Physical Geology Geology 104 Syllabus Fall 2018

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

Office Hours: SCI D331 MW 10:30-11:30; 282A Wausau Campus TTh 11:45-12:45; or by appointment

Lecture: MW 12:00-12:50 p.m. in SCI A201 with a 25% online component

Labs in SCI D324: 1) M 1:00-2:50 2) W 3:00-4:50

Geology Study Room: SCI D328

Required Textbooks: Earth: Portrait of a Planet 5th ed. By Stephen Marshak

104 Laboratory Manual, by Hefferan, 2017 Revised August 8, 2017

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.

D2L: Powerpoints, videos, and worksheets are available on D2L.

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:

Α	94-100%	В	84-86%	С	74-76%	D	64-66%
A-	90-93%	B-	80-83%	C-	70-73%	D-	60-63%
B+	87-89%	C+	77-79%	D+	67-69%	F	<59%

Mid-term Exams: 30% of total course grade

This consists of 3 mid-term exams at 10% of the total course grade each. Exams will be mostly multiple-choice, matching, and short answer format. No make-up exams will be given. Instead, the final exam will be comprehensive. The final exam will be divided into three sections, with each section containing material covered in exams 1, 2, 3. Should you improve your percentage on one of the sections, then that percentage will replace a previous exam score in the gradebook. For example, if you scored a higher percentage on section 2 of the final exam, then that percentage would replace your exam 2 score. This method will only affect one previous exam.

Final Exam: 15% of total course grade (Wednesday, December 19th 2:45-4:45pm SCI A201)

The final exam will be comprehensive. The final exam will be divided into three sections, with each section containing material covered in exams 1, 2, & 3. Should you improve your percentage on one of the sections, then that percentage will replace a previous exam score in the gradebook. This method will only affect one previous exam. For example, if you scored a higher percentage on section 2 of the final exam, then that percentage would replace your exam 2 score.

Lab & Assignments: 55% of total course grade

Your lab and assignments grade will count for 55% of your overall course grade and will include 2 lab quizzes. You must bring to each week's lab your lab manual, lecture text, pencils with erasers (pens are strongly discouraged in the lab), and colored pencils. Lab is a required component in this course. Missing 4 or more labs will result in failure of the overall course.

There are weekly reading worksheets (5 multiple choice questions based on assigned Marshak textbook chapter) and videos (links available on D2L). You will find these worksheets in the "quizzes" section of the course. Despite where they are found in D2L, these are NOT quizzes. You may start, save, close your browser, and return to the quiz several times. However, you may only *submit* the quiz once. They must be submitted by the due date. No late submissions will be allowed without *prior* (days not hours before the due date/time) approval by Lisa.

ALL assignments (online lab worksheets, reading quizzes, and video worksheets are due on the Sunday at 11:59pm. Check D2L for specific due dates.

Attendance Policy: Attendance is required for all laboratory sessions. Missing 4 labs (regardless of excuse or not) will result in failing the course. 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

Any changes will be announced in class and on D2L

Week	Dates	Lecture Topic	Marshak Reading	D2L Assignments (due Sundays 11:59pm)	Lab		
1	9/5	Minerals	Chapter 5	V1, RQ1	Plate Tectonics (online)		
2	9/10	Continental Drift	Chapter 3	V2 11 DO2 DO2	Minerals		
	9/12	Plate Tectonics	Chapter 4	V2, L1, RQ2, RQ3			
3	9/17	Igneous Processes	Chapter 6	V2 DO4 DOE	Igneous Rocks		
	9/19	Volcanic Processes	Chapter 9	V3, RQ4, RQ5			
4	9/24	Weathering	Interlude B	V4 DOC DO7	Sedimentary Rocks		
	9/26	Sedimentary Rocks	Chapter 7	─ V4, RQ6, RQ7			
5	10/1	Metamorphic Rocks	Chapter 8	DOG	Metamorphic Rocks		
	10/3	Exam 1		RQ8			
6	10/8	Geologic Time	Chapter 12	DO0	Lab Quiz 1		
	10/10	Stratigraphy	Chapter 12	RQ9			
7	10/15	Folding	Chapter 11	DO10	Topographic Maps		
/	10/17	Faulting	Chapter 11	RQ10			
8	10/22	Streams	Interlude F	V5, RQ11, RQ12	Streams		
	10/24	Floods	Chapter 17	V3, KQ11, KQ12			
9	10/29	Groundwater	Chapter 19	V6, RQ13	Groundwater & Karst		
9	10/31	Karst	Спарсет 19	V0, KQ13			
10	11/5	Aeolian Processes	Chapter 21	V7, L9, RQ14	Cadillac Desert (online)		
10	11/7	Exam 2		V7, L3, NQ14	Caumac Desert (Orimie)		
11	11/12	Glaciation	Chapter 22	V8, V9, RQ15	Glaciers		
11	11/14	Glaciation	<u> </u>	V0, V3, RQ13			
12	11/19	Climate Change	Chapter 23	V10, RQ16, RQ17	Coastal Processes		
12	11/21	Coastal Processes	Chapter 18	V10, NQ10, NQ17			
13	11/26	Coastal Processes	Chapter 18	V11, RQ18	Lab Quiz 2		
	11/28	Earth Interior	Chapter 2	VII, NQIO			
14	12/3	Earthquakes	Chapter 10	V12, RQ19, RQ20	Geologic Map		
1 T	12/5	Geologic Resources	Chapter 14				
15	12/10	Mass Wasting	Chapter 16	V13, RQ21** Due	Geologic Map		
	12/12	Exam 3		12/14/18	Geologic Map		
16	12/19	Final Exam SCI A201 2:45-4:45pm					