

GEOL 10000-02 (2688) – Introduction to Geology
Spring 2017
Tuesday and Thursday, 7:00 PM to 8:15 PM
Hunter West 509B

Instructor: Dr. Faye F. Melas
Office: 1032 Hunter North (10th floor of the North Building)
Office hours: Tuesday and Thursday, 8:15 to 9:00 pm; or by appointment
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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", Text. 14th edition, McGraw Hill (2010) ISBN-13 9780073376714.

This textbook is also available as a 360 day subscription eTextbook. Check out www.coursesmart.com and search under the title.

Note: Older editions or used copies of this book may be used for the course. Students may check with Amazon or eBay for affordable copies of the text.

Blackboard: All slides used for each lecture class will be posted on blackboard prior to the class, under course materials.

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.

Course Objectives: The objective of this course will be to introduce students to the major Earth features, materials, structures and processes.

Upon successful completion of this course, the students will be able to:

- Understand the origin and formation of the Earth
- Understand materials, processes, systems, and history of the Earth
- Understand where and how and why natural phenomena such earthquakes, and volcanoes, occur
- Describe and discuss the consequences of earth-people interactions
- Be able to communicate their geologic knowledge to others

Expected Student outcomes: Upon completion of the course, the students will have the following outcomes:

- Understand the fundamental principles of geology
- Demonstrate knowledge of the properties and processes of the lithosphere and hydrosphere, geologic time, earth history, and plate tectonics
- Apply basic principles of other sciences to geology
- Understand the impact of geologic processes in today's global context

Grading procedure for Introduction to Geology 100: There will be three lecture examinations based on lecture and reading assignments. Each exam counts for 1/3 of the student's 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. The Hunter College grading system will be used in this class and can be viewed in the latest undergraduate catalog available online.

***Under no circumstances will a student be allowed "extra credit" to raise his/her grade.

Credit/no credit: You may file for CR/NC before the start of the final exam. Keep in mind that the Hunter College rules apply. For more information or to determine if you qualify for CR/NC, you may want to visit the following URL before you make your decision:

<http://www.hunter.cuny.edu/advising/how-to/file-credit-no-credit-cr-nc>

Incomplete Work in Course: Incompletes for this course are only given under the most extraordinary and documented circumstances. When a student **FOR VALID REASON (S)** 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.

Classroom policies: There is no texting permitted in the classroom—turn your phones off. Earphones are not to be worn in the classroom. No electronic devices are allowed during exams.

Attendance: Lecture attendance is recommended (required for freshmen). Attendance will be taken in every class. If missing class is unavoidable please inform me as soon as you know. Excessive absences (more than two classes) will result in deduction for one point from the final grade for every additional absence. In addition to information provided in the text, extra material and occasional pertinent films may be shown and discussed in class. Examinations will include questions on all of the above.

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.

ADA Policy:

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of Accessibility, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772- 4857 or (212) 650-3230.

Course Schedule, Topic Outline and Exams: **

First day of classes: Tuesday January 31, 2017. Last day of classes: Thursday May, 18, 2017

To keep yourself informed concerning important days such as holidays/other non-meeting dates/days when classes follow a different schedule, please consult the Hunter College academic calendar found using the following URL:

<http://www.hunter.cuny.edu/onestop/calendars>

1. Course Introduction: Formation of the Universe, Solar System, and Earth internal differentiation.
2. Earth Materials: Composition of the earth's crust (Minerals, Igneous, Sedimentary and Metamorphic Rocks: Composition, Classification, and environments of formation).

EXAM 1: Chapters 1, 2, 3, 4, 6, 7 (Tuesday, March 7)

3. Surface geologic processes: Weathering and Agents of Erosion (Gravity, Water, Ice, Wind).

EXAM 2 Chapters 5, 9, 10, 11, 12, 13 (Tuesday, April 27)

4. Earth's history and the Geologic Time Scale.
5. Surface manifestation of deep-seated geologic processes (Earth's Interior, Earthquakes, and Plate Tectonics).

EXAM 3: Chapters 8, 16, 17, 19 – Thursday, May 25, 6:20 to 8:20 PM