The earth, environmental, and planetary sciences encompass a wide range of inquiries into the physical, chemical, and biological processes that shape the earth and the planets. Application of these inquiries to understanding a planet’s evolution through time is a unique attribute of geological investigations. Knowledge of the past and present reveals the constraints of our environment and serves as a guide for the future.

In recent years, significant advances have been made in the understanding of Earth’s interior, the nature of surface and near-surface processes, the history of the Earth’s climate, the ecology of living and ancient organisms, and the comparative geology of other planets. Geological knowledge is fundamental to resource conservation, land use planning and other environmental concerns.

Department faculty have active research programs to investigate planet formation and evolution, and Earth and environmental history. The department offers degree programs leading to the Bachelor of Arts (BA) and Bachelor of Science (BS) in geological sciences, BA in environmental geology, BA in environmental studies, Master of Science (MS), and Doctor of Philosophy (PhD). The Environmental Studies Program is described elsewhere in this bulletin.

Department Faculty

Steven A. Hauck, II, PhD
(Washington University in St. Louis)
Professor and Chair
Geodynamics

Ralph P. Harvey, PhD
(University of Pittsburgh)
Professor
Planetary geology

Beverly Z. Saylor, PhD
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Professor
Sedimentary geology

James A. Van Orman, PhD
(Massachusetts Institute of Technology)
Professor
Geochemistry

Peter J. Whiting, PhD
(University of California, Berkeley)
Professor; Associate Dean, College of Arts and Sciences; Director,
Environmental Studies
Geomorphology; surface water hydrology; environmental geology

Adjunct Faculty

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Adjunct Associate Professor
Structural geology

Jeffrey Balcerski, PhD
(Case Western Reserve University)
Adjunct Assistant Professor

Andrew Dombard, PhD
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Adjunct Associate Professor, University of Illinois-Chicago
Planetary geophysics

Joseph Hannibal, PhD
(Kent State University)
Adjunct Associate Professor, Cleveland Museum of Natural History
Invertebrate paleontology

Nathan Jacobson, PhD
(University of California)
Adjunct Associate Professor

Zhicheng Jing, PhD
(Yale University)
Adjunct Associate Professor

Elham Mohsenian, PhD
(University of Leoben)
Adjunct Assistant Professor

Anne Willem Omta, PhD
(Vrije Universiteit)
Adjunct Assistant Professor

Michael Ryan, PhD
(Univ of Calgary)
Adjunct Associate Professor

David Saja, PhD
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Adjunct Assistant Professor
Mineralogy

Emeritus

Gerald Matisoff, PhD
(Johns Hopkins University)
Professor Emeritus
Sedimentary and environmental geochemistry

Peter McCall, PhD, JD
(Yale University)
Professor Emeritus
Benthic ecology, paleoecology
Visiting Faculty

Onema Adojoh, PhD
(University of Liverpool, United Kingdom)

Visiting Assistant Professor
Geomicropaleontology; environmental and climate change; coastal sedimentology

Anne Omta, PhD
(Vrije Universiteit)

Visiting Assistant Professor
Ocean biogeochemistry; climate dynamics

Programs

• Environmental Geology, BA
• Environmental Studies, BA
• Environmental Studies, Minor
• Geological Sciences, BA
• Geological Sciences, BS
• Geological Sciences, Minor
• Geological Sciences, MS
• Geological Sciences, PhD

Dual Degrees

• Undergraduate Programs toward Graduate or Professional Degrees