



EARTH, WIND, AND FIRE

INTRODUCTION TO GEOSCIENCE

Earth, Wind, and Fire is a course in geoscience literacy. It covers the fundamentals of how the Earth works, and how its various systems—the lithosphere, atmosphere, hydrosphere, and biosphere—interact to form the complex world in which we live. Geoscience is the study of the Earth. It is an integrated science drawing on the fundamental principles of physics, chemistry, biology, and geosciences to explain Earth processes. Many of the most complex and interesting scientific problems of this century, such as energy resources, water supply, and climate change, require geologic thinking skills to solve. This class introduces students to the major areas in geoscience and helps them develop critical, creative, and geologic problem-solving skills, as applied to 21st century scientific problems.

Students will experience curriculum designed by the faculty at The University of Texas at Austin. Students can earn three hours of UT credit with feedback and assessment provided by UT course staff.

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BIG IDEAS



HOW THE SOLID EARTH FUNCTIONS

The Earth as a system, plate tectonics, the rock record, geologic time, geologic hazards

HOW THE FLUID EARTH FUNCTIONS

Water cycle, groundwater, rivers, ocean and atmospheric circulation, climate, climate change, feedback loops

HOW HUMANS INTERACT WITH THE EARTH

Earth resources, sustainability, stewardship, climate change, scientific debate and discussion

HOW LIFE ON EARTH EVOLVED

Earth and life origins, change through time, extinction, population growth theory

TRANSFERABILITY

3 College Credits

UT Course Code: GEO 302E

PRE-REQUISITES

Biology or IPC

Recommended or concurrent enrollment:

Chemistry

TECHNOLOGY

Computer, Laptop, Chromebook, or Tablet Access

PEDAGOGY

Concept Sketches

Peer Instruction