Non-PhD. Granting	56	94,404	77.6	21.0	1.4
2-Year Degree Granting	16	29,800	86.9	12.6	0.4
Non-degree Granting	5	4,118	89.1	10.9	0.0

There are 14 non degree-granting programs that teach introductory courses to over 4,000 students. These institutions are almost equally divided between 2-year and 4-year schools and are educating 2% of the total report introductory geoscience enrollment. The average enrollment load for these 14 institutions is 294 students in the 2004-2005 academic year. None of these institutions report teaching a National Parks/Public Lands course.

There are 49 degree granting 2-year programs that responded to the survey that teach a total of 29,800 students. These 2-year institutions represent 16% of the total responding programs and educate 15% of the total reported enrollment for introductory geoscience courses. The average enrollment load for these institutions is 608 students. These institutions are playing an increasingly important role in teaching introductory geoscience courses, especially in teaching introductory physical geoscience courses.

There are 176 Non-PhD. granting programs that responded to the survey. This category includes not only traditional 4-year colleges but also programs that grant Masters degrees. Non-PhD. granting programs make up more than half of the responding schools and had a total reported enrollment of 94,404 students in introductory geoscience courses in 2004-2005. These 94,404 students represent 49% of the total reported enrollment for this academic year. For these 176 programs, the average enrollment load is 536 students for the year. These departments are

responsible for teaching nearly half of the total population of students enrolled in National Parks/Public Lands courses.

There are 73 Ph.D. granting departments that responded to the survey that teach a total of 63,456 students in the 2004-2005 academic year. These programs represent 33% of the total reported introductory geoscience course enrollment for this academic year. The average enrollment load for these schools is 869 students for the year. These programs are responsible for educating more than half the total enrollment in National Parks/Public Lands courses.

Table 4 shows the number of departments offering each type of introductory geoscience course and the average course size. This table also shows the largest and smallest enrollment for each of the introductory geoscience courses. These numbers are not significantly different than the class sizes reported in the 2003-2004 baseline report.

**Table 4 Reported Average, Maximum and Minimum Enrollments by Course, 2004-2005**

	<b>Physical Geoscience</b>	<b>Environmental Geoscience</b>	<b>National Parks/Public Lands</b>
Departments Offering	294	204	55
Average Enrollment	508	192	61
Largest Enrollment	3962	2045	720

