

# **GEOL 10000-03: Introduction to Geology**

## **Saturday 4:00 PM to 6:50 PM HN 1021 – Fall 2019**

### **Contact Information:**

Professor: Anita Forrester  
Office: 1032 Hunter North, Department of Geography  
Office hours: 3:00 – 4:00 when classes meet on campus  
Live zoom sessions by appointment

**Email:** anita.forrester@hunter.cuny.edu – I will respond to emails within 48 hours. Make sure that all email messages contain **GEOL10000** in the subject line. Also, make sure that you always sign your name as it appears in CUNYfirst. I do not respond to unsigned email messages.

### **Required materials:**

1. Lutgens & Tarbuck; Essentials of Geology 13<sup>th</sup> edition.
2. Modified Mastering Geology for the textbook – do not buy this before the first class unless you purchase it through Blackboard; I will show you how to do this on the first day of classes. If you buy the Modified Mastering through Blackboard, there is an option to buy the e-book along with it – I found this to be the most cost efficient option if you don't mind using an electronic version of the textbook.

### **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 including the nebular hypothesis and Plate Tectonic Theory.
- Why plate tectonics is known as the unifying theory of geology.
- 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.

#### Expected Student Learning Outcomes:

1. Describe the formation of the solar system and the Earth
2. Discuss the theory of plate tectonics and how it relates to a wide variety of geologic phenomena
3. Recognize the three major rock categories and how rocks are transformed via the Rock Cycle
4. Recognize and describe geologic structures
5. Use seismic data to locate the epicenter of an earthquake
6. Describe the structure and geophysical properties of the Earth
7. Demonstrate knowledge of geologic time and the history of planetary evolution
8. Describe how geologic resources are formed and distributed
9. Discuss the impact of human activity on the Earth's climate

**PRELIMINARY COURSE SCHEDULE – SEE BB FOR UPDATES**

<b>Geology - Fall 2019</b>			
<b>#</b>	<b>Date</b>	<b>Content</b>	<b>Instructional mode</b>
1	31-Aug	Introduction to the course; Chapter 1: Introduction to Geology	On-campus session
2	7-Sep	Chapter 2: Plate Tectonics: A Scientific Revolution Unfolds	On-campus session
3	14-Sep	Chapter 3: Matter and Minerals	Hybrid session
4	21-Sep	Chapter 4: Igneous Rocks and Intrusive Activity	On-campus session
5	28-Sep	Chapter 5: Volcanoes and Volcanic Hazards; Exam 1	Hybrid session
6	5-Oct	Chapter 6: Weathering and Soils; Chapter 7: Sedimentary Rocks;	On-campus session
7	12-Oct	Chapter 8: Metamorphism and Metamorphic Rocks; Chapter 9: Earthquakes and Earth's Interior	Hybrid session
8	19-Oct	Field trip to Central Park; Chapter 10: Origin and Evolution of the Ocean Floor;	On-campus session
9	26-Oct	Exam 2; Chapter 13: Running Water;	Hybrid session
10	2-Nov	Chapter 14: Groundwater; Chapter 17: Shorelines;	Hybrid session
11	9-Nov	Chapter 11: Crustal deformation and Mountain Building; Chapter 15: Glaciers;	On-campus session
12	16-Nov	Exam 3; Chapter 18: Geologic Time;	Hybrid session
13	23-Nov	Chapter 20: Global Climate Change	On-campus session
x	30-Nov	No class scheduled	
14	7-Dec	Chapter 19: Earth's Evolution through Geologic Time	Hybrid session
15	14-Dec	Final Exam	On-campus

A more detailed schedule will be posted on the Blackboard site and is included below. Please check it often as the schedule can and will change depending on discussion times. Updates will be posted reflecting these changes.

