

Geology 111: Introduction to Geology

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Office Hours: Mondays and Wednesdays, 2-4 p.m. (back of Lab 285)

Resources: *Essentials of Geology*, Lutgens, Tarbuck, Tasa, 10th edition, Pearson-Prentice Hall (required); *Science Matters: Achieving Scientific Literacy*, Robert M. Hazen and James Trefil, New York: Random House, Inc. (Anchor Books), 2009 ed. (recommended)

Mission of Abilene Christian University: to educate students for Christian service and leadership throughout the world.

Mission of the Department of Chemistry and Biochemistry at ACU: to prepare students for careers in chemistry, biochemistry, chemical education, and health profession by displaying high professional standards and by modeling Christian values, leadership, and service.

Course Description: from the course catalog: “Study of the physical processes involved in Earth’s development. Identification of minerals and rocks, and introduction to plate tectonics and structural features of the earth.” This course may be used to satisfy a portion of the general science requisite in the university core curriculum.

Academic Integrity: Rules dealing with violation of academic integrity as defined ACU’s Academic Integrity Policy will be strictly enforced.

Attendance Policy: Due to the nature of the course, students are strongly encouraged to attend class. If more than twenty-five (25) percent of the course is missed (i.e. eleven(11) class meetings), the student may be dropped from the course and given a “withdraw failing” (WF). If you travel for a school sponsored trip, you are to have the official notification to the instructor no later than one (1) week prior to the trip as required by the Dean’s office. If you are ill, you must notify the instructor by phone or email on the day of absence. Students need to be mindful that absences due to University-approved trips also count toward their total number of absences.

Class Format: The class will compose of lecture with student participation, hands-on activities illustrating selected concepts, videos, and assessments.

Grading: This course will accumulate 600 points. The following scale will then be applied to calculate individual grades: A= 93% (600-558 points), B= 85% (557-510 points), C=77% (509-462 points), D= 69% (461-414 points). A detailed profile of the 600 points will be distributed and discussed during the first class session.

Course Content:

Week 0: Discussion of syllabus and Pre-test over previous geology knowledge

Week 1: Science Literacy

Week 2: Matter and Atomic Structure (Chapter 2)

Week 3: Minerals (Chapter 2)

Week 4: Rocks (Chapters 3, 6, and 7)

Week 5: Weathering and Soil (Chapter 5)

Week 6: Mass Movements and Glaciers (Chapters 8 and 11)

Week 7: Surface Water (Chapter 9)

Week 8: Groundwater (Chapter 10)

Week 9: Maps

Week 10. Plate Tectonics (Chapter 15)

Week 11: Volcanoes (Chapter 4)

Week 12: Earthquakes (Chapter 14)

Week 13: Ocean Geology (Chapter 16)

Week 14: Mountain Building (Chapter 17)

Week 15: Final Exam

Grade Profile for Geology 111

- I. As mentioned in the syllabus, your grade will be the percentage you successfully complete out of a possible 600 points. This 600 total points may be reduced if class sessions are lost due to bad weather, holidays, etc.
- II. The points are temporarily divided in the following manner:
 - A. 100 points: At the beginning of class each Monday, a vocabulary list of definitions will be due. You may work together on the definitions but each student should submit his/her original copy. If this is submitted after the first five minutes of class or later, it will be counted late and a -2 deduction from the total grade will be assessed. Refer to grading rubric for grading criteria.
 - B. 120 points: Each Wednesday or Friday we will do a "Pseudo-lab" or hands-on activity. This activity will demonstrate one of the many concepts covered the previous Monday in lecture. You will be given instructions and questions to answer during and at the completion of the activity. These will be worth 10 points each. You will need to complete 12 of these activities.
 - C. 60 points: We will view six videos in a series on Planet Earth. You will have a short assignment to do during or at the close of the video. These will be worth 10 points each. Guest speakers may be substituted for videos.
 - D. 240 points: Every other Friday we will do an assessment over the previous two weeks work. Each assessment will be worth 40 points. They will consist of short discussion questions from lecture, activities, videos and research from the textbook. You will need to complete all six of these for 240 points. If you are absent on that Friday, come to the instructor's office during office hours on the following Monday to make up the assessment.
 - E. 100 points: The final exam will consist of 100 vocabulary words covered during the entire semester. This test will be multiple-choice.
- III. Grading rubric for Vocabulary Lists
 - +10= Submitted on time; all words are defined; all definitions apply to Geology (not just generic definitions)
 - +8= One of the above criteria is missing from the submission
 - +6= Two of the above criteria are missing from the submission

