

Geology 100/101 Syllabus: Physical Geology

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Please, when possible, use email to contact me, and only use the phone to leave messages.

Required Text in bookstore: Essentials of Geology, Stephen Marshak, 5/e, 2016, W. W. Norton and Co., 567 p. (Note: a 5/e is available too, but our bookstore is not selling it yet)

Other Possible texts:

Physical Geology, Plummer, Carlson and McGeary, 15/e, 2016, McGraw Hill

Physical Geology: Earth Revealed, Plummer, Carlson and McGeary, 9/e, 2012, McGraw Hill

Physical Geology Today, R. Damian Nance and Brendan Murphy, 2015, Oxford University Press (higher level...best for a science major)

Materials Recommended for Class: Colored Pencils, calculator

Note: Enrollment in Physical Geology Laboratory is recommended but not required. Consult your educational advisor.

Purpose and Scope

This class is an introduction to the study of the Earth with emphasis on: the materials that make up the Earth, plate tectonics, and the external processes that form and reshape the landscapes. A background in simple chemistry, mathematics and physics is helpful, but not required. With respect to tests, questions will emphasize application, interpretation and analysis of data and content, rather than memorization of facts and vocabulary.

Student Learning Outcomes

(By the end of the semester, you should understand the following “big picture” topics of geology and Earth Science.)

- *Students will understand the basic theory of plate tectonics and southern California’s place in the plate tectonic system of the dynamic Earth.
- *Students will understand that tectonic processes dynamically move the Earth’s crust, and that the Earth’s hydrosphere and atmosphere work together to constantly reshape the landforms on the surface of the Earth.
- *Students will have a basic understanding of the concept of scale (spatial and time), and how it pertains to geology and the Earth Sciences.
- *Students will understand the difference between an element, a mineral and a rock, and how each of these is related to one another.
- *Students will understand that ancient environments (eolian, fluvial, glacial) exposed in rock on the surface of the Earth were created by the same environmental forces seen in operation today.

Important Dates

_____ : Last day to withdraw without a grade of “W”

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Student Responsibilities and Class Policies

- 1) Attend class regularly and on time. It is **your responsibility** to notify me that you arrived late after I took roll. **Three absences are excusable, but any more than that could result in your being dropped from the class.**
- 2) Turn in assignments on time. If you are late, I reserve the right to reduce your grade on that assignment.
- 3) Once class begins and the doors are shut, **PLEASE DO NOT EXIT THE CLASSROOM FOR ANY REASON OTHER THAN AN EMERGENCY.** It is distracting to your fellow students and to me, and **could affect your grade.** **Answering your cell phone is not an emergency.** Please notify me **prior to the beginning of class** of any personal necessity that requires you to leave class early. Otherwise, **leaving early is counted as an absence and will affect your grade.**
- 4) Please **turn off all “ringers” on cell phones.** Responding to pages and calls **will be done after class**, except in emergency. Use of other technology, **such as IPODs and texting during class will considered an insult and disrespectful**, and will earn you high rates in the PITA factor, which in turn will affect your grade in a negative fashion. **Don’t expect any breaks, because you will not get them.**
- 5) Questions are always welcome, but they should be asked at the appropriate time. In other words, please raise your hand when asking a question.
- 6) If you need to drop the course, especially late in the semester, and you do not take the proper steps to do so on your own, you will receive a grade of “F” for the class.
- 7) A student may be dropped from the course for any one of the following reasons:
 - a) failure to attend the first two (2) class meetings;
 - b) more than three (3) absences during the first 4 weeks;
 - c) disorderly or inappropriate conduct of any sort followed by dismissal from class or a field trip;
 - d) arriving late to class more than six (6) times.
- 8) **There are no make-up tests, exams, assignments or field trips.** Sometimes exceptions can occur if prior written arrangements are made, such as email, and I agree. **You need to do this ahead of time (like months).**
- 9) In general, there is no extra credit. However, extra point opportunities are given in most quizzes and exams. Extra credit field trips are also available.
- 10) **Cheating of any sort will be reported to the Office of Student Affairs (even “small” infractions),** and the student may receive a grade of “F” **for the semester**, depending upon the infraction. If the cheating occurs on a small assignment such as a quiz, that quiz will count as a zero and **CANNOT** be dropped.

Class Activities and Field Trips

The class activities and field trip component of the course is worth the same as an exam, and is the best way to help your grade since a possible of 105 points can be accumulated overall. Details will be provided for you in a separate set of instructions. There will be several field trips for you to choose from as well as a variety of other activities. **Participation in a 1-day long field trip is encouraged.** After all, geology is the study of the Earth, and the Earth is outside the classroom. Attendance points will be given, and an assignment associated with the trip will be given as well. Several guided trips will be offered as well as self guided. If other commitments do not allow you to attend trips, the points can be accumulated in other activities. See the activity sheet for more information.

The Quizzes and Problem Sets

Quizzes are given at least once a week during class, and more frequently in condensed summer classes. **If you miss the quiz, it can't be made up.** Quizzes are worth ten (10) points each, and are taken from the lecture and reading material. Only ten (10) quizzes will be counted. If I give more than ten, the lowest one(s) will be dropped.

Several problem sets will be given throughout the semester. Separate instructions will be provided. Problem sets are also ten points and will be counted with the quizzes.

The Tests

A test is given at the end of each unit. The test dates are etched in stone, and the dates are included in the course outline on the first. There are no makeup exams, but the three highest exams will be counted toward your total grade. If you miss an exam, that is your drop. Generally, the tests consist of two distinct parts, which are:

- 1) A multiple guess section, which also may include true-false, matching, etc. (**you will need a no. 882-E scantron for this section of the test**), and
- 2) A short answer essay section which may include an explanation of a diagram or graph and/or a short explanation of an Earth process. I will provide the essay sheets where you will write.

Grades

Your grades will be posted after each exam and points will be accumulated as follows:

- | | |
|---|--------------------|
| 1) Three (3) of four tests at 100 points each | =300 Points |
| 2) Ten (10) quizzes or problem sets at 10 points each | =100 Points |
| 3) Class Activities and Field Trips | <u>=100 Points</u> |
| Total | =500 Points |

Your grade will be determined by the points you've accumulated throughout the semester. Your total points will be divided by 500 and converted to a percentage, which will be applied to the following scale:

A: 90-100% (450-500 points) **B:** 80-89.9% (400-449 points) **C:** 70-79.9% (350-399 points)
D: 60-69.9% (300-349 points) **F:** 0-59.9% (less than 300 points)

Recipe for Academic Success in this Class

The method explained below exposes your conscious and subconscious mind to the material at least seven (7) times before taking a test. This method requires time is effective in studying for just about any classroom course:

- 1) Prior to class, read background material listed on the course description carefully, and if you are a highlighter person, use a marker pen to highlight key terms and concepts. Also pay special attention to diagram and figures in the text.
- 2) Listen attentively and write down everything at the lecture. Sacrifice neatness for quantity and quality of notes, for you can always recopy your notes for study later. Make sketches of any diagrams on the board.
- 3) Supplement lecture notes with other diagrams and explanations that you highlighted in your textbook.
- 4) Neatly organize and recopy lecture and textbook notes into a permanent notebook that you will use for study.