GEOSCIENCE MINOR

This Minor is available to help prepare for careers in the field of Geoscience.

Code	Title	Credits	Completed
Minor Requirements (20 credits)			_____
Core Courses			_____
ENST-201	Earth Cycles & Systems	4	_____
ENST-303	Life Sust. in Earth's History	4	_____
Select **three** of the following electives:		12	_____
ASTR-101	Intro to Planetary Astronomy		_____
ENST-300	Geoscience Issues & Society		_____
ENST-302	Apocalypse Science and Society		_____
ENST-320	Earth's Climate: Past & Future		_____
ENST-323	Mapping Nature With GIS		_____
ENST-461	Freshwater Science and Systems		_____
MET-225	Meteorology		_____
Total Credits		**20**	_____

**Please note some courses have prerequisites.

Upon completion of the Geoscience Minor, students will be able to:

- Make observations of a rock's texture, mineralogy, and structure, and from these facts make inferences about the rock's history and mode of origin, as well as its significance to understanding the larger processes acting within the Earth or on the Earth's surface.
- Make observations of landscape features in the field and on maps and other imagery and infer the processes acting to shape that landscape, as well as their significance to understanding the larger processes of the Earth system.
- Utilize topographic maps to visualize Earth's features, demonstrating an understanding of map projections, map scale, map orientation, and utilizing coordinate systems for plotting of map locations.
- Describe the Scientific Theory of Plate Tectonics, provide evidence in its support, and apply it to understanding landform development and the distribution of various resources.
- Demonstrate comprehension of the scale of geologic time, and the rates of changes in the Earth system.
- Identify major events in the history of the Earth and describe their impacts on the Earth's surface, the oceans, the atmosphere, and life.
- Describe the Earth's energy balance (Earth-Sun relationship) and energy re-distribution systems (global atmospheric and ocean circulation patterns, and resulting climate zones, in turn determining of weathering regimes, hydrologic activity, soil types, and biomes).
- Describe the Earth as a dynamic system of solid, liquid, gaseous and living components, connected through the cycling of matter and energy, including the concepts of dynamic equilibrium and feedback loops.
- Use data to model Earth Systems and predict the response of system components to disturbance, applying the concepts of dynamic equilibrium and feedback loops.
- Critique geoscience-related news stories from a scientific perspective.
- Evaluate human impact on the Earth system.
- Practice how science works via inquiry, observation, verification, reason and critical thinking.
- Prepare and interpret visual presentations (maps, graphs, etc…) of relevant earth science data.