

G 161 : FIELD GEOLOGY: STUDY OF LANDSCAPE EVOLUTION

Transcript title

Field Geo: Landscape Evolution

Credits

3

Grading mode

Standard letter grades

Total contact hours

70

Lecture hours

10

Lab hours

60

Course Description

Introduces students to the processes by which landscapes evolve in a field based setting. Learn how to observe the landscape using methods from field sciences such as geology and ecology, and then apply ideas from these sciences to interpret how landscapes change. The course will take place primarily outdoors, including hiking to field sites and camping for an extended period of time.

Course learning outcomes

1. Observe and describe evidence of landscape evolution.
2. Create and test hypotheses to explain landscape evolution.
3. Construct and communicate an evidence-supported narrative of landscape evolution.

Content outline

• Geologic principles of Landscape Evolution, including topics such as Erosion Sediment Transport, Mountain Building, Volcanism, Glaciation, and Mass Wasting • Interdisciplinary principles of Landscape Evolution, including topics such as Ecological Succession, Disturbance Regimes and Climate. • Field science skills including scientific observations and measurements, map reading, and description of basic rock types and plant communities

Required materials

Students will need to supply personal hiking and camping gear, including hiking boots, clothing appropriate for severe weather, sleeping bag, sleeping pad, and tent or other shelter. If these supplies are prohibitively costly, additional resources are available, please contact instructor for assistance. Every student should feel encouraged to take this course, regardless of personal equipment.

General education/Related instruction lists

- Science Lab