## Responding Departments:

Adirondack Community College, Science Division  
Adrian College, Dept of Earth Sciences  
Albion College, Dept of Geological Sciences  
Alfred University, Dept of Geology  
Amarillo College, Dept of Physical Science  
American River College, Dept of Earth Science  
Angelo State University, Dept of Physics (Geology)  
Anoka-Ramsey Community College, Dept of Natural Science (Geology)  
Appalachian State University, Dept of Geology  
Arizona Western College, Dept of Geology  
Arkansas Tech University, Dept of Physical Sciences-Geology  
Ashland University, Dept of Chemistry/Geology/Physics  
Auburn University, Dept of Geology & Geography  
Augustana College, Dept of Geology  
Austin Peay State University, Dept of Geology & Geography  
Ball State University, Dept of Geology  
Bates College, Dept of Geology  
Baylor University, Dept of Geology  
Beloit College, R.D. Salisbury Dept of Geology  
Bemidji State University, Center for Environmental, Earth, & Space Studies  
Bloomsburg University, Dept of Geography and Geosciences  
Boston University, Dept of Earth Sciences  
Bowdoin College, Dept of Geology  
Bowling Green State University, Dept of Geology  
Brooklyn College (CUNY), Dept of Geology  
Broome Community College, Dept of Engineering Science/Physics/Physical Sciences  
Bryn Mawr College, Dept of Geology  
Bucknell University, Dept of Geology  
California Institute of Technology, Div of Geological & Planetary Sciences  
California Lutheran University, Dept of Geology  
California State Polytechnic University, Pomona, Dept of Geological Sciences  
California State University, Bakersfield, Department of Physics and Geology  
California State University, Chico, Dept of Geological and Environmental Sciences  
California State University, Dominguez Hills, Earth Sciences  
California State University, Fresno, Dept of Earth & Environmental Sciences  
California State University, Fullerton, Dept of Geological Sciences  
California State University, Hayward, Dept of Geological Sciences  
California State University, Long Beach, Dept of Geological Sciences  
California State University, Los Angeles, Dept of Geological Sciences  
California State University, Northridge, Dept of Geological Sciences  
California State University, Stanislaus, Dept of Geology  
California University of Pennsylvania, Dept of Earth Sciences  
Carleton College, Dept of Geology  
Casper College, Geology Dept  
Castleton State College, Dept of Natural Sciences (Geology)  
Central Methodist University, Division of Science  
Central Michigan University, Dept of Geology  
Central Missouri State University, Dept of Earth Science  
Central Oregon Community College, Dept of Science  
Central Washington University, Dept of Geological Sciences  
Cerritos College, Earth Science Department  
Chadron State College, Dept of Geosciences  
City College of San Francisco, Dept of Earth Sciences  
Clarion University, Dept of Anthropology, Geography & Earth Science  
Clatsop Community College, Dept of Geology  
Clemson University, Bob Campbell Geology Museum  
Cleveland State University, Dept of Biological, Geological, & Environmental Sciences  
Colby College, Dept of Geology  
Colgate University, Dept of Geology  
College of Charleston, Dept of Geology & Environmental Geosciences  
College of Southern Idaho, Dept of Physical Science  
College of Staten Island, Engineering Science & Physics  
College of the Desert, Div of Science & Mathematics  
College of the Redwoods, Dept of Science (Earth Science)  
College of the Siskiyous, Div of Natural & Applied Sciences  
College of William & Mary, Dept of Geology  
Colorado College, Geology Dept  
Colorado School of Mines, Dept of Geology & Geological Engineering  
Colorado School of Mines, Dept of Geophysics  
Colorado School of Mines, Dept of Mining Engineering  
Colorado State University, Dept of Geosciences  
Columbia College, Dept of Science & Mathematics  
Columbia University, Dept of Earth & Environmental Sciences  
Columbus State University, Dept of Chemistry & Geology  
Community College of Baltimore County, Catonsville campus, Div of Mathematics, Science & Engineering  
Community College of Rhode Island, Dept of Physics (Geology & Oceanography Div)  
Cornell College, Dept of Geology  
Cowley County Community College, Dept of Natural Sciences (Geology)  
Crafton Hills College, Geology Dept  
Cypress College, Physical Sciences Dept  
Dartmouth College, Dept of Earth Sciences  
De Anza College, Physical Science & Mathematics Div  
Del Mar College, Dept of Natural Sciences  
Delta College, Dept of Geology  
Denison University, Department of Geosciences  
Dickinson College, Dept of Geology  
Earlham College, Geosciences Dept  
East Carolina University, Dept of Geology  
Eastern Illinois University, Dept of Geology/Geography  
Eastern Kentucky University, Dept of Earth Sciences  
Eastern Oregon University, Science Dept  
Edinboro University of Pennsylvania, Dept of Geosciences  
Elizabethtown College, Dept of Physics  
Emory University-Oxford College, Dept of Geology  
Fairleigh Dickinson University, Dept of Chemistry & Geology  
Florida Atlantic University, Dept of Geography & Geology  
Florida International University, Dept of Earth Sciences  
Florida State University, Dept of Meteorology  
Fort Lewis College, Geosciences Dept  
Franklin and Marshall College, Dept of Earth and Environment  
Fresno City College, Earth/Physical Science Dept  
Gainesville College, Division of Natural Science  
Georgia Institute of Technology, School of Earth & Atmospheric Sciences  
Georgia Perimeter College, Geology Dept, Clarkston Campus  
Georgia Southern University, Dept of Geology and Geography



