G 207 : Geology of the Pacific Northwest

Introduces the regional geology of the Pacific Northwest with emphasis on Oregon geology. Includes basic geologic principles, earth materials and geology of Pacific Northwest provinces.

Geology of the Pacific Northwest (G207) is a one-term introductory course in geology. The purpose of this course is to acquaint the student with basic geologic principles and the general geology of the Pacific Northwest. The emphasis is on the geology of Oregon and Washington. 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 geologic time scale and the evolution of the Earth.

Credits 3

Prerequisites

Equivalent placement test scores also accepted. MTH 58 or MTH 65 accepted.

Subject

Geology

Course Outcomes

Upon completion of the course students should be able to:

- Use an understanding of earth materials and landforms to infer the surficial and internal processes which formed the landscape and underlying geology of the physiographic provinces of the Pacific Northwest.
- Use an understanding of plate tectonics and surficial processes to unravel the sequence of geologic events which have acted over time to create the physiographic provinces of the Pacific Northwest from diverse geologic terranes.
- Access earth science information about the Pacific Northwest from a variety of sources, evaluate the quality of this information, and compare this information with current models of the formation and development of the physiographic provinces of the Pacific Northwest, identifying areas of congruence and discrepancy.
- Make field and laboratory based observations and measurements of earth materials and landforms, use scientific reasoning to interpret these observations and measurements, and compare the results with current models of geological processes affecting the Pacific Northwest, identifying areas of congruence and discrepancy.
- Use scientifically valid modes of inquiry, individually and collaboratively, to critically evaluate the hazards and risks posed by the geological processes which are still shaping the Pacific Northwest both to themselves and society as a whole, evaluate the efficacy of possible ethically robust responses to these risks, and effectively communicate the results of this analysis to their peers.
- Assess the contributions of physical and historical geology to our evolving understanding of global change and sustainability while placing the development of the geology of the Pacific Northwest in its historical and cultural context.

Prerequisite Courses

WR 115
RD 115
MTH 58
MTH 65