

Winter '24 - GEOL 10000 Introduction to Geology



Mon, Tue, Wed, & Thu 1:00pm – 4:08pm

Classes: 1/2/24 – 1/21/24

Final Exam: 1/23/24

Dear winter session student: This is a 3 week winter session course. If you sign up for this course, please note that this is a very fast-paced course completed in just 11 class meetings. We will cover multiple chapters, and exercises each day as well as 4 exams in three weeks.

Winter 2024						
MON	TUE	WED	THU	FRI	SAT	SUN
1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan
No class	Ch 1	Ch 2	Ch 3			Exam 1
8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan
Ch 4&5	Ch B&6	Ch 7&8	Ch E&10			Exam 2
15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan
No class	Ch 11	Ch 14&16	Ch18	Exam 3		
22-Jan	23-Jan					
Ch 19	Exam 4					

Make sure that you are capable of handling the intensity of this session. You know yourself, and you know what you can handle. There is a lot of content – *BUT it is incredibly interesting and exciting to learn about how the planet works and I can't wait to share it with you.*

If you are all good with this then I am looking forward to seeing you all on January 2nd

Contact Information:

Instructor: Professor Anita Erdős Forrester

<u>Office hours</u>: I will be available after each class from 4:00 – 5:00, Fridays 9:00 - 10:00 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 (GEOL 101) in your subject line. (2) Include your entire name as it appears in CUNYfirst in your email (3) Email me from your @myhunter account. Do not reply to Bb messages sent to the entire class. I answer all emails within 24 hours Monday through Friday. Messages sent over the weekend will be answered on Sunday evening and Monday morning. I do not check my emails on the weekend, so plan accordingly. Please be sure to write a complete email, including a salutation and a signature.

Textbooks:

Essentials of Geology, 7th ed by Stephen Marshak



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.

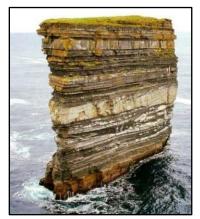
This course will cover the geophysical properties of the Earth, plate tectonics, earthquakes, volcanism, metamorphism, crustal deformation, geologic time, geological resources and natural and anthropogenic global change. Under the Hunter Core Requirements this course satisfies D, Scientific World.

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 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



Please note that: All people have the right to be addressed and

referred to in accordance with their personal identity. In this class, we will have the chance to indicate the name that we prefer to be called and, if we choose, to identify pronouns with which we would like to be addressed...I will do my best to address and refer to all students accordingly and support classmates in doing so as well.

Course Format:

This is a winter session course so it is quite intense. Our class will meet via zoom every Monday -



Thursday (1/2/24 - 1/21/24) from 1:00 - 4:08. Lecture attendance is NOT OPTIONAL, attendance will be taken and there will be occasional in-class assignments. Both of these will be part of your grade.

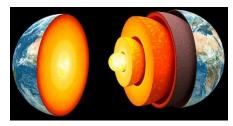
Your course content will be covered in our live lecture sessions, class discussions, in the assigned chapters of the textbook, chapter review exercises and additional material that may be posted via Bb to complement in-class live learning.

Technological requirements:

The course is a synchronous live course – meaning: we meet via zoom at a specified time every M-Th. While you may hear the presentation if you log into zoom via your phone, to fully be able to see the course content, the shared material, and in-class exercises, plus to be able to complete these inclass exercises, it is highly recommended that you have access to a computer, or at least a tablet capable of multitasking. It will be very difficult to complete the work required for this course using a phone. You will also need a camera and a microphone, plus the ability to use the chat function to participate in the course.

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 lecture and complete the associated questions.
- 2. *Readings:* You are expected to read the assigned chapters and readings in their entirety.
- 3. Assignments: you will have exercises to complete for each chapter, and 4 exams

Yes, that's a lot of work but this is a very intense course completed in just 11 class meetings. Make sure that you are capable of handling the intensity of this session. Take advantage of the weekends, read ahead, don't fall behind. In a winter session course that is very easy to do.

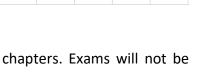
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Course evaluation/grading:

Exams: This course will have four exams. Each exam will cover 4-5 chapters. 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 administered online and will be multiple choice.









Assignments, in-class exercises, etc: You will have review exercises to complete for every chapter that we cover. During class session, there may be questions or surveys to complete.

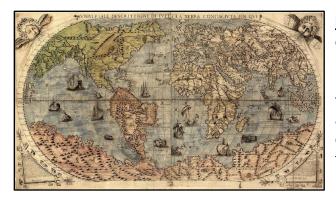
Policies:

1) All homework must be turned in by the due date/time. There will be no extensions and no late submissions – accept in extreme cases and are not automatic, but must be approved by the instructor - due to the intensity of the course.

<u>Course Grading Sur</u>	<mark>nmary:</mark>
Exams (4)	<mark>50%</mark>
Chapter review exercises	<mark>40%</mark>
In-class and homework assignments	<mark>10%</mark>

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 50% 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 http://catalog.hunter.cuny.edu/content.php?catoid=15&navoid=1433
- c. Examinations are multiple choice and will be timed.
- d. Make-up exams are ONLY available in extreme cases, and with medical (or other) forms that confirm the absence.



Inclement Weather and other unknowns: If circumstances prevent me, the professor, from being able to join the zoom session, I will do my best to let you know in a timely manner and in those instances, we will move our class to an asynchronous setting. 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, participate 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 class.
- 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. If there are any unusual circumstances that we cannot meet, I may hold an asynchronous class and the lecture will be recorded. 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.

Geology 10000 – updates on Bb					
	Date	Lecture schedule Textbook		Exams	
	Introduction to the course				
1 2-Jan		The Earth in Context	Chapter 1	Francis 1, does how 1/7	
2	3-Jan	The way the Earth works: Plate Tectonics	Chapter 2	Exam 1, due by 1/7, 11:59pm	
3	4-Jan	Patterns in nature: Minerals	Chapter 3		
л	Q lan	Up from the Inferno: Magma and Igneous Rocks	Chapter 4	Exam 2 due by 1/15, 11:59pm	
4	4 8-Jan	The wrath of Vulcan: Volcanic Eruptions	Chapter 5		
г	5 9-Jan	A Surface Veneer: Sediments and Soil	Interlude B		
5		Pages of the Earth's Past: Sedimentary Rocks	Chapter 6		
C	10 lan	Metamorphism: A Process of Change	Chapter 7		
0	6 10-Jan	A Violent Pulse: Earthquakes	Chapter 8		
7	7 11-Jan	Memories of Past Life - Fossils and Evolution	Interlude E		
/		Deep time: How old is old	Chapter 10	Exam 3 due by	
8	16-Jan	Biography of the Earth	Chapter 11	1/23/202411:59pm	
0	17 Jan	Streams and Floods: The Geology of Running Water	Chapter 14		
9 17-Jan	A Hidden reserve: Groundwater	Chapter 16			
10	10 1	Amazing Ice: Glaciers and Ice Ages	Chapter 18	Final Exam due by	
10	18-Jan	Global Change in the Earth System Chapter 1		1/23, 11:59pm	
11 22-Jan		Course review			

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/Policyon-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.

