

Date Submitted: 01/17/19 4:28 pm

Viewing: **GS 106 : Physical Science (Geology)**

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

Last edit: 02/02/19 7:01 am

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

Catalog Pages referencing this course	General Education/Discipline Studies General Science Geology
Other Courses referencing this course	This course is listed in the Catalog Description for: G 203 : Evolution of Planet Earth

General Information

In Workflow

1. [GS SAC Chair](#)
2. [GS 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 12:47 pm
[eriks.puris](#):
Recommended for GS
SAC Chair
2. 01/18/19 1:13 pm
[alyson.lighthart](#):
Recommended for GS
SAC Administrative
Liaison
3. 01/27/19 3:08 pm
[sally.earll](#):
Recommended for
Curriculum Office-
Curriculum
4. 02/19/19 6:24 am
[ann.cary](#): Recommended
for Curriculum
Committee Chair

History

1. Aug 13, 2014 by [jmorfin](#)
2. Mar 19, 2015 by
[stimmins](#)

Submitter:	<u>User ID:</u> eriks.puris stimmins	<u>Phone:</u> x7627 7813
Course Prefix	General Science (GS)	
Course Number	106	
Course Type	Lower Division Collegiate	
Implementation Term	Fall 2019 201502	
Course Title	Physical Science (Geology)	
Transcript Title	Physical Science (Geology)	

	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 3 hours per week for 10 weeks. Total student academic engagement hours per quarter: 30
	Total student academic engagement hours for course: 120
Credits	4
Please indicate the basis for creating this experimental course:	
Justification for change:	Updating math, reading, and writing prerequisites.
Does this course require a special additional fee set up through the bursar's office?	Yes
Special Fee Amount	\$12.00
Special Fee Code	T111
Special Fee	\$12.00
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	Covers minerals, rocks, volcanism, earthquakes, plate tectonics, erosion and deposition by wind, glaciers and streams, weathering, fossils , fossils and geologic history. Includes a weekly lab. 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
Areas Satisfied Mathematics, Science, Computer Science

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 The purpose of this course is to gain knowledge and appreciation of geology through lecture/discussion sessions and laboratory experiences. It is a one-term survey course that may be included as part of the years sequence in physical science for college transfer credit.

The course will have as many of the following components as feasible: lectures, discussions, lab activities, videos, slides, CDs, live television, field trips, and computer-aided instruction.

The text and materials for the course have been chosen by the faculty, and viewpoints shall be that of the author(s). This includes the topics of relativity, the geologic time scale, evolution of the Earth and its atmosphere, the solar system, the galaxy, and the universe.

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.

- 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.

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

1. Use an understanding of the rock cycle, plate tectonics and surface processes to explain how the Earth's surface wears away and is renewed.
2. Use an understanding of geologic dating methods and the interpretation of geologic deposits to explain how geologists reconstruct the history of the Earth.
3. Access earth science information from a variety of sources, evaluate the quality of this information, and compare this information with current models of geologic **processes**, ~~processes~~ identifying areas of congruence and discrepancy.
4. Make field and **laboratory-based** ~~laboratory-based~~ observations and measurements of earth materials and landscapes, use scientific reasoning to interpret these observations and measurements, and compare the results with current models of geologic processes identifying areas of congruence and discrepancy.
5. Use scientifically valid modes of inquiry, individually and collaboratively, to critically evaluate the hazards and risks posed by geologic processes 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.

Aspirational Goals

Course Activities and Design The laboratory is not separated from the lecture but will usually be correlated in such a way as to reinforce the materials being discussed in the lecture session. It is necessary for the student to successfully complete the laboratory section of the course in order to earn a grade for the course. Math will occasionally be used for solving simple ratio problems, as will be the use of maps and graphs.

**Outcomes
Assessment
Strategies**

The instructor will choose from the following methods of assessment: exams, quizzes, lab exercises, written reports, oral presentations, group projects, class participation, homework assignments, and field trips. The instructor shall detail the methods being used to the student at the beginning of the course.

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

(NOTE: the topics may be chosen in any order by the instructor)

- Explain rock and mineral classification and identification
- Explain how these materials form and how they are related to each other
- Describe the major types of landscapes that make up the earth's surface and how they are formed
- Describe the earth's internal structure and the processes shaping it
- Explain the relationship between the processes that shape landscapes and those that shape internal structure.
- Explain the relationship between the processes that shape landscapes and structure and those that form crustal materials
- Explain how geologic histories are constructed
- Identify the major parts of and events in the geologic calendar
- Discuss the personal and societal relevance of these topics

Topics to be covered include:

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Course reviewer
comments

Key: 4102