Spring '22 - GEOL 10000-01
Introduction to Geology

Mon & Thu 9:45am – 11:00am
via Zoom

Contact Information:

Instructor: Professor Anita Erdős Forrester
Office hours: Office hours via Zoom are held on Mondays from11:00 – 12:00, and by appointment
Email: You can reach me at anita.forrester@hunter.cuny.edu only – In order for me to respond to your emails as efficiently as possible please adhere to the following instructions: (1) Include the course name and number in your subject line. (2) Include your entire name as it appears in CUNYfirst in your email (3) Email me from your @myhunter account. I try to answer all emails within 24 hours. Allow for a 48 hour delay on the weekends. Please be sure to write a complete email, including a salutation and a signature.

Brief description/purpose of course:

This course will be of interest to any student who wants to learn more about the Earth as well as to those contemplating a major in Geography or Environmental Studies. The lecture meets twice per week for 1hr and 15 minutes. Approximately 60 minutes of this period will be used for a live lecture, delivered via Zoom. The last 15 minute portion of the class meeting will be used for questions and in-class assignments. The lecture portion of the course will be recorded and available for students who have an excused absence from lecture.

This course will cover the geophysical properties of the Earth, plate tectonics, earthquakes, volcanism, metamorphism, crustal deformation, geologic time, geological resources and natural and anthropogenic global change.

Under the Hunter Core Requirements this course satisfies D, Scientific World.

This course also fulfills the Stage 2 group E of the General Education Requirement (GER). Combined with PGEOG13000, Weather and Climate laboratory or GEOL 10100, Geology Laboratory, this course satisfies the core requirements for the "new" geography major. For Psychology majors, the course, combined with GEOL 10100, satisfies one of the laboratory science requirements

The main goals for this course are to: (1) Teach key foundational concepts about the Earth and the methodology of science. (2) Introduce you to a fascinating subject area that might influence your academic and career path. (3) Create a learning community that is engaged in the study of Geology

Course Format:

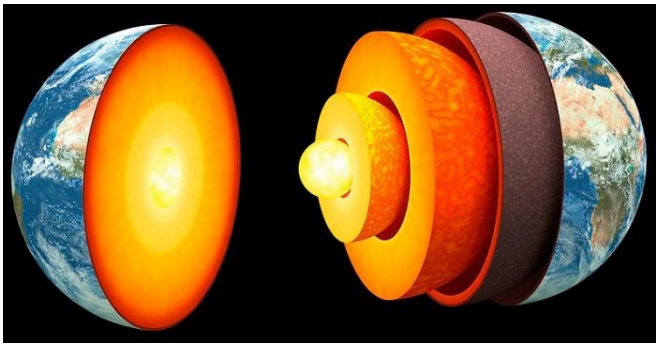
This course will be taught in a synchronous mode. The course will meet as scheduled for a live lecture from at 9:45am – 11:00am on Mondays and Thursdays.
This lecture will be approximately 1:00 with the last 15 minutes reserved for questions, in-class assignments, etc. The class might be divided into work groups of 5 students each.

Based on your lectures and textbooks, problems from the online Guided Explorations and/or Smartwork/other associated with required textbook will be assigned to be completed.
This class wrap up period, and opportunity to ask questions and additional interaction from 10:45 am to 11 am. Additional lecture material may be posted via Bb to complement in-class live learning. Additional readings may also be distributed.

Technological requirements:
This course is designed for students to take using a computer. It will be very difficult to complete the work required for this course using a phone.

Textbooks:
Essentials of Geology, 6th ed by Stephen Marshak
The textbook must include Smartwork, the Student Site and Guided Explorations. The cheapest option is to purchase the ebook directly from Norton for $55. I recommend this.

Course Description, Objectives and Expected Student Outcome:
Introduction to Geology is the study of the physical aspects of our planet. The course will cover how the Earth formed and the continuous processes that impact its surface and our environment. This course gives you a solid foundation for learning more about the basic nature of our planet and if you wish to continue with further studies in geology, geography or environmental studies.



In this class, you will learn:
- How scientists apply the scientific method to arrive at major scientific breakthroughs Plate Tectonic Theory.
- Methodologies employed by geoscientists to study the geophysical properties of the Earth
- Igneous processes and relationship to Plate Tectonics

- Metamorphic rocks, mechanisms of mountain building and related geologic structures and phenomena
- Sedimentary rocks, geologic time and a brief history of Earth
- About the immensity of geologic time and the timescales and mechanisms of geologic processes
- The impact of geologic events on the evolution of humans.
- The impact of humans on the Earth System
- Natural and anthropogenic global change

Expected Student Learning Outcomes:

At the end of the course the successful student shall be able to:

