

GEOL 10000-02 (5310) – Introduction to Geology
FALL 2019
Web-Enhanced (W)
Tuesday and Thursday, 5:35 PM to 6:50 PM
Hunter North 510

Instructor: Dr. Faye F. Melas
Office: 1032 Hunter North (10th floor of the North Building)
Office hours: Tuesday and Thursday, 7:15 to 8:00 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 Hammersley, "Physical Geology", Text. 16th edition, McGraw Hill (2018) ISBN 9781259916823.

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 should check with Amazon or eBay for affordable copies of the text.

Blackboard: All slides and additional materials used for 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:

- Explain the origin and formation of the Earth
- Identify and describe materials, processes, systems, and history of the Earth
- Describe where, 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 Learning Outcomes: Upon completion of the course, the students will have the following outcomes:

- Describe 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
- Appreciate 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.

Communication:

The preferred method to conduct the instructor for urgent matters is through e-mail. Approximate response time is 1-2 days. For all other matters, see me before class, after class, or schedule an appointment during office hours

Credit/no credit: You must 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. Attendance will be taken in every class. If missing class is unavoidable please inform me as soon as you know. 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.

Hunter College Policy on 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.

Hunter College Policy on Sexual Misconduct

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College affirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationship. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

- a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, on contacting the College's Public Safety Office (212-772-4444)
- b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) of Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link: <http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf>

Course Schedule, Topic Outline and Exams: **

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>

Important dates to remember:

Tuesday, August 27: Classes begin

Thursday, September: Classes follow Monday schedule

Tuesday, October 1: No classes scheduled

Tuesday, October 8: No classes scheduled

Thursday, November 28: College closed

Thursday December 12: Last day of classes

Saturday-Friday, December 14-20: Final exams

Topic outline and course Exams:

***** The schedule of topics is instructor-set, based on student pace**

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 (Thursday, October 10)

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

EXAM 2 Chapters 5, 9, 10, 11, 12, 13 (Tuesday, November 19)

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 (TBA)