

OSC025 – PHYSICAL GEOLOGY WITH LAB

Credit Hours: 4 Semester Hours
Prerequisites: None
Suggested Textbook Topics: Minerals; Rocks and fossils; Igneous rocks and activity; Weathering, erosion and mass wasting; Igneous, sedimentary and metamorphic rocks; Earthquakes and the Earth's interior; Plate tectonics; Radiometric dating; Solar Nebula Theory; and Water systems - running water and ground water.
Related TAG: Geology
General Course Description: Earth's interior, theory of plate tectonics and the rock cycle. Internal processes: plate tectonics and the formation of geologic structures; volcanoes, earthquakes, and mountain building. Surface processes: weathering, erosion, and mass wasting. Hydrologic cycle and changing landscapes. Energy and mineral resources. Laboratory component stresses introduction to and use of basic scientific methods and problem solving.
A minimum of 70% of the Student Learning Outcomes, including essential outcomes marked with an asterisk (*), must be met.
Students will be able to:
1. Utilize the methods of scientific inquiry.*
2. Explain characteristics of Earth systems, such as climate change.
3. Recognize properties and classification of Earth materials and natural resources and understand their formation.
4. Describe surficial processes and their rates including weathering, erosion, and landform evolution.
5. Recognize glacial and hydrologic systems and features.
6. Demonstrate an understanding of the development and application of the theory of plate tectonics.*
7. Describe and recognize applications and impacts of Earth sciences to society.
8. Explain the origin of the Earth in the context of the Solar Nebula Theory and deep time as confirmed by radiometric dating.

Lab Course Learning Outcomes:
9. Describe and recognize physical samples of minerals and rocks and interpret topographic and geologic maps.*
10. Demonstrate proper and safe use of experimental techniques and tools/instruments.

GEOLOGY TAG: PHYSICAL GEOLOGY WITH LAB TAG COURSE
FACULTY PARTICIPANTS
September 2016 - April 2017

Name	Institution
David Miller (Revision/Review Lead)	Clark State Community College
Daniel Holm (Sub-Co-Lead)	Kent State University
Anne Henry (Sub-Co-Lead)	Sinclair College
Jeff Snyder	Bowling Green State University
Jeff Richardson	Columbus State Community College
David Pierce	Lakeland Community College
Lawrence Kressek	The Ohio State University
John Peck	The University of Akron
Warren Huff	University of Cincinnati