

Fall 2009
FUNDAMENTALS OF GEOLOGY - GEOL 101
Sections 051, 052, 053 and 054
Hunter College
Department of Geography

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A volcano erupts in Japan; an earthquake rattles Mexico City; a tsunami hits an island in Indonesia; a landslide destroys a village in Greece; a meteorite hurls through space and crashes in the Pacific Ocean. All these and many more are natural phenomena which continuously shape our planet and have a profound effect on the lives of millions of people worldwide. We live on earth! We are involved in many aspects of our planet on a daily basis. Our understanding of these phenomena is necessary in order to make informed choices.

Textbook: Plummer, Carlson, and McGeary, *Physical Geology*, 13th edition, McGraw Hill (2010). ISBN-13 9780073376714
Lab book: Zumberge, Rutherford and Carter, *Physical Geology*. McGraw Hill (2007). ISBN-13 9780072988611
Note: Older editions or used copies of these books may be used for the course and are available online at both www.bn.com and www.amazon.com.

Use of email: Please make sure that any email communication contains the phrase “**GEOL 101**” in the subject line. And make sure you sign your messages with your full name. I will not answer unsigned email messages.

Course description: Fundamentals of geology is the study of the physical aspects of our planet. The goal of this course is to provide the students with a basic understanding of the forces continuously shaping the surface of our planet and the influence they have on our environment, so that their appreciation and interest in our planet is heightened. At the same time, this course provides a strong fundamental background for students who want to pursue more advanced geology courses.

Grading procedure: There will be three lecture examinations based on lecture and reading assignments. Each exam counts for 20 % of your final grade. Makeup exams will not be given. In the event that one regular exam is missed (not the final) the student's lowest exam grade will be assigned as the score for the missed exam. All students must take the final exam. In any event, if missing an exam is unavoidable (i.e., for medical reasons), I must be notified prior to the exam, if possible.

There will be three lab quizzes each of which counts for 10% of your final grade. In addition, there will be a museum field trip which also counts for 10% of your final grade.

The university rules concerning grading will be strictly followed. Under no circumstances will a student be allowed to do "extra credit" to raise his/her grade.

Attendance: Lecture attendance is recommended (required for freshmen). In addition to information provided in the text, extra material and occasional pertinent films may be shown and discussed. Examinations will include questions on all of the above.

Lab attendance is **required!!!** A maximum of two absences is allowed without any consequences on the student's grade.

Academic integrity:

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

Lecture Topic Outline: **

1. Course Introduction.
2. Earth Materials (Minerals; Igneous, Sedimentary and Metamorphic Rocks).
EXAM 1 (TBA)
3. Weathering and Agents of Erosion (Gravity, Water, Ice, Wind).
EXAM 2 (TBA)
4. Geologic Time Scale, Earth's Interior, Plate Tectonics.
EXAM 3 (Final, during final exam period)
5. **Final exam – December 12, 5:20 to 7:20 p.m.**

Lab Topic Outline:

1. Mineral Identification
2. Rock Identification (Igneous, Sedimentary, Metamorphic)
3. Topographic maps

Each topic will be followed by a quiz, the date of which will be determined by the lab instructor. In addition, there will be an American Museum of Natural History field trip, accompanied by a report.

** This schedule may be altered slightly during the course of the semester.

Incomplete Work in Course: When a student **FOR VALID REASON** does not complete the work assigned in a course (including the final exam, papers, etc.) and in the view of the instructor still has a reasonable chance to pass the course, the student shall be given the grade IN (incomplete). The student must explain the reason to the instructor or, in the absence of the instructor, to the department chair and arrange a schedule for making up the missing course work. These steps must be taken as soon as possible and no later than the end of the second week of the following semester. The student shall then be given the opportunity to complete the course without penalty beyond previously established penalties for lateness." Students averaging "C" or above are eligible to request an incomplete grade.