

Geomorphology

Course # EAES 2046

Credits 6

Prerequisites and/or Co-requisites: Introduction to Earth and Environmental Sciences

Course Description

Geomorphology examines the Earth's surface and is essential for addressing various environmental and engineering challenges. It has even become an important tool for understanding how far-off planets like Mars and Venus have evolved to their current state. This course is about earth's landscape, its present form, and the processes responsible for its large-scale organization. Students will gain insights into the formation and ongoing transformation of their surroundings, with a special emphasis on the mountainous regions of Central Asia.

Course Learning Outcomes

Upon the completion of the course, students will be able to:

- Explain principal terms, definitions and theories of geomorphology.
- Describe landforms and land forming processes in different climate zones and tectonic regimes.
- Explain different theories and models for landscape evolution.
- Discuss the development of micro to mega scale landforms and their lifespans
- Assess the mode of formation, age and history for landforms in mountain environments of Central Asia
- Compare the formation of large-scale landforms involving both exogenous and endogenous processes

Course Assessments and Grading

| Item | Weight |
|---------------------------------------|--------|
| Participation and in-class activities | 10% |
| Lab Assignments (5 in total) | 25% |
| Fieldwork reports (2 in total) | 20 % |
| Mid-term Exam | 15% |

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| Final Exam | 30% |
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