

Physical Geology Geology 104 Syllabus Spring 2019

Instructor: Lisa Siewert **e-mail:** lisa.siewert@uwsp.edu

Office Hours: SCI D331 M 9:30-10:30 and W 1:00-2:00; 282A Wausau Campus TTh 11:45-12:45; or by appointment

Lecture: MW 11:00-11:50 p.m. in SCI D102 until Spring Break, then online thereafter

Labs in SCI D324: 1) M 12:00-1:50 2) W 2:00-3:50

Geology Study Room: SCI D328

Required Textbooks: Earth: Portrait of a Planet 5th ed. By Stephen Marshak
Exercises in Physical Geology 12th ed by Hamblin and Howard

Learning Outcomes:

1. Apply scientific method with respect to plate tectonics & Earth's interior;
2. Understand the taxonomy of minerals & rocks
3. Interpret topographic & geologic maps;
4. Apply knowledge making predictions of Earth processes, resources & geohazards;
5. Assess the interrelationship of geologic processes, geologic events & life on Earth.

GEP Alignment: Students describe relevance of some aspect of geology to their lives and society.

Canvas: Powerpoints, videos, and worksheets are available on Canvas.

Student Responsibility: Students are required to read the textbook prior to class, attend class regularly and to take tests during the scheduled time. Students should interact in a positive, polite manner and engage in scientific inquiry via active participation in classroom exercises, discussions, lab and readings. Absences, lack of preparation and/or poor behavior as determined by Lisa will adversely impact your grade. Be mature, responsible and respectful.

Grading: Generally, the following division will apply to all course grades:

A	94-100%	B	84-86%	C	74-76%	D	64-66%
A-	90-93%	B-	80-83%	C-	70-73%	F	<63%
B+	87-89%	C+	77-79%	D+	67-69%		

Assignments: 15% of total course grade

Periodically throughout the semester we will have in-class activities and assignments. You are responsible for turning in all assignments by the due dates listed on Canvas. Sometimes, we'll do in-class activities which will be collected for points and those are not listed on the syllabus. If you do not contact me ahead of time for missing class, you will not be given the assignment. The lowest assignment score will be dropped from the gradebook.

Reading Quizzes: 20% of total course grade

There are assigned readings from our textbook. Every week you will take at least one reading quiz on Canvas. All reading quizzes are due by 11:59pm on the Sunday of the week that they are assigned. The lowest quiz score will be dropped from the gradebook.

Mid-term Exams: 40% of total course grade

This consists of 3 mid-term exams. Exams will be mostly multiple-choice, matching, and short answer format. No make-up exams will be given.

Lab: 25% of total course grade

Your lab will count for 20% of your overall course grade and will include 2 lab quizzes and weekly lab exercises. You must bring to each week's lab your lab manual, lecture text, pencils with erasers (pens are strongly discouraged in the lab). Lab is a required component in this course.

Attendance Policy: Attendance is required for all laboratory sessions. There is a strong correlation with student lecture attendance and success. While, I will not be taking attendance in lecture, there is a chance that some graded activities will occur without prior notice. Failure to attend will result in the loss of those points.

Disabilities: Students with disabilities of any nature are expected to meet with the instructor during the first week of classes to accommodate student needs.

Secrets of Success: Read assigned chapters *before* class. If a subject is not clear, ask questions at anytime. Ask for help/suggestions *before* the third exam.

- For more suggestions, check out: <http://www.wikihow.com/Take-Perfect-Lecture-Notes>
- 26 Free 28 minute Earth Revealed videos online at: <http://learner.org/resources/series78.html>
- Science Now: <http://www.pbs.org/wgbh/nova/sciencenow/archive/date-20050125.html>
- Science tutorials online: Kalman Khan Academy Free videos <https://www.khanacademy.org/>
- Great Short (5 minute) Geology Videos at <http://www.youtube.com/c/GeoScienceVideos>

****Tentative Schedule** Check Canvas for any updates!**

Week	Dates	Lecture Topic	Marshak Reading	Canvas Assignments (due Sundays 11:59pm)	Lab
1	1/23	Minerals	Chapter 5	RQ1; A1	<i>No lab</i>
	1/25	Minerals			
2	1/28	Continental Drift	Chapter 3	RQ2, RQ3; A2; L1A	L1B: Mineral Identification
	1/30	Plate Tectonics	Chapter 4		
	2/1	Plate Tectonics			
3	2/4	Igneous Rocks	Chapter 6	RQ4, RQ5, A3	Mineral Quiz
	2/6	Igneous Rocks			
	2/8	Weathering	Interlude B		
4	2/11	Sedimentary Rocks	Chapter 7	RQ6, RQ7, A4, L2A	L2B: Igneous Rocks
	2/13	Sedimentary Rocks			
	2/15	Metamorphic Rocks	Chapter 8		
5	2/18	Rock Cycle	Interlude C	RQ8, A5, L3A	L3B: Sedimentary Rocks
	2/20	Exam 1			
	2/22	Volcanoes	Chapter 9		
6	2/25	Volcanoes	Chapter 9	RQ9, RQ10, A6, A7 L4A	L4B: Metamorphic Rocks
	2/27	Earthquakes	Chapter 10		
	3/1	Earthquakes			
7	3/4	Crustal Deformation	Chapter 11	RQ11, RQ12, A8	Rock Quiz Study Day
	3/6	Crustal Deformation			
	3/8	Fossils	Interlude E		
8	3/11	Geologic Time & Stratigraphy	Chapter 12	RQ13	Rock Quiz
	3/13	Geologic Time & Stratigraphy			
	3/15	Exam 2			
9	3/18-24	<i>Spring Break</i>			
10	3/25-3/31	Earth Resources	Chapter 14 & 15	RQ14, RQ15, V1	L5: Geologic Time L6: Maps & Aerial Photos
11	4/1-4/7	Mass Wasting	Chapter 16	RQ16, V2	L7: Landforms of the US L8: Mass Movement
12	4/8-4/14	Streams & Floods	Chapter 17	RQ17, V3	L9: Stream Erosion & Deposition
13	4/15-4/21	Coastal Geology	Chapter 18	RQ18, V4	L10: Coastal Processes
14	4/22-4/28	Groundwater	Chapter 19	RQ19, V5	L11: Groundwater & Karst Topography
15	4/29-5/5	Deserts	Chapter 21	RQ20, V6, V7	L12: Eolian Processes
16	5/6-5/12	Glaciers & Ice Ages	Chapter 22	RQ21, V8	L13: Valley Glaciation L14: Continental Glaciation
17	5/15	Exam 3 12:30-2:30pm SCI D102			