DEPARTMENT OF GEOLOGY AND GEOPHYSICS

Geology

The field of geology includes the scientific study of all aspects of the solid Earth and the fluids within it, including the fundamental processes that shape it and the stewardship of its resources that benefits society. The undergraduate curricula in geology foster critical thinking, and the application of scientific skills to the study of Earth materials (rocks, minerals, fossils, structures, landforms and subsurface fluids) and geologic processes. Courses provide a broad background in geology, emphasize knowledge transfer from other sciences to geologic problems and emphasize hands-on application of knowledge through laboratories and field trips and promote application to practical problems in petroleum exploration, environmental management and civil engineering.

The Department of Geology and Geophysics offers two undergraduate programs in geology, the Bachelor of Arts and the Bachelor of Science. The BS program is appropriate for students seeking careers as geologists or preparing for graduate school in geology, whereas the BA program is designed for students wishing to combine geology with other disciplines. Details of the two programs are given below.

To remain in satisfactory academic standing, students must maintain a 2.0 or better GPA in all technical courses (geology, geophysics, chemistry, math and physics).

Geophysics

Geophysics includes all areas of scientific inquiry that deal with the physical state of Earth and other planets and the dynamic processes that act on and within planetary bodies. The Bachelor of Science in Geophysics is for students who wish to combine a proficiency in mathematics with an interest in Earth. The objective of this program is to develop a physically-motivated approach to the study of Earth phenomena, with an emphasis on collection and analysis of geophysical data for probing and imaging the Earth’s interior. Graduates will be well-prepared for careers in the energy and environmental industries, and for advanced study at top-ranked graduate programs.

Minors in Geology and Geophysics

The Department of Geology and Geophysics offers minors in two separate programs: Geology, Geophysics. Minors provide opportunities for broadening a student’s background and tailoring the curriculum to specific career goals. For example, a minor in Geology or Geophysics may be especially beneficial to students majoring in fields that deal directly or indirectly with geological processes. These include agriculture, anthropology, archaeology, architecture, business, education, engineering, and soil science, to name a few.

Faculty

Balta, Joseph B, Visiting Assistant Professor
Geology & Geophysics
PHD, California Institute of Technology, 2010

Bapst, David W, Lecturer
Geology & Geophysics
PHD, University of Chicago, 2013

Becker, Mauro R, Research Professor
Geology & Geophysics
PHD, University of Texas - Austin, 1996

Belanger, Christina L, Assistant Professor
Geology & Geophysics
PHD, University of Chicago, IL, 2011

Benavides Iglesias, Alfonso, Lecturer
Geology & Geophysics
PHD, Texas A&M University, 2007

Bhatia, Mukul R, Executive Professor
Geology & Geophysics
PHD, The Australian National University, 1982

Chester, Frederick M, Professor
Geology & Geophysics
PHD, Texas A&M University, 1988

Chester, Judith S, Professor
Geology & Geophysics
PHD, Texas A&M University, 1992

Clement, Brad M, Professor
Geology & Geophysics
PHD, Columbia University, 1985

Donovan, Arthur D, Professor of the Practice
Geology & Geophysics
PHD, Colorado School of Mines, 1985

Duan, Benchun, Professor
Geology & Geophysics
PHD, University of California, Riverside, 2006

Everett, Mark E, Professor
Geology & Geophysics
PHD, University of Toronto, 1991

Ewing, Ryan C, Associate Professor
Geology & Geophysics
PHD, The University of Texas - Austin, 2009

Giardino, John R, Professor
Geology & Geophysics
PHD, University of Nebraska, Lincoln, 1979

Grossman, Ethan L, Professor
Geology & Geophysics
PHD, University of Southern California, 1982

Hu, Lin Ying, Professor Of The Practice
Geology & Geophysics
PHD, Mines Paris Tech, 1988

Kabir, Mian M, Lecturer
Geology & Geophysics
PHD, Delft University Of Technology, 1997

Kitajima, Hiroko, Assistant Professor
Geology & Geophysics
PHD, Texas A&M University, 2010
Knappett, Peter S, Assistant Professor
Geology & Geophysics
PHD, University of Tennessee at Knoxville, 2010

Kronenberg, Andreas K, Professor
Geology & Geophysics
PHD, Brown University, 1983

Lamb, William M, Professor
Geology & Geophysics
PHD, University of Wisconsin - Madison, 1987

Laya Pereira, Juan Carlos, Assistant Professor
Geology & Geophysics
PHD, Durham University, United Kingdom, 2012

Marcantonio, Franco, Professor
Geology & Geophysics
PHD, Columbia University, 1994

Miller, Brent V, Associate Professor
Geology & Geophysics
PHD, Dalhousie University, Canada, 1997

Newman, Julie, Professor
Geology & Geophysics
PHD, University of Rochester, 1993

Perez, Nicholas D, Assistant Professor
Geology & Geophysics
PHD, University of Texas at Austin, 2015

Pope, Michael, Professor
Geology & Geophysics
PHD, Virginia Tech, 1995

Raymond, Anne L, Professor
Geology & Geophysics
PHD, University of Chicago, 1983

Reece, Julia S, Assistant Professor
Geology & Geophysics
PHD, University of Texas, 2011

Reece, Robert S, Assistant Professor
Geology & Geophysics
PHD, The University of Texas - Austin, 2012

Riggs, Eric A, Associate Professor
Geology & Geophysics
PHD, University of California-Riverside, 2000

Shebl, Mamdouh A, Research Professor
Geology & Geophysics
PHD, University of Wyoming, 1996

Sparks, David W, Professor
Geology & Geophysics
PHD, Brown University, 1992

Sun, Yuefeng, Professor
Geology & Geophysics
PHD, Columbia University, 1994

Tice, Michael M, Associate Research Scientist
Geology & Geophysics
PHD, Stanford University, 2006

Torrez, Betsy D, Lecturer
Geology & Geophysics
PHD, University of Alabama, 1994

Yancey, Thomas E, Professor
Geology & Geophysics
PHD, University of California, Berkeley, 1971

Yu, Alan Zhihua, Professor Of The Practice
Geology & Geophysics
PHD, University of South Carolina, 1992

Zhan, Hongbin, Professor
Geology & Geophysics
PHD, University of Nevada, Reno, 1996

**Majors**

- Bachelor of Arts in Geology (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/geology-ba)
- Bachelor of Arts in Geology and Master of Ocean Science and Technology, 5-Year Degree Program (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/bs-geol-most)
- Bachelor of Science in Geology (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/geology-bs)
- Bachelor of Science in Geology and Master of Ocean Science and Technology, 5-Year Degree Program (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/bs-geol-most)
- Bachelor of Science in Geophysics (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/geophysics-bs)

**Minors**

- Geology Minor (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/geology-minor)
- Geophysics Minor (http://catalog.tamu.edu/undergraduate/geosciences/geology-geophysics/geophysics-minor)