

Date Submitted: 01/17/19 4:53 pm

Viewing: **G 207 : Geology of the Pacific Northwest**

Last approved: 03/19/15 12:56 pm

Last edit: 02/02/19 7:14 am

Changes proposed by: [eriks.puris](#)

Catalog Pages referencing this course	General Education/Discipline Studies Geology
Programs referencing this course	ELECTV-AVS01: Aviation Science Program Electives

General Information

In Workflow

1. [G SAC Chair](#)
2. [G SAC Administrative Liaison](#)
3. [Curriculum Office-Curriculum](#)
4. [Curriculum Committee Chair](#)
5. [Dean of Instruction - Cascade](#)
6. Dean of Academic Affairs
7. VP Academic Affairs
8. Ready for Banner
9. Banner

Approval Path

1. 01/18/19 12:55 pm
[eriks.puris](#): Recommended for G SAC Chair
2. 01/18/19 1:10 pm
[alyson.lighthart](#): Recommended for G SAC Administrative Liaison
3. 01/27/19 3:00 pm
[sally.earll](#): Recommended for Curriculum Office-Curriculum
4. 02/19/19 6:15 am
[ann.cary](#): Recommended for Curriculum Committee Chair

History

1. Aug 12, 2014 by [jmorfin](#)
2. Mar 19, 2015 by [stimmins](#)

Submitter:	User ID: eriks.puris stimmins	Phone: x7627 7813
Course Prefix	Geology (G)	
Course Number	207	
Course Type	Lower Division Collegiate	
Implementation Term	Fall 2019 201502	
Course Title	Geology of the Pacific Northwest	
Transcript Title	Geology of the Pacific N.W.	

	Lecture: Meets 3 hours per week for 10 weeks. Total student academic engagement hours per quarter: 90
Contact Hours per Quarter	Lec/Lab: Meets 0 hours per week for 10 weeks. Total student academic engagement hours per quarter: 0
	Lab: Meets 0 hours per week for 10 weeks. Total student academic engagement hours per quarter: 0
	Total student academic engagement hours for course: 90
Credits	3
Please indicate the basis for creating this experimental course:	
Justification for change:	Revising/updating MTH prereqs
Does this course require a special additional fee set up through the bursar's office?	No
Special Fee	
Course Is Repeatable	No
If this course is equivalent to other currently active course(s), please indicate	
If this course is mutually exclusive with other currently active course(s), please indicate	
If the SAC intends to allow this course to be co-scheduled with other currently active course(s), please indicate	
Grading Option(s)	Audit Letter Grade Pass/No Pass
Default Grading Option	Letter Grade
Course Description	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. Recommendation: Prior geology experience . experience strongly recommended. Audit available.
Prerequisites	(WR WR-115, RD-115 and RD 115) MTH-65 or IRW 115 and (MTH 58 or MTH 65) or equivalent placement. placement-test scores.
Pre/Concurrent Courses	
Corequisites	
General Education/Discipline Studies Designation	
General Education	Mathematics, Science, Computer Science

Areas Satisfied

Standard Prerequisites

Does this course need to opt-out of the standard prerequisites? No

Cultural Literacy Designation

Does this course satisfy the Cultural Literacy Designation Criteria No

Course Content and Outcome Guide (CCOG)

Addendum to Course Description 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. Regarding the teaching of basic geologic principles (such as geologic time and the theory of evolution), the Portland Community College Geology Department stands by the following statements about what is science.

1. Science is a fundamentally non-dogmatic and self-correcting investigatory process. A scientific theory is neither a guess, dogma, nor myth. The theories developed through scientific investigation are not decided in advance, but can be and often are modified and revised through observation and experimentation.
2. "Creation science," also known as scientific creationism, is not considered a legitimate science, but a form of religious advocacy. This position is established by legal precedence (Webster v. New Lenox School District #122, 917 F.2d 1004).

Outcomes Upon completion of the A student who successfully completes this course students should be able to:

1. ~~1.~~ 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.
2. ~~2.~~ 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.
3. ~~3.~~ 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, Northwest identifying areas of congruence and discrepancy.
4. ~~4.~~ Make field 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, Northwest identifying areas of congruence and discrepancy.
5. ~~5.~~ 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

Aspirational Goals

Course Activities and Design The material in this course will be presented in a lecture/discussion format Other educationally sound methods may be employed such as guest lectures, field trips, research papers, and small group work.

**Outcomes
Assessment
Strategies**

At the beginning of the course, the instructor will detail the methods used to evaluate student progress and the criteria for assigning a course grade. The methods may include one or more of the following tools: examinations, quizzes, homework assignments, research papers, small group problem solving of questions arising from application of course concepts and concerns to actual experience, oral presentations, or maintenance of a personal work journal.

**Course
Content:
Themes,
Concepts,
Issues and
Skills**

1. Locate the physiographic provinces of the Pacific Northwest on a map
2. Explore the rock types and geologic features of each of the physiographic provinces of the Pacific Northwest
3. Identify and describe the major features of the Earth's surface and interior
4. Describe the major types of materials that make up the Earth's crust and explain how each material relates to the rock cycle
5. Describe the geologic processes and features that occur at plate boundaries
6. Describe the impact of surficial processes on landscapes and geologic materials
7. Identify the role of volcanism and faulting in the development of the High Lava Plains and the Basin and Range Provinces
8. Describe the roles of flood-type volcanism, catastrophic flooding, and glaciation in the development of the Columbia Plateau
9. Compare the geologic histories of the Western Cascades, High Cascades, and North Cascades provinces
10. Discuss the formation of the Puget Sound and Willamette Valley
11. Describe the role of accretion and crustal deformation in the development of the Klamath Mountains and Blue Mountains
12. Describe the role of subduction in the development of the Coastal ranges and the Cascades
13. List the major divisions of the standard geologic time scale

**Course reviewer
comments**

Key: 3996