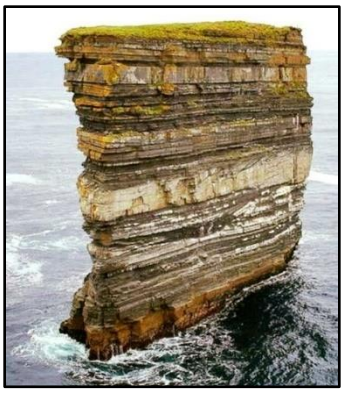
1. Describe Plate Tectonic Theory and how it relates to the distribution of geologic phenomena and the geophysical properties of the Earth; recognize plate boundaries, associated rock types and relationship to Earth's resources.
2. Describe the common tools applied in geology
3. Describe geologic time and Earth history
4. Explain the causes and evidence for anthropogenic climate change in the context of the Earth System
5. Recognize that the impact of geologic/climate events on people is highly dependent on socioeconomic factors including: race, nationality and socioeconomic status.

Course Expectations

1. ***Attendance:*** You are expected to attend every live lecture and complete the associated questions. Given that there are new challenges for everyone, including child care, sick care etc. the classwork questions will remain available for you to complete until 11:59 PM on the day of the class meetings. These questions will count toward your final grade as class participation.
2. ***Readings:*** You are expected to read the assigned chapters and readings in their entirety.
3. ***Assignments:*** All assignments are expected to be completed

Course evaluation/grading:

Exams: This course will have three exams. Each exam will cover 4-5 topics. Exams will not be cumulative. They will be multiple choice. Exam questions will cover the material in live meetings, any additional posted lecture videos and reading content and the text. Many questions will be based on questions asked in class and in homework questions.

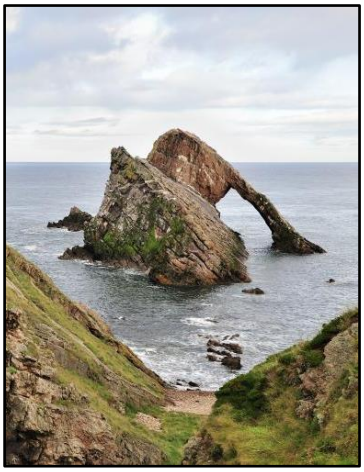


Exam procedures: All exams are required. All exams will be completed on BB and will be multiple choice. If you have a technical difficulty with the exam, you will have a second opportunity to take and submit it. This option is only for technical issues. The second submission will be the submission that counts towards your grade.

Assignments: There will be (Norton) Smart Work and Guided Explorations assignments each week that will be completed via Bb access of the Norton site.

Policies:

1) All homework must be turned in by the due date/time.
2) Students are allowed to miss two assignments with no penalty.
3) If all assignments are completed students will receive additional points for the homework assignments portion of their grade.



Course Grading Summary:

Guided Learning 20%
Smart Work 20%
In-class and homework assignments 20%
Exams 40%

Opportunity for Extra Credit (up to 5 points will be added to your final grade, equivalent to a bump of 1/3 of a letter grade, i.e. going from a B to a B+). In order to obtain EC, you must obtain my approval of your topic and schedule your presentation before March 15.

Extra Credit: Create a video presentation (5-10 minutes) for your class about a recent scientific discovery or phenomenon that relates to the course material.

About examinations and grades

a. This course is designed so that if you attend class and complete all of the homework you will pass. Note that the exams count for 33% of the grade, so it is possible to pass the class even if you are a poor exam taker.
b. Grades follow Hunter's grading system:
c. http://catalog.hunter.cuny.edu/content.php?catoid=15&navoid=1433
d. Examinations are multiple choice and will be timed.
e. Make-up exams are ONLY available in extreme cases, and with medical (or other) forms that confirm the absence.
f. Every student will have the option to submit the exam twice in case the first attempt encounters a technical difficulty. The last submission is the one that will count. Be very careful with this option. It is only intended to allow you to overcome a technological glitch.
g. I will automatically agree to the CR/NC option only if the conditions stated in the CR/NC form are satisfied: all course work has been completed and you earned grades such that you accumulate at least 50 points total in the course. Students on probation are not eligible for this option. Students must make an appointment to discuss this option with me at least one

week before the final exam. Requests for CR/NC as a final grade will not be accepted during or after the final exam.

