



# Spring '25 - GEOL 10000

## Introduction to Geology

Tue & Thu 7:00pm – 8:15pm



**Register for the zoom sessions (7:00pm - 8:15pm) prior to the first class using the following link:** [CLICK FOR REGISTRATION LINK](#) After registering, you will receive a confirmation email containing information about joining the meeting. Please save that link for future entry into the class sessions.

### **Contact Information:**

**Instructor:** [Professor Anita Erdős Forrester](#)

**Office hours:** I will be available before each class from 6:30 – 7:00, and after class, and by appointment

**Email:** You can reach me at [anita.forrester@hunter.cuny.edu](mailto: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 100) 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 messages sent to the entire class (they will always begin with “Hi guys” or “Hi everyone” so don’t hit reply to those). I answer all emails within 24 hours Monday through Friday. Messages sent over the weekend will be answered on 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 plus access to Guided Learning

### **Brief description/purpose of course:**

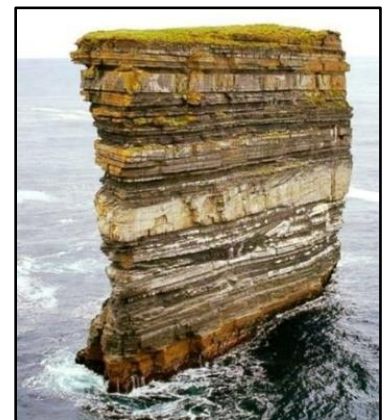
This course will be of interest to any student who wants to learn more about the Earth as well as to those contemplating a major in Geography or Environmental Studies.

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:**

Our class will meet via zoom every Tuesday and Thursday, from 7:00pm – 8:15pm; except when noted on the schedule.

Lecture attendance is **NOT OPTIONAL**, attendance will be noted, participation and occasional in-class assignments will be part of your grade.

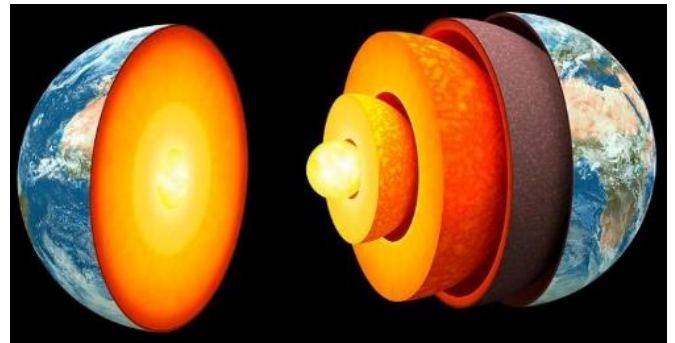
Your course content will be covered in our live lecture sessions, class discussions, in the assigned chapters of the textbook, chapter review exercises and additional material that may be posted to complement in-class live learning.

### **Technological requirements:**

The course is a synchronous live course – meaning: we meet via zoom at a specified time. 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 in-class 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. Do not attempt to take the exam on a phone – I have had several students do that in the past and had severe challenges with it, and many were not able to complete it.

### **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. Attendance is monitored and noted, but not graded. Attending every class session, does not count as participation.
2. **Readings and on-line exercises:** You are expected to read the assigned chapters and readings in their entirety and to complete the online exercises. These will help solidify what you are learning in-class. (30%)
3. **Participation:** You are expected to participate (20%) in the class discussions, to be a part of the class-room community.
4. **Exams:** You will have exams (50%) to complete beginning with the first one during our first weekend.

## **Course evaluation/grading:**

**Exams:** Each exam will cover about 4 chapters, except for the first one. 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:** During class session, there may be questions or surveys to complete. In-class exercises are to be completed in-class, and have a strict due date. There are no make-ups for in-class exercises. They are not announced – and will occur at random times during our class sessions. The highest grade you can get without any participation in the course is a C+ ( Note: if you don't attend the class, you cannot participate and any in-class assignments submitted will not be accepted)

## **Policies:**

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

### **Course Grading Summary:**

Exams (10%)	50%
On-line exercises	30%
In-class assignments and participation)	20%

## **About examinations and grades**

- a. This course is designed so that if you attend class and complete all of the exams 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, as long as you complete the other work assigned and participate in class.
- b. Grades follow Hunter's grading system  
<http://catalog.hunter.cuny.edu/content.php?catoid=15&navoid=1433>



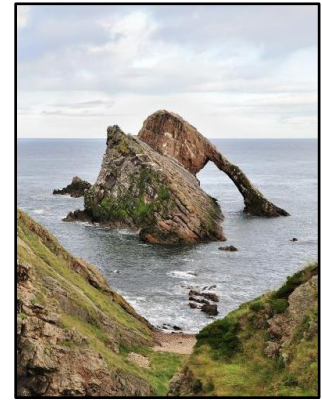
- c. Examinations are multiple choice and will be timed.
- d. Make-up exams are ONLY available in extreme cases, and with medical (or other) forms that confirm the absence.



**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.

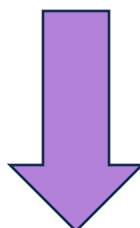
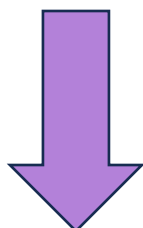
**Helpful information:** The following are useful tips to do well in this or any class

- 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 for each chapter.
- Carefully study the diagrams you have made and those given in the class.
- Complete the on-line exercises
- Be a part of the classroom community
- 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 email and also posted. Except for changes that substantially affect grading, this syllabus is a guide for the course and is subject to change with advance notice.

Class schedule can be found on the following page as well as on the course’s BrighSpace page



H	Spring'25 - Geology 10000-02			
	Date	Lecture schedule	Chapter	Exams
1	28-Jan	Introduction, The Earth in Context	Ch 1	Exam 1 due 2/9
2	30-Jan	The Earth in Context		
3	4-Feb	The Earth in Context		
4	6-Feb	The way the Earth works: Plate Tectonics	Ch 2	
5	11-Feb			
6	13-Feb	Patterns in nature: Minerals	Ch 3	
X	18-Feb	No classes (2/18 is Monday's schedule)		
7	20-Feb	Up from the Inferno: Magma and Igneous Rocks	Ch 4	
8	25-Feb			
9	27-Feb	The wrath of Vulcan: Volcanic Eruptions	Ch 5	
10	4-Mar			
X	6-Mar	No classes (3/6 is Wednesday's schedule)		
11	11-Mar	Exam 2		Exam 2 due 3/11
12	13-Mar	A Surface Veneer: Sediments and Soil	Int B	Exam 3 due 4/2
13	18-Mar	Pages of the Earth's Past: Sedimentary Rocks	Ch 6	
14	20-Mar			
15	25-Mar	Metamorphism: A Process of Change	Ch 7	
16	27-Mar	A Violent Pulse: Earthquakes	Ch 8	
17	1-Apr			
18	3-Apr	Memories of Past Life - Fossils and Evolution	Int E	
19	8-Apr	Deep time: How old is old	Ch 10	
20	10-Apr			
X	15-Apr	Spring Break - No classes		
X	17-Apr			
21	22-Apr	Biography of the Earth	Ch 11	
22	24-Apr			
23	29-Apr	Exam 4		Exam 4 due 4/29
24	1-May	Riches in Rock: Energy and Mineral Resources	Ch 12	
25	6-May			
26	8-May	Amazing Ice: Glaciers and Ice Ages	Ch 18	
27	13-May	Global Change in the Earth System	Ch 19	
28	15-May			
X	20-May	Exam 5		

## 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) or 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.

