GEOL 10000-01 Introductory Geology Lecture Syllabus Monday and Thursday 10:00 AM - 11:15AM Hunter North, Room 510 Spring 2023



Instructor: Prof. Rashkova
Office: Office HC North, 1032

Hours: Monday 6:00-7:00PM by appointment

E-mail: ar9108@hunter.cuny.edu (please include GEOL 101 in the subject

line along with your full name as it appears in CUNYFirst)

T.A Filip Trzcinka

Brief description/purpose of course:

GEOL 10000, Introductory Geology Lecture, is a science course that will introduce you to geophysical properties of Earth, plate tectonics, volcanism, geologic time, earthquakes, glaciers, and natural and anthropogenic global change. This course will assist you, in learning and expanding your understanding of the scale of the Earth and the forces that shape it. This course will serve as