Facilities for Graduate Work

The teaching and research facilities of the Department of Geography and the Environment are housed in Patton Hall, home to other liberal arts programs and departments. There are also research labs in the adjacent Student Activities Center.

Environmental Information Systems Laboratory. This laboratory provides comprehensive resources for learning and research in cartography, geographic information systems (GIS), remote sensing, and spatial statistics. It contains 25 microcomputers connected by Ethernet to the campus network and the Internet. The laboratory is also equipped with scanners, digitizers, plotters, GPS receivers, a station for field mapping, and audiovisual equipment for hypermedia production. The computers run a variety of software for microcomputer mapping and GIS, remote sensing, computer-assisted drafting, and statistical analysis.

Digital Landscape Laboratory. The Digital Landscape Laboratory is a GIS and remote sensing facility designed to support research in the modeling and characterizing of Earth’s varied processes through geomorphology, biogeography, and landscape ecology. The laboratory includes a server, high-speed Ethernet connections, Windows-based workstations, scanners, and a large-format plotter.

Environmental Analysis Laboratories. The Soils and Geoarchaeology Laboratory, the Laboratory of Soils and Sediments, the Geosciences Laboratory, and the Environmental Hydrology and Water Quality Laboratory are equipped for field study and laboratory analysis of soils, sediments, pollen, water, fluvial and lake systems, and archaeological materials. Used as research facilities, these laboratories are integral to graduate study in geomorphology, paleoecology, hydrology, biogeography and cultural ecology, morphodynamics, and geoarchaeology. High technology equipment includes a laser granulometer, an X-ray fluorescence analyzer, magnetic susceptibility meters, 210Pb dating by alpha spectroscopy, an Acoustic Doppler Current Profiler (ADCP), a digital echosounder coupled to a DGPS system, a dual frequency Stratosbox for geophysics surveys, microscopes, samplers, mechanical augers, a vibracorer, spectrophotometers, and other water quality multi-analyzers, among other equipment. Two small boats and two outboard engines are available for research in rivers, lakes, and dams. Additionally, there is a dedicated environmental geoscience classroom for hands-on laboratory learning.

University Libraries. The University Libraries are noted for their collections on Latin America, the Middle East, South Asia, and the American West.

Special research, training, and financial aid opportunities are available through area studies centers and research institutes in African and African American studies; Australian studies; East Asian studies; Latin American studies; Middle Eastern studies; Russian, East European, and Eurasian studies; and South Asian studies. Language training is available in Arabic, Bengali, Chinese, Hebrew, Hindi, Japanese, Korean, Malayalam, Persian, Sanskrit, Serbian/Croatian, Tamil, Telugu, Turkish, Urdu, Yoruba, and all major European languages. Additional University research facilities used by graduate students in the Department of Geography and the Environment include the Bureau of Economic Geology, the Center for Energy and Environmental Resources, the Center for Research in Water Resources, the Center for Transportation Research, the Marine Science Institute, the Center for Space Research, and the Population Research Center.

Areas of Study

The graduate curriculum in geography enables students to obtain an understanding of the heritage and philosophical foundations of the discipline, of contemporary thought and practice in its various subfields, and of the theories, analytical tools, and techniques currently used in geographic research.

Faculty and graduate students have contributed in many ways to understanding and managing the earth's diverse cultural and physical environments, ranging from local to global scales across the full range of human history. Current clusters of faculty research include space, place, and social worlds; environmental changes and surface processes; and digital landscapes.

Faculty associated with the space, place, and social worlds cluster investigate how socio-cultural and political-economic processes such as urbanization, agricultural transformation, industrialization, poverty, health care, migration, and mediated communication interact to produce diverse socio-spatial realities across urban, regional, national, and global scales.

Faculty associated with the environmental changes and surface processes cluster study biotic, climatic, geomorphic, and anthropogenic factors and processes.

Faculty associated with the digital landscapes cluster explore the theoretical and applied issues associated with the acquisition, measurement, representation, analysis, simulation, and visualization of digital geographic information.

The faculty has a strong international orientation and is well prepared to guide students in research in Latin America, South Asia, Southern Africa, and Europe, as well as in the Southwestern and Western regions of the United States. The department encourages interdisciplinary and collaborative work that takes advantage of the University's extensive scholarly resources.

Graduate Studies Committee

The following faculty members served on the Graduate Studies Committee (GSC) in the spring 2023 semester.

Paul C Adams  
Eugenio Yatsuhas Arima  
Sheryl Luzzadder Beach  
Timothy Beach  
Kelley A Crews  
William Doolittle  
David J Eaton  
Caroline Faria  
Thomas Garrison  
Steven D Hoelscher  
Gregory W Knapp  
Laurel Mei-Singh  
Jennifer A Miller  
Carlos E Ramos  
Bjorn Ingmann Sletto  
Amy Thompson  
Rebecca M Torres  
Pavithra Vasudevan  
Kenneth R Young