Geological Sciences

Alan G. Whittington, Chair
101 Geological Sciences Building
(573) 884-7625
whittingtona@missouri.edu

Tammy L. Bedford, Administrative Assistant
101 Geological Sciences Building
(573) 882-6785
bedfordt@missouri.edu

Faculty

Associate Professor M. Appold**, F. G. Gomez**
Assistant Professor N.M. Bartlow, J. W. Huntley**, J. Schifflauer**
Director, Geology Field Program M. Barquero-Molina*

* Graduate Faculty Member - membership is required to teach graduate-level courses, chair master's thesis committees, and serve on doctoral examination and dissertation committees.
** Doctoral Faculty Member - membership is required to chair doctoral examination or dissertation committees. Graduate faculty membership is a prerequisite for Doctoral faculty membership.

Undergraduate

• BA in Geological Sciences (http://catalog.missouri.edu/undergraduategraduate/collegeofartsandscience/geologicalsciences/ba-geological-sciences)
• BS in Geological Sciences (http://catalog.missouri.edu/undergraduategraduate/collegeofartsandscience/geologicalsciences/bs-geological-sciences)
• Minor in Geological Sciences (http://catalog.missouri.edu/undergraduategraduate/collegeofartsandscience/geologicalsciences/minor-geological-sciences)

The Department of Geological Sciences offers two undergraduate degree programs, a Bachelor of Arts with a major in Environmental Geology and a Bachelor of Science with major in Geological Sciences. The BA is geared to those students interested in environmental concerns, while the BS is geared toward the traditional fields of geology. Both degrees provide a rigorous background in earth sciences. In addition, students majoring in other departments can minor in geological sciences.

Departmental Honors

Departmental honors can be achieved by students who maintain a cumulative GPA of 3.0, departmental GPA of 3.2, and who complete a senior thesis.

Dual Degrees

The Department of Geological Sciences offers dual degree programs with the Department of Soil, Environmental and Atmospheric Science in their emphasis area of Environmental Soil Science and with the Department of Civil and Environmental Engineering and with the College of Education in the Bachelor of Science in Education, emphasis in Earth Science Education. For more information, contact an advisor in the department.

Graduate

• MS in Geology (http://catalog.missouri.edu/undergraduategraduate/collegeofartsandscience/geologicalsciences/ms-geology)
• PhD in Geology (http://catalog.missouri.edu/undergraduategraduate/collegeofartsandscience/geologicalsciences/phd-geology)

Department of Geological Sciences
101 Geological Sciences Building
573-882-6785
http://geology.missouri.edu/index.html

Director of Graduate Studies: Francisco Gomez

About the Geological Sciences Program

The areas of research covered by faculty are broad and diverse, with strong research expertise in the general areas of geochemistry, petrology, paleontology, and geophysics-tectonics. These strengths allow us to focus on problems identified by the National Research Council to be socially relevant and to be fundamental to an understanding of earth processes. Dynamic faculty, along with their students, are making significant contributions to numerous areas of basic and applied research. This research is supported by excellent, state-of-the-art analytical facilities in the department and on campus. Our graduate program prepares students for a wide range of professions within the geological sciences; students have been placed in private, federal, state, and academic institutions. Prospective students are encouraged to contact any faculty member directly for additional information.

Areas of Specialization

The areas of specialization are aqueous geochemistry, biogeochemistry, invertebrate paleontology, isotope geochemistry, geophysics, hydrogeology, igneous petrology, metamorphic petrology, paleontology, ore deposits, paleoclimatology, paleoecology, sedimentation, stratigraphy, structural geology, tectonics, and volcanology.

Facilities and Resources

The Geological Sciences Building houses many different research laboratories, as well as classrooms and an excellent geology library. Equipment is available for supervised student use in many fields. The Geology Field Camp is in the Wind River Mountains near Lander, Wyoming. See the Department website at http://geology.missouri.edu/index.html.

About the Degrees

The master's degree program includes a thesis and a non-thesis option, both of which require 30 credit hours beyond the bachelor's degree. The thesis option is accomplished by taking 18 to 21 graduate course credits and preparing a written thesis involving 9-12 credits of research or problems credits. Students have until the middle of their second semester in residence to choose a supervisor and a thesis topic. The non-thesis track requires 27 hours of graduate course credits plus 3 hours of research credit leading to completion of a smaller-scale research project.

The doctoral degree requires 72 hours beyond a bachelor's degree, and may include as many as 24 hours credit from a prior master's degree. Doctoral candidates must pass a qualifying exam during their first year in residence to assess their general background so that a meaningful program of study can be constructed. The usual doctoral program involves courses within and outside the department, and researching
the dissertation topic prior to taking the comprehensive examination by
the end of the second year. The results of the dissertation research are
presented to the faculty and graduate students when the student has
completed the project.

Financial Aid from the Program

Some programs require an extra form or statement from those who wish
to be considered for internal assistantships, fellowships or other funding
packages. Check the program website or ask the program contact for
details.