Geology is the study of the Earth: its composition, structure, history and the processes which shape the Earth. Geologists investigate landscapes and rocks to discover the story of how the Earth formed and developed over geologic time. Geologists examine problems related to earth hazards, resources and environmental quality and then work toward developing corrective measures. Geology coursework is an important part of many college programs.

The G 201, G 202, G 203 courses introduce students to the study of geology while preparing them for further study in the earth science field, include a lab component, and are on the PCC General Education course list. The G 147, G 148, G 184 courses introduce students to specific topics within geology, include a lab component, and are on the PCC General Education course list. The G 207, G 208, G 209 courses introduce students to specific topics within geology and do not include a lab component. The G 160, G 161, G 200A, G 200D, G 200E, G 200F, G 200G field experiences courses use field trips to introduce students to the regional geology of the Pacific Northwest. The independent study course, G 298A, allows students to pursue individualized study and research projects. Geology courses can be taken individually or in any sequence.

G 147. Geology of the National Parks. 4 Credits.
Explores the geology found in our national park system. Examines basic geologic processes which created park landscapes, and the role of society in creation, maintenance and enjoyment of the national park system. Includes a weekly lab. Prerequisite: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/AAS, Science, Math, Computer Science/AGS, Science, Math, Computer Science/AAS, Science, Math, Computer Science/ASOT-B, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAS, Science, Math, Computer Science/AAOT.

G 148. Volcanoes and Earthquakes. 4 Credits.
Explores the Earth’s volcanism and seismicity examining its nature, geographic distribution, frequency, magnitude, and relation to plate tectonics. Covers the assessment of hazards and risks associated with volcanoes and earthquakes and how communities can manage these hazards and risks. Includes a weekly lab. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/AAS, Science, Math, Computer Science/ASOT-B, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAOT, Science, Math, Computer Science/ASOT-B.

G 160. Geology: Oregon Coast. 2 Credits.
Designed to introduce the relationships between the biology and geology of the Oregon Coast.

G 161. Geology: Great Basin/Cascades. 2 Credits.
Introduces the relationships between the biology and geology of the Great Basin and/or Cascades geographical area. Explores the geologic history of the Great Basin and/or Cascades geographical area and the relationships between geology and the plants and animals of these areas. Includes a four-day field trip to the Great Basin and/or Cascades geographical area for field experience of concepts covered in the lecture portion of the class.

G 184. Global Climate Change. 4 Credits.
Covers characteristics of Earth’s climate system. Includes the atmosphere, ocean, biosphere, and solid Earth as well as past, present, and future climate change and future mitigation and adaptation efforts. Includes a weekly lab. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/ASOT-B, Science, Math, Computer Science/AGS, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAOT.

G 200A. Geology Field Studies. 2 Credits.
Introduces basic concepts of geology through field experience. Includes both lecture and field components. Content varies based on site location. Prior geology experience recommended. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available.

G 200D. Geology Field Studies. 1 Credit.
Introduces basic concepts in geology through lecture and field trip. Content varies based on site location. Prior geology experience recommended. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available.

G 200E. Geology Field Studies: Mount St. Helens. 1 Credit.
Introduces basic concepts in geology through lecture and a field trip in the vicinity of Mount St. Helens. Prior geology experience recommended. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available.

G 200F. Geology Field Studies: Pacific Northwest Coast. 1 Credit.
Introduces basic geology concepts through lecture and a field trip in the vicinity of the Pacific Northwest Coast. Prior geology experience recommended. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available.

G 200G. Geology Field Studies Columbia River Gorge. 1 Credit.
Introduces basic concepts in geology through lecture and a field trip in the vicinity of the Columbia River Gorge. Prior geology experience recommended. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement. Audit available.

G 201. Earth Materials and Tectonics. 4 Credits.
Introduces physical geology which deals with minerals, rocks, internal structure of the earth, and plate tectonics. Includes a weekly lab. Prerequisite: (WR 115 and RD 115) or IRW 115 and (MTH 95 or MTH 98) or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/AS, Science, Math, Computer Science/AAOT, Science, Math, Computer Science/ASOT-B, Science, Math, Computer Science/AGS, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAOT.

G 202. Earth Surface Processes. 4 Credits.
Introduces physical geology which deals with mass wasting, streams, glaciers, deserts, beaches, groundwater, and use of topographic maps. Includes a weekly lab. Prerequisite: (WR 115 and RD 115) or IRW 115 and (MTH 95 or MTH 98) or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/ASOT-B, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAOT, Science, Math, Computer Science/AAOT.

G 203. Evolution of Planet Earth. 4 Credits.
Introduces historical geology which deals with geologic time, fossils, stratigraphic principles, and the geologic history of the North American continent. Includes a weekly lab. Recommendation: completion of G 201 or G 202 or GS 106. Prerequisite: (WR 115 and RD 115) or IRW 115 and (MTH 95 or MTH 98) or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/ASOT-B, Science, Math, Computer Science/AAOT, Science, Math, Computer Science/AGS, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAOT.
G 208. Volcanoes and Their Activity. 3 Credits.
Covers the origin, activity, products, classification, and hazards of volcanoes. Prerequisite: (WR 115 and RD 115) or IRW 115 and (MTH 58 or MTH 65) or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/AAOT, Science, Math, Computer Science/AS, Science, Math, Computer Science/AAS, Science, Math, Computer Science/AGS.

G 209. Earthquakes. 3 Credits.
Covers the nature and origin of earthquakes, the characteristics of seismic waves, how earthquakes are measured, the hazards of earthquakes, and the historical and geological record of earthquakes. Prerequisite: (WR 115 and RD 115) or IRW 115 and (MTH 58 or MTH 65) or equivalent placement. Audit available. This course fulfills the following GE requirements: Science, Math, Computer Science/AAOT, Science, Math, Computer Science/AAS, Science, Math, Computer Science/AGS, Science, Math, Computer Science/AS.

G 298A. Geology Independent Study. 1-4 Credit.
Provides an opportunity to work independently on an individualized area of study within geology under the sponsorship of geology faculty. Prerequisites: (WR 115 and RD 115) or IRW 115 and MTH 20 or equivalent placement, and Instructor permission.