Georgia Southwestern State University, Dept of Geology & Physics  
 Glenville State College, Div of Science & Mathematics  
 Grand Valley State University, Dept of Geology  
 Green River Community College, Dept of Geology  
 Greenfield Community College, Dept of Earth Science  
 Gustavus Adolphus College, Dept of Geology  
 Hanover College, Dept of Geology  
 Hobart & William Smith Colleges, Dept of Geoscience  
 Hofstra University, Geology Department  
 Hope College, Dept of Geological & Environmental Sciences  
 Hudson Valley Community College, Physics Dept  
 Hunter College (CUNY), Dept of Geography  
 Idaho State University, Dept of Geosciences  
 Illinois State University, Dept of Geography-Geology  
 Indiana University / Purdue University, Fort Wayne, Dept of Geosciences  
 Indiana University / Purdue University, Indianapolis, Dept of Geology  
 Indiana University, Bloomington, Dept of Geological Sciences  
 Iowa State University of Science & Technology, Dept of Geological & Atmospheric Sciences  
 Jacksonville University, Dept of Biology & Marine Science  
 Kansas State University, Dept of Geology  
 Kent State University, Stark Campus, Dept of Geology  
 La Salle University, Dept of Geology & Environmental Science  
 Lafayette College, Dept of Geology & Environmental Geosciences  
 Lake Superior State University, Geology/Physics  
 Lehigh University, Dept of Earth & Environmental Sciences  
 Lehman College (CUNY), Environmental, Geographic, and Geological Sciences  
 Lewis-Clark State College, Earth Sciences  
 Lincoln Land Community College, Div of Biological and Physical Sciences  
 Loma Linda University, Dept of Natural Sciences, Geology Program  
 Long Island University, C.W. Post Campus, Dept of Earth & Environmental Sciences  
 Los Angeles City College, Chemistry & Geophysical Sciences Department  
 Los Angeles Harbor College, Dept of Earth Science  
 Los Angeles Valley College, Dept of Earth Science and Anthropology  
 Louisiana State University, Dept of Geology & Geophysics  
 Louisiana State University, Dept of Oceanography & Coastal Sciences  
 Louisiana Tech University, Geosciences Program  
 Lower Columbia College, Dept of Earth Sciences  
 Macalester College, Geology Dept  
 Mansfield University, Dept of Geography & Geology  
 Marin Community College, Geology Dept  
 Marshall University, Dept of Geology  
 Massachusetts Institute of Technology, Dept of Earth, Atmospheric, & Planetary Sciences  
 Miami University, Dept of Geology  
 Michigan Technological University, Dept of Geological & Mining Engineering & Sciences  
 Midwestern State University, Dept of Geosciences  
 Millsaps College, Dept of Geology  
 Mississippi State University, Dept of Geosciences  
 Montana State University, Billings, Dept of Biological & Physical Sciences  
 Montana State University, Dept of Earth Sciences  
 Montana Tech of the University of Montana, Dept of Geological Engineering  
 Montclair State University, Dept of Earth & Environmental Studies  
 Montgomery County Community College, Dept of Science  
 Moravian College, Dept of Physics & Earth Science  
 Morehead State University, Dept of Physical Sciences  
 Mount San Antonio College, Dept of Earth Sciences and Astronomy  
 Mount Union College, Dept of Geology  
 Murray State University, Dept of Geosciences  
 New Jersey City University, Dept of Geoscience/Geography  
 New Mexico Highlands University, Environmental Geology Program  
 New Mexico Institute of Mining and Technology, Dept of Earth & Environmental Science  
 New Mexico Institute of Mining and Technology, Dept of Mineral Engineering  
 New Mexico State University, Las Cruces, Dept of Geological Sciences  
 North Dakota State University, Dept of Geosciences  
 Northeastern Illinois University, Dept of Earth Science  
 Northeastern Oklahoma A&M College, Dept of Physical Science  
 Northeastern State University, Dept of Geology  
 Northern Arizona University, Department of Geography, Planning, and Recreation  
 Northern Illinois University, Dept of Geology and Environmental Geosciences  
 Northern Kentucky University, Dept of Physics and Geology  
 Northland College, Dept of Geoscience  
 Oberlin College, Dept of Geology  
 Ohio Wesleyan University, Dept of Geology & Geography  
 Okaloosa-Walton Community College, Science Dept  
 Oklahoma State University, School of Geology  
 Olivet Nazarene University, Dept of Physical Sciences  
 Orange Coast College, Div of Mathematics & Science  
 Orange County Community College, Dept of Science & Engineering  
 Pacific Lutheran University, Dept of Geosciences  
 Palomar College, Dept of Earth Sciences  
 Pennsylvania State University, University Park, Department of Geosciences  
 Plymouth State College, Natural Science Dept  
 Prescott College, Dept of Environmental Studies  
 Principia College, Dept of Geology  
 Radford University, Dept of Geology  
 Randolph-Macon College, Environmental Studies Program  
 Rider University, Dept of Geological & Marine Sciences  
 Rutgers, The State University of New Jersey, Dept of Geological Sciences  
 Saint Norbert College, Geology Dept  
 Saint Petersburg Junior College, Dept of Natural Science  
 Salem State College, Geological Sciences Dept  
 San Jose City College, Dept of Physical Science  
 San Jose State University, Dept of Geology  
 Seattle Central Community College, Div of Science & Mathematics  
 Shawnee State University, Dept of Natural Sciences  
 Shorter College, Division of Natural Sciences  
 Skidmore College, Dept of Geosciences  
 Slippery Rock University, Dept of Geography, Geology, and the Environment  
 Smith College, Dept of Geology  
 South Dakota School of Mines & Technology, Dept of Geology & Geological Engineering  
 Southern Arkansas University, Dept of Physical Sciences (Geology)  
 Southern Connecticut State University, Dept of Earth Sciences  
 Southern Illinois University Carbondale, Department of Geology  
 Southern Methodist University, Dept of Geological Sciences  
 Southern Oregon University, Dept of Geology