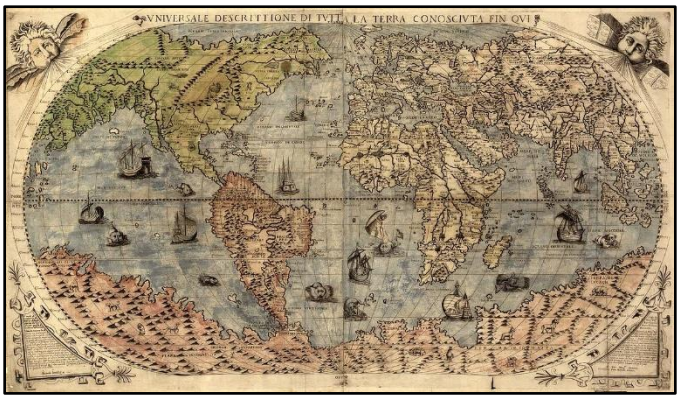
h. http://www.hunter.cuny.edu/advising/howto/file-credit-no-credit-cr-nc. This includes both the CR/NC policy and a link to the form.

Classroom policies: We will be meeting in a Zoom Classroom. Please keep your microphones on mute and your video on. If you need to turn off your camera for a short time, then it is recommended that there you post a photo of you so we can have some reminder of what our classroom with ist many attendees would look like. unless requested to turn on. A chat box will be available for questions. Please restrict your comments to the subject material and be respectful to one another. I will review the chat and respond to these questions during the closing portion of our class each day, or with an announcement posted later that day.

Inclement Weather and other unknowns: If circumstances prevent me, the professor, from being able to access the internet, I will do my best to let you know in a timely manner. Please let me know if you experience circumstances that make completing the requirements challenging.

Helpful information:

The following are useful tips to do well in this or any class:



- Read the chapter for the class lecture before coming to class.
- Attend class via Zoom and take detailed notes. Sketch the relevant diagrams.
- Re-write your lecture notes as soon as possible after class. This will allow you to fill in the details still fresh in your memory, and prepare questions for the next time the class meets.
- Complete the work and meet the learning goals each week.
- Carefully study the diagrams you have made and those given in the virtual class.
- It is important to start with a good study habit. Consistency is the key. Forming study groups is extremely helpful. You may use the groups that I create on BB or form your own. Make progress steadily as the material in this course cannot be understood the night before the exam. Concentrate on understanding rather than 'regurgitating'.

Syllabus Policy:

The professor may change the schedule during the semester if warranted. Several classes may be scheduled as asynchronous. All changes will be announced via BB. Except for changes that substantially affect grading, this syllabus is a guide for the course and is subject to change with advance notice. These changes will be announced in class and through Blackboard announcements. Make sure to check Blackboard regularly.

Geology 100 - Lecture Schedule:

	Date	Day of Week	Subject	Required reading (Marshak, 6th ed)	Exams
1	31-Jan	Mon	Introduction; The Earth in Context	Chapter 1	
2	3-Feb	Thu	The Earth in Context	Chapter 1	
3	7-Feb	Mon	Plate Tectonics	Chapter 2	
4	10-Feb	Thu	Plate Tectonics	Chapter 2	
x	14-Feb	Mon	Minerals	Chapter 3	
5	17-Feb	Thu	Introduction to Rocks	Interlude A	**Exam**
6	21-Feb	Mon	Igneous Processes	Chapter 4	
7	24-Feb	Thu	Igneous Processes	Chapter 4	
8	28-Feb	Mon	Volcanism	Chapter 5	
9	3-Mar	Thu	Volcanism	Chapter 5	
10	7-Mar	Mon	Sedimentary Processes	Chapter 6; Interlude B	
11	10-Mar	Thu	Sedimentary Processes	Chapter 6; Interlude E	
12	14-Mar	Mon	Metamorphic Processes	Chapter 7	
13	17-Mar	Thu	The Rock Cycle	Interlude C	**Exam**
14	21-Mar	Mon	Earthquakes	Chapter 8	
15	24-Mar	Thu	Earthquakes	Chapter 8	
x	28-Mar	Mon	Mountain Building	Chapter 9	
x	31-Mar	Thu	Geologic Time	Chapter 10	
16	4-Apr	Mon	Geologic Time	Chapter 10	
17	7-Apr	Thu	Earth's Biography	Chapter 11	
18	11-Apr	Mon	Energy and Mineral resources	Chapter 12	
19	14-Apr	Thu	Energy and Mineral resources	Chapter 12	**Exam**
20	18-Apr	Mon	Hunter Closed - no classes held		
21	21-Apr	Thu			
22	25-Apr	Mon	Deserts	Chapter 17	
23	28-Apr	Thu	Global Change in the Earth System	Chapter 19	
24	2-May	Mon	Global Change in the Earth System	Chapter 19	
25	5-May	Thu	Amazing Glaciers	Chapter 18	
26	9-May	Mon	Amazing Glaciers	Chapter 18	
27	12-May	Thu	Running water	Chapter 14	
28	16-May	Mon	Groundwater	Chapter 16	
	TBD		**Final Exam**		**Exam**

Hunter Policies

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 the 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 AccessABILITY, 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.

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

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)

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.barr7@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.