An Introduction to Physical Geology Spring 2018

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Office Hours: MWF 9-10 AM; TR 8:30-9:15 AM;
by appointment or if office door is open

Required Textbook: Essentials of Geology 4th or 5th edition by Stephen Marshak

Course Description: Physical geology is an introduction to the origin and physical properties of the planet we live on. Think of it as a type of owner's manual. This class will focus on the physical processes, properties, and continuously acting forces that make the Earth such a dynamic planet to live on. This class in not just about learning facts (although that will be required), but also learning to look at the world around you in a different way.

Course Objectives: At the end of this course, students should

- Be able to explain the origin and age of the planet.
- Have a working understanding of Plate Tectonic Theory.
- Understand the relationship and discriminate between minerals and igneous, sedimentary, and metamorphic rocks.
- Understand major geologic phenomena such as volcanoes, earthquakes, mountain building, weathering and erosion, etc.
- Have an appreciation for how geology affects their daily lives and society as a whole.

Course Policies:

Cell Phones: Your cell phones should be muted or off and put away during class time. "Lap Texting" and "surfing" is easily discernable, distracting, and disrespectful and will result in you leaving the class for the day. IF there is a need for you to have your phone on during a class (medical, family, job) I need to know about it at the beginning of the class. No phones will be permitted during testing (I also note how many times you look at your Apple Watch).

Attendance: I am required to take attendance in the course. Your attendance in the course (assuming you are paying attention) is the single-most defining element in being successful in this course. University policy allows for 2 absences in a course without penalty. In this course, you can miss up to 6 days for any reason. However, when you miss the 7th, your grade will be recorded as a failing grade regardless of your actual performance in the course. Arrive on time. I will end class on time.

Behavior: You are all adults. I expect that you will act like it. I will treat you like it. Be respectful of yourself and your peers. Disruptive behavior will not be tolerated. (No, I can't believe I have to actually have this policy but some of your predecessors have forced it upon us.)

Academic Honesty: I expect you to fulfill your academic obligations through honest and independent effort. If I have sufficient reason to believe you are cheating on any graded

work in this course, you will be dropped from the course with a failing grade. You may refer to the SHSU Academic Policy Manual, student section, Policy #810213 for specific language.

Americans with Disabilities Act: Any student with documented disabilities who may need classroom academic adjustments or auxiliary aids and services may request academic accommodations. Students must provide documentation from Services for Students with Disabilities (http://www.shsu.edu/dept/disability/) located in the Lee Drain Annex.

Grading and Grading Policies:

The course grade will be determined by the combined points accumulated in the lecture portion of this course and the laboratory component. The laboratory component is overseen by other faculty (Dr. Brian Cooper) and will have its own syllabus and expectations. Lecture (this class) will be 75% of your total grade and lab will be 25%.

Exams: There will be three midterm exams worth 100 points each and a comprehensive final exam worth 150 points.

Exam Dates:

Exam I:	February 15th
Exam II:	March 22nd
Exam III:	April 26th
Final:	
>9:30 to 10:50 TTh	May 10th, 9:30-11:30 AM*
>11:00 to 12:20 TTh	May 10th, 12:00-2:00 PM*

**You must attend YOUR course final!*

Quizzes: There will be 12 – 14 quizzes over assigned reading in your textbook. The top ten quiz grades will then be added up and the total will count as a fourth midterm exam (100 points total). These quizzes will be administered through the course Blackboard site. Quizzes will open by noon on each Monday and close at 11 PM the following Sunday. If you have issues with a quiz locking up, you must contact me ASAP.

Grading: The total number of points available in the lecture portion of the course is 550. Standard grading cutoffs of 90, 80, 70, and 60 percent will be used to determine your grade.

Extra Credit: There will be NO extra credit given in the course. There will also be NO curve.

Missed Exams: If you must miss a midterm exam, you have one week in which to make it up. After the exams are returned (one week after the exam), the missing grade will become a zero. Sometimes there are extenuating circumstances to this policy and they will be addressed on a case by case basis. There will be no make-up for the final exam.

Lecture Topics: ******Please Note****** The topics of lecture are in relative chronological order but are subject to change. The dates of the exams are set and the material to be covered will be clarified based on lecture topics completed.

Tentative Lecture Topics	*Relevant Reading Assignments*
1. Course Introduction	Prelude; *Chapter 1*
2. The Big Bang	*Chapter 1*
3. Birth of a Planet	*Chapter 1*
4. The Dynamic Earth	*Interlude D; Chapter 1*
5. Geologic Time	*Chapter 10; Chapter 11*
6. Plate Tectonics	*Chapter 2*
Approximate Exam 1	
7. Minerals	*Chapter 3*
8. Igneous Rocks & the Rock Cycle	*Interludes A & C; Chapter 4*
9. Sedimentary Rocks	*Chapter 6*
10. Sedimentary Systems	*Chapter 6*
11. Weathering and Erosion	*Interlude B; Chapter 6*
12. Metamorphic Rocks	*Chapter 7*
Approximate Exam 2	
13. Volcanoes	*Chapter 5*
14. Earthquakes	*Chapter 8*
15. Mountain Building & Geologic Structures	*Chapter 9*
16. Landslides and Mass Wasting	*Chapter 13*
17. Streams and Floods	*Chapter 14; Interlude F*
18. Groundwater	*Chapter 16; Interlude F*
Approximate Exam 3	
19. Glaciers and Ice Ages*	*Chapter 18*
20. Deserts*	*Chapter 17*

**probably will one get to one of these if at all*