

Environmental Geoscience

Earth Sciences 303W

Section: D100

Term: 2008 Spring

Instructor: Dr. Brent Ward

Discussion Topics: REQUIREMENT DESIGNATION: W

Environmental geoscience is an applied branch of Earth Science that examines the relationship between people and their geologic habitat. There will be an emphasis on topics and examples that relate to British Columbia. This course will be writing intensive with an emphasis on communicating your professional recommendations to decision makers.

Course Topics

1. Introductory concepts: human interaction with the geologic environment
2. Terrain types and terrain maps
3. Natural hazards and their mediation: mass-movements, volcanic, floods, earthquakes
4. Terrain analysis and the forestry industry
5. Groundwater utilization
6. Environmental geochemistry and impacts and consequences of resource extraction
7. Urban geology
8. Global change and its affects

Field trips:

1. Forestry related geoscience, terrain types, landslides, Chilliwack Valley.
2. Urban Geology, North Shore Slopes of Burrard Inlet.

Course Organization:

One 2-hour lecture and one 2-hour laboratory class per week.

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The field sessions will take all day (we will leave campus at 8:30 am (sharp!) and return at 6:30/7:00 PM). Students will require basic fieldgear (boots, raingear, etc.), a lunch and must have a camera. You will also hand in your field notes with your field report.

Grading: Examinations:

Midterm (Tues Oct 19) 15 %

Final 25 %

Field reports 35 %

Labs 15%

Quick writes 10%

Required Texts: Environmental Geology, Eighth Edition, Edward A. Keller, Prentice Hall,
ISBN:0-013-022466-9

Recommended Texts: None

Materials/Supplies: None

Prerequisite/Corequisite: 75 Credit hours including six credit hours in Earth Sciences and GEOG213.

Notes: "Be aware that during the field trip there will be period of strenuous hiking, hiking close to cliffs and crossing roads with busy traffic. Appropriate clothing and footwear should be worn. Further details regarding safety, food, housing and field supplies will be discussed prior to the field trip."

There will be a supplementary fee.

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.