

GEOL 1505 - Physical Geology

Fall 2026 Syllabus, Section 02, CRN 41099,

Credit hours: 4

Public Instructor Information

Instructor Title: Dr. Beej Spieler

Instructor Professional Qualifications:

Ph. D., Physical Geography, Kent State University - 2014

Master's of Science, Structural Geology, Kent State University - 2005

Bachelor's of Science, Earth Science Education, Youngstown State University - 2002

Instructor Office Location: Moser 2075

Instructor Office Phone: 330-941-2293

Course Description

1505. Physical Geology. A study of the various physical and chemical processes acting on and within the earth, and their products within the context of plate tectonics and their relevance to humans and modern society. The laboratory component includes identification of minerals and rocks, and the interpretation of topographic and geologic maps. Three hours of lecture, two hours of lab per week. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Essentials of Geology	Marshak	9780393644456

E-book or Hard copy.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 1	M - Introduction: What is Geology M - Classmate Scavenger Hunt W - Movie: Planet of Plates F - Lab: Intro to Plate Tectonics	
8/31	Chapter 2: The Way the Earth Works	M/W - The Way the Earth Works - Plate Tectonics F - Lab: Plate Tectonics	
9/7	MONDAY NO CLASS - LABOR DAY Chapter 3 - Minerals	W - Minerals F - Mineral Museum Scavenger Hunt F - Lab - Mineral ID	Mineral Selfie due Monday Sept. 14
9/14	Ch. 4 Igneous Rocks Ch. 5 The Wrath of Vulcan - Volcanic Eruptions	M - Igneous Rocks W - Volcanoes F - Lab - Dante's Peak	List and describe 5 volcanic hazards - due Wednesday 9/21
9/21	Ch. 5 Continued	M - Volcanoes - cont. W - Exam 1 review F - Exam 1 (Ch. 2, 3, 4, 5)	
9/28	Ch. 6 - Pages of the Past	M - Exam remediation W - Sedimentary Rocks F - Lab Intro to Rocks	



10/5	Ch. 7 - Metamorphism	M/W - Metamorphism: A Process of Change F - Lab - Sedimentary Rocks	Pet Rocks - Due Oct. 14 on Blackboard
10/12	Ch. 8 - Earthquakes Ch. 9 - Geologic Structures and Mountain Building	M - Intro video to earthquakes; Earthquakes lecture W - Geologic Structures; Geologic Structures diagrams F - Lab - Metamorphic Rocks	List and describe 5 earthquake hazards; due Oct. 16 on Blackboard Dr. Seuss topics and Partners due Oct. 19 via email (bjspieler@ysu.edu)
10/19	Ch. 10 - How Old is Old?	M - Geologic Time W - In class relative dating diagrams F - Lab - Geologic time	Minor Canyon diagrams due Oct. 23
10/26		M - Review for exam W - Exam 2 (Ch. 6, 7, 8, 9, 10) F - Lab - Topographic Maps F - Exam Remediation	
11/2	Ch. 13 - Unsafe Ground Ch. 14 - Streams	M - Mass wasting; Landslide video W - Streams and floods F - Podcast workday F - Lab - Stream features in Google Earth	
11/9	Ch. 17 -- Geology of Deserts	M/W - Agents of Erosion Podcast presentations F - Lab - Mill Creek Park virtual field trip	
11/16	Ch. 18 - Glaciers	M - Dr. Seuss project work day W - Glaciers and Ice Ages F - Lab - Ohio Glaciation	
11/23		M - Glaciers continued W and F - No Class Thanksgiving Holiday	
11/30		M - Dr. Seuss Presentations Round 1 W - Dr. Seuss Presentations Round 2 F - Dr. Seuss Presentations Round 3 F - Exam 3 Review	
12/7		FINAL EXAM MONDAY DEC. 7 10:30-12:30 (Ch. 13, 14, 17, 18)	

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