### **Course delivery:**

This course will run as a hybrid section (50/50), meaning that not all class sessions will be held in the classroom at Hunter College. There will be 7 on campus class sessions and 7 hybrid sessions. Some of the sessions will be conducted online through Blackboard collaborate sessions with the lecture content delivered through online delivery mode using a combination of PowerPoint and Mastering content as well as utilizing a “flipped” classroom method which allows us to discuss material that you will have previewed prior to meeting in the classroom. “The **flipped classroom** is a pedagogical model in which the typical lecture and homework elements of a course are reversed. Short video lectures are viewed by students at home before the class session, while in-class time is devoted to exercises, projects, or discussions.”

I am very excited to share with you these non-traditional delivery methods as I found in my experience that students learn and retain more using these methods. Whether we meet in class or on-line, I will be available via email and online live meetings to discuss content, answer questions or just to share and discuss material relevant to our course and to the field of earth science.

### **Grading policy:**

Exams (4)	50%
BlackBoard Mastering assignments	30%
Field trip and paper	10%
Class participation & in-class work	10%

Exams: Exams will be a mix of multiple choice, true/false and fill-in-the-blank and short answer questions.

Weekly BlackBoard Mastering Assignments: There will be assignments to be completed for each chapter that we cover in class. Each assignment will be due by the following Friday at 11:59pm.

Field Trip and Paper: 5 page paper (plus cover, references, and any visuals) about the geologic history of Central Park

Weekly Participation Assignments: Weekly participation assignments that will include discussion board postings, in-class exercises, video exercises, etc

There will be NO INCOMPLETES (with the exception of a death, serious illness, or work-related issues such as travel). Incompletes must be requested in writing prior to the last class session (unless of an unforeseen emergency as outlined above) and will be given only if student’s grade is at “C” or above at the time the IN is filed, and with evidence of a satisfactory reason. At the time you request an IN you must also complete a Contract to Resolve an Incomplete Grade (form available at the college) and get my signature. Otherwise, I will average your existing grades based on the course grading rubric and record the grade you have earned. To receive a CR/NC you must have completed all the course requirements (exams, quizzes, etc.) and have requested the CR/NC option prior to beginning the final exam. Based on your final score you will be assigned a letter grade based on the numerical standards that can be found in the Hunter College Undergraduate Catalogue at <http://catalog.hunter.cuny.edu/>

### **Course Policies**

Attendance is an integral part of the course. Missing lecture whether it’s an on-campus or hybrid session will negatively impact your performance as there will be things discussed and reviewed in class that are not in your textbook. Since we meet only once a week, missing a single Saturday

session is the equivalent of missing two lectures, or an entire week of regular classes. After the first full day absence, any additional full day or equivalent absence will result in a 5-point deduction from your final grade. Lecture 1 is scheduled from 4:00 PM to 5:15 PM; Lecture 2 is from 5:35 PM to 6:50 PM. Attendance will be monitored during each of the lecture sessions, both on-campus and hybrid.

Any work assigned must be completed before the next class session begins whether you are in class or not. Missing a lecture class does not excuse you from completing and submitting the material that was assigned or that was due that day.

If you miss an exam for a satisfactory and documented reason you must contact me **within two days** of the missed exam deadline to schedule a make-up at a mutually convenient time. After that the grade will be automatically a zero.

### **Classroom Electronics Policy:**

All personal electronics, such as phones, laptops, tablets, etc., must be silenced **AND** put away or turned off before coming into the classroom. There is no need to use a laptop/tablet/iPad during lecture sessions. More about this during the first session.

### **Blackboard:**

Make sure that your Blackboard account is active and that you know how to use it. We will use BB extensively in this course so please make sure that you familiar with the application before the course begins. I will use it for course related work, send out assignments, reminders and emails. There will be classwork and assignments that are Blackboard-based (i.e., exams, quizzes, discussion, etc.) and it will be the delivery method for on-line lectures, discussions, and office hours. We will go over these in our first class session – but please email me as soon as you find that you can't find something or don't know how to get to an activity. I will not be responsible for work that you miss because you do not check your @myhunter email account or you didn't check BlackBoard.

### **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 reaffirms 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 relationships. 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, or 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](mailto:jtrose@hunter.cuny.edu) or 212-650-3262) or Colleen Barry ([colleen.barry@hunter.cuny.edu](mailto: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>

**Syllabus Policy:**

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.