EAS 2250 The Earth System

Course information provided by the Courses of Study 2022-2023.

EAS 2250 provides a broad math-, physics-, and chemistry-based introduction to the earth sciences, including geology, paleontology, oceanography, and atmospheric science. Topics covered include formation of the Earth, the chemistry and physics of the Earth's interior, plate tectonics, weathering and erosion, soil development, stream and groundwater flow, volcanism and crustal deformation, the evolution of life, ocean and atmospheric structure, circulation and heat transport, ocean waves and tides, generation of storms, seawater chemistry, mineral and energy resources, and climate change.

When Offered: Fall, Spring.

Prerequisites/Corequisites: Prerequisite: MATH 1110 or MATH 1910.

Distribution Category: (OPHLS-AG, PBS-AS, PHS-AS) Course Attribute: (CU-SBY)

Outcomes:

Describe and use the scientific process; i.e. explain how theories are built upon observations and how both are tested and revised. Be able to give Earth-related examples of this process.

Explain how fundamental physical, chemical, and biological principles shape the planet Earth, providing concrete examples. Explain the place of the Earth in the cosmos: specifically how and when it formed, and how it continues to evolve through processes such as plate tectonics, erosion and sedimentation, etc. Describe the key observations that have led scientists to this present theory of Earth.

Describe the history of life on Earth and explain how natural selection and evolution has led to the current diversity of organisms on Earth, including man. Explain how life has affected and changed the Earth.

Be able to participate knowledgeably and intelligently in discussions of public policy related to earth science, particularly with respect to hazards, such as earthquakes and volcanoes, and resources such as water, mineral deposits, hydrocarbons, etc.; and the impact of man's activities on the Earth, particularly including climate change.

Enrollment Information		Syllabi: none				
Regular Academic Session. Choose one lecture and one laboratory. Combined with: ENGRD 2250						4 Credits Graded
9682	LEC 001	TR Snee Hall	2:45pm - 4:00pm Geological Sci 2146	Jan 23 - May 9, 2023	Lohman, R	•
Instruction Mode: In Person						
Prerequisite: MATH 1110 or MATH 1910.						
9756	LAB 401	W	2:40pm - 5:10pm	Jan 23 - May 9, 2023	Lohman, R	•
	Snee Hall Geological Sci 1146					
Instruction Mode: In Person						
10347	LAB 402	F	11:20am - 1:50pm	Jan 23 - May 9, 2023	Lohman, R	•
		Snee Hall Geological Sci 1146				
Instruction Mode: In Person						