G 202 : GEOLOGY II - EARTH'S SURFACE

Transcript title
Geology II

Credits
4

Grading mode
Standard letter grades

Total contact hours
60

Lecture hours
30

Lab hours
30

Recommended preparation
G 201.

Course Description
Examines Earth's dynamic landscapes through the lens of surface processes. Uses a geologic perspective to consider how humans and the geologic world impact each other. Second course in sequence.

Course learning outcomes
1. Explain the foundational theories of geology and the evidence used to construct them.
2. Apply the skills of scientific thinking such as making observations and interpretations and testing hypotheses.
3. Evaluate the role of humans in the process of landscape evolution.
4. Sustainability outcome: Explain the interconnectedness of environmental, social, and economic systems in the context of geology.
5. Sustainability outcome: Analyze the major environmental, social, and economic challenges and potential solutions of our time using a systems thinking approach.

Content outline
- The scientific process (how scientific knowledge is created)
- Earth systems and the hydrologic cycle
- Surface processes and landscape evolution
- Isostasy and mountain-building
- Mass wasting (landslides)
- Fluvial environments (rivers)
- Glacial environments (glaciers)
- Sediment transport via landslides, rivers, glaciers, and human activities
- Climate change

Required materials
Field trips often substitute for labs, with options to ensure accessibility for every student. Transportation will be provided.

General education/Related instruction lists
- Science Lab