

Distance-Learning Opportunities *in the Earth Sciences*

Online Courses and Graduate Opportunities for Degree-Seeking and Non-Degree Students

Emporia State University offers one of the only online earth science M.S. programs in North America. The Masters of Science degree and a Graduate Certificate may be earned online through a combination of graduate-level coursework and research. The wide range of online courses offered at ESU is also available to non-degree seeking professionals and teachers.

**U.S. News and World Report
has listed Emporia State
University among the top 20
universities nationally for online
graduate programs.**



For more information, visit:

<http://www.emporia.edu/earthsci/graduat.htm>

or

http://www.emporia.edu/earthsci/gsa_cert.htm

or contact:

Graduate Programs Chair
Earth Science Department
Departments of Physical Sciences
Room 133, Science Hall
1200 Commercial St.
Emporia State University
Emporia, KS 66801-5087
620-341-5330



*Distance Learners access ESU
from all corners of Earth*



**EMPORIA STATE
UNIVERSITY**™

Online Courses in the Earth Sciences

Course Number	Course Title
GO 326	Plate Tectonics
ES 331	Ice Age Environments
GO 340	Gemstones and Gemology
ES 341	Wetland Environments
ES 351	Introduction to Geospatial Analysis
ES 521	History of Geology
ES 546	Field Geomorphology
GO 547	Field Geology
GO 548	Field Stratigraphy
ES 551	Computer Mapping Systems
ES 555	Small Format Aerial Photography
GO 571	Hydrogeology
GO 572	Contaminant Hydrogeology
GO 580	Environmental Field Methods
ES 739	Research Problem
ES 747	Field Studies in Earth Science
ES 767	Quaternary Geology
ES 767	Global Tectonics
ES 767	Wetland Environments
ES 767	Geowriting and Geoliterature
ES 767	Applied Hydrogeology Seminar
ES 771	Remote Sensing
ES 775	Advanced Image Processing
ES 875	Thesis

NOTE: A combination of 500- and 700-level courses may be taken toward the M.S. degree. Sixty percent of the courses must be 700-level or higher.

Online Courses in Related Fields

Earth Science M.S. requirements include six hours of coursework outside of the earth sciences. Popular examples of online offerings at ESU in chemistry, business, and instructional technology include:

Course Number	Course Title
CH 506	Environmental Chemistry
CH700	Nuclear Sci and Radiation Safety
BE 701	PC Troubleshooting Techniques
IT700	Foundations of Instructional Design/ Tech

Many other alternatives are listed at ESU's Office of Distance Education. See: <http://www.emporia.edu/distance/>. Program advisor approval is required.



Intense weekend field trips are options in some online courses. Above: Field Geomorphology fall '09 trip to Cheyenne Bottoms in central Kansas. Local Kansas students were joined by distance-learning students from California, Illinois, Missouri and Washington, D.C.

M.S. Degree Options

Two M.S. degree options are available:

- The M.S. degree requirements are designed to allow considerable flexibility for students wishing to create individual programs within the framework of earth-system science. Thirty or thirty-two hours of graduate-level coursework, which includes a thesis or research project, are required for the Earth Science concentration. Up to nine credit hours of approved transfer courses from other universities may apply to a program of study.
- Earth science educators may pursue online learning as part of an M.S. concentration in physical science teaching. This program is designed to provide graduate work to enhance the backgrounds of licensed chemistry, earth-space science, physics, or physical science teachers. Thirty or thirty-two hours are required, depending on a thesis or research project.

The Geospatial Analysis (GSA) Graduate Certificate Option

The certificate program is designed to provide training and competency in geographic information systems (GIS), remote sensing, global positioning system (GPS), and related technologies. The GSA graduate certificate may exist either within or independent of traditional graduate majors.

The certificate requires 16 graduate credit hours. A three-credit hour independent research project involving some application of geospatial analysis technology is required.