

# G 202 : Earth Surface Processes

Introduces physical geology which deals with mass wasting, streams, glaciers, deserts, beaches, groundwater, and use of topographic maps. Includes a weekly lab.

Physical Geology G202 is intended for both geology majors and non-majors, and is the second term of a year of beginning college geology. Physical Geology is concerned with earth materials and geologic processes acting on the earth. G202 deals mainly with surficial geologic processes. This course can be used to partly fulfill graduation requirements for the Associate Degree, and has been approved for block transfer. The text and materials have been chosen by the faculty and the emphasis of the course will be the viewpoint of the author(s). This includes the concepts of geologic time and the evolution of the Earth.

**Credits** 4

**Prerequisites**

Equivalent placement test scores also accepted. MTH 95 or MTH98 accepted.

**Subject**

Geology

**Course Outcomes**

Upon completion of the course students should be able to:

- Use an understanding of landform characterization and classification to infer the geologic processes which formed specific landforms.
- Analyze how earth materials, uplift, subsidence, erosion, transport, deposition, climate, biological activity, and time interact to create landscapes.
- Access earth science information from a variety of sources, evaluate the quality of this information, and compare this information with current models of earth surface processes, identifying areas of congruence and discrepancy.
- Make field and laboratory-based observations and measurements of landforms and/or surface processes, use scientific reasoning to interpret these observations and measurements, and compare the results with current models of earth surface processes identifying areas of congruence and discrepancy.
- Use scientifically valid modes of inquiry, individually and collaboratively, to critically evaluate the hazards and risks posed by flooding, slope processes and coastal erosion both to themselves and society as a whole, evaluate the efficacy of possible ethically robust responses to these hazards and risks, and effectively communicate the results of this analysis to their peers.
- Assess the contributions of physical geology to our evolving understanding of global change and sustainability while placing the development of physical geology in its historical and cultural context.

**Prerequisite Courses**

WR 115

RD 115

MTH 95

MTH 98