

Facilities at Western Kentucky University



A topic hotly debated (mostly outside the scientific community) concerns the effects of asbestos minerals on human health. Research has shown that certain asbestos minerals (e.g., crocidolite) present more health risk than others, so there is renewed interest in determining how fibrous byproducts develop in amphibole and other deposits. But fibrous minerals are not limited to near-surface dust and the risk to human health from mining could be more extensive than previously thought. Our research in very low temperature mineralogy, for example, has shown that dust trapped in snow in the high-altitude Peruvian Andes, which has been transported to ~5000-7000m in the atmosphere, contains significant quantities of asbestos talc, as well as faceted copper- and mercury-bearing minerals.



WKU has been home to the Kentucky Climate Center since 1978, and the Kentucky Mesonet since 2005. The Kentucky Climate Center is the State Climate Office for Kentucky and home to the State Climatologist, Dr. Stuart Foster. The mission of the Kentucky Climate Center is to conduct research and disseminate information of climatic variability and change, influences of the natural environment upon human activity, and impacts of human activity upon the natural environment.



Careers in Geoscience

Students who complete the M.S. Geoscience degree at Western Kentucky University will be able to pursue careers that include the following areas:

- Environmental Management
- Oil and Gas Industries
- Climate Science
- Resource Sustainability
- Social and Cultural Analysis
- Diplomatic Service
- Business and Industry
- Geologic Sciences

Students who continue their graduate studies by pursuing a Ph.D. in the Geosciences or related disciplines are able to pursue careers that include the following:

- University Professor
- Geospatial Technology
- Sustainability and Environment
- Planning and GIS
- Energy Consulting



Master of Science in Geoscience



Department of Geography & Geology

For more information contact:

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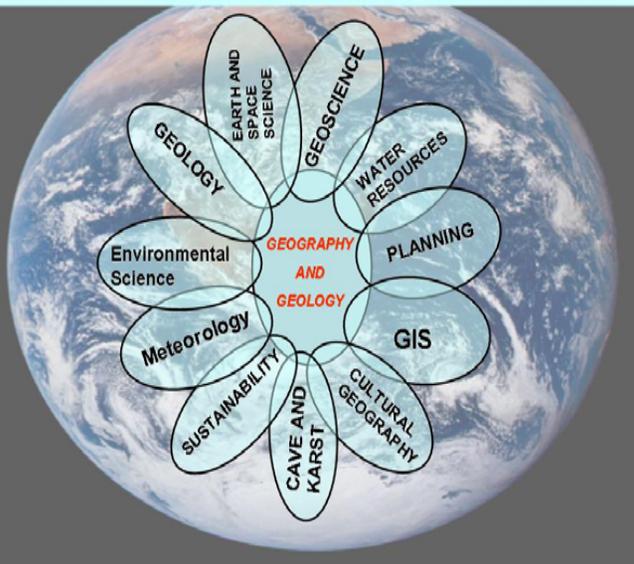
M.S. in Geoscience at Western Kentucky University

The M.S. Geoscience program requires a minimum of 30 semester hours of coursework, including a six-hour research thesis. Students completing the M.S. in Geoscience degree will learn the concepts and skills necessary to qualify for a variety of career opportunities that require a solid foundation in geospatial thinking and analysis.

Why enroll in the M.S. Geoscience program?

- Geoscience offers a broader knowledge base compared to other disciplines;
- Geoscience offers a global perspective or world view on place and society;
- Geoscience focuses on human-environment relationships and variations in environmental quality and resources;
- Geoscience offers the tools to analyze and manage space effectively and successfully;
- Geoscience is holistic, in that it combines both the human and physical aspects of place, space, and environment.

DEPARTMENT OF GEOGRAPHY AND GEOLOGY



M.S. Geoscience Curriculum

Core requirements (9 credit hours)

GEOS 500 Research and Literacy	(4)
GEOS 520 Geoscience Statistical Methods	(4)
GEOS 502 Geoscience Methods	(1)

Program Electives (15 credit hours)

Coursework in:
 Environment and Sustainability
 Geographic Information Science
 Climate Science
 Cultural Geography
 Physical Geoscience (Karst, Water, Geology)

Research Thesis (6 credit hours)

An independent research thesis directed by a thesis advisor and two committee members. All students take a comprehensive written exam before the thesis defense, present their thesis research in a faculty-student seminar, and defend their thesis research in an oral examination.

Admission Requirements: Students should score 3.5 or higher on the GRE Writing component, and should have appropriate preparatory coursework to support their thesis research. Students should seek out a thesis director during the application process, who will determine appropriate prerequisite coursework. GIS and Statistics are important preparatory courses for most thesis projects.

Why study Geoscience at Western Kentucky University?

Refer to the departmental website for more info:
<http://www.wku.edu/geoweb/documents/msgeoscience.pdf>

The M.S. in Geoscience program at WKU is the largest such program in Kentucky or Tennessee. Students become more directly involved in faculty-sponsored research, with opportunities for co-authorship of peer-reviewed research articles, and presentation of research results at professional meetings, conferences, and workshops.

Faculty research a variety of human-environment issues that both inform the coursework students take and provide students with opportunities to engage in a number of projects that directly influence the human condition.