Southern Utah University, Department of Physical Science  
 Southwestern Oregon Community College, Dept of Geology  
 SUNY College at Brockport, Dept of the Earth Sciences  
 SUNY, Buffalo, Dept of Geology  
 SUNY, Fredonia, Dept of Geosciences  
 SUNY, Geneseo, Dept of Geological Sciences  
 SUNY, Oneonta, Dept of Earth Sciences  
 SUNY, Potsdam, Dept of Geology  
 SUNY, Stony Brook, Dept of Geosciences  
 Susquehanna University, Dept of Earth & Environmental  
 Science  
 Tarleton State University, Dept of Chemistry, Geosciences,  
 and Environmental Science  
 Temple University, Dept of Geology  
 Tennessee Technological University, Dept of Earth Sciences  
 Texas A&M University, Corpus Christi, Geosciences  
 Program  
 Texas A&M University, Dept of Geography  
 Texas A&M University, Dept of Geology & Geophysics  
 Texas A&M University, Dept of Soil & Crop Sciences  
 Texas Christian University, Dept of Geology  
 The Johns Hopkins University, The Morton K. Blaustein  
 Dept of Earth & Planetary Sciences  
 Thiel College, Dept of Environmental Science  
 Towson University, Dept of Physics, Astronomy &  
 Geosciences  
 Trinity University, Dept of Geosciences  
 Tufts University, Dept of Geology  
 Union College, Geology Dept  
 University of Alabama, Dept of Geological Sciences  
 University of Arizona, Dept of Geography & Regional  
 Development  
 University of Arizona, Dept of Geosciences  
 University of Arizona, Dept of Hydrology & Water  
 Resources  
 University of Arizona, Dept of Planetary Sciences  
 University of Arizona, Dept of Soil, Water & Environmental  
 Science  
 University of Arkansas, Little Rock, Dept of Earth Science  
 University of California, Davis, Dept of Geology  
 University of California, Davis, Dept of Land, Air & Water  
 Resources  
 University of Chicago, Dept of Geophysical Sciences  
 University of Delaware, College of Marine Studies,  
 Oceanography Program  
 University of Hawai'i at Hilo, Dept of Geology  
 University of Houston Downtown, Dept of Natural Sciences  
 University of Idaho, Dept of Geological Sciences  
 University of Iowa, Dept of Geoscience  
 University of Kansas, Dept of Geology  
 University of Kentucky, Dept of Earth and Environmental  
 Sciences  
 University of Louisiana at Lafayette, Department of Geology  
 University of Louisiana, Monroe, Dept of Geosciences  
 University of Louisville, Dept of Geography & Geosciences  
 University of Mary Washington, Dept of Environmental  
 Science & Geology  
 University of Massachusetts, Dept of Geosciences  
 University of Miami, Dept of Geological Sciences  
 University of Minnesota, Duluth, Dept of Geological  
 Sciences  
 University of Mississippi, Dept of Geology & Geological  
 Engineering  
 University of Missouri, Columbia, Dept of Soil,  
 Environmental & Atmospheric Sciences  
 University of Montana, Dept of Geology  
 University of Montana, Western, Dept of Environmental  
 Sciences  
 University of Montevallo, Dept of Geology  
 University of Nebraska, Kearney, Dept of Geography &  
 Earth Science  
 University of New Hampshire, Dept of Earth Sciences  
 University of North Carolina, Chapel Hill, Dept of  
 Geological Sciences  
 University of North Carolina, Wilmington, Dept of Earth  
 Sciences  
 University of Northern Colorado, Dept of Earth Sciences  
 University of Northern Iowa, Dept of Earth Science  
 University of Pittsburgh at Johnstown, Dept of Geology &  
 Planetary Science  
 University of Pittsburgh, Dept of Geology & Planetary  
 Science  
 University of Puget Sound, Dept of Geology  
 University of Rhode Island, Graduate School of  
 Oceanography  
 University of Saint Thomas, Dept of Geology  
 University of South Alabama, Dept of Marine Sciences  
 University of South Carolina, Marine Science Program  
 University of South Florida, Saint Petersburg, Dept of  
 Marine Science  
 University of Southern Indiana, Dept of Geology  
 University of Southern Maine, Dept of Geosciences  
 University of Texas, Permian Basin, Dept of Geology  
 University of the South, Dept of Forestry & Geology  
 University of Tulsa, Dept of Geosciences  
 University of Washington, Dept of Earth & Space Sciences  
 University of Washington, School of Oceanography  
 University of West Alabama, Div of Natural Sciences &  
 Mathematics  
 University of West Florida, Dept of Environmental Studies  
 University of Wisconsin, Madison, Dept of Atmospheric &  
 Oceanic Sciences  
 University of Wisconsin, Madison, Dept of Soil Science  
 University of Wisconsin, Parkside, Dept of Geology  
 University of Wisconsin, Platteville, Dept of Geosciences  
 University of Wisconsin, River Falls, Dept of Plant & Earth  
 Science  
 University of Wyoming, Dept of Geology and Geophysics  
 Ventura College, Geosciences Dept  
 Washington State University, Dept of Geology  
 Washington University, Dept of Earth & Planetary Sciences  
 Wayne State University, Geology Dept  
 Weber State University, Dept of Geosciences  
 West Chester University, Dept of Geology & Astronomy  
 West Texas A&M University, Dept of Life, Earth &  
 Environmental Science  
 Western Carolina University, Dept of Geosciences & Natural  
 Resources Management  
 Western Illinois University, Dept of Geology  
 Western Kentucky University, Dept of Geography &  
 Geology  
 Western New Mexico University, Dept of Natural Sciences  
 Western Oregon University, Earth and Physical Sciences  
 Dept  
 Western State College of Colorado, Dept of Geology  
 Western Washington University, Dept of Geology  
 William Paterson College, Dept of Environmental Science &  
 Geography  
 Williams College, Dept of Geosciences  
 Wittenberg University, Dept of Geology  
 Yakima Valley College, Dept of Geology  
 Yavapai College, Geology Dept.  
 Youngstown State University, Dept of Geological &  
 Environmental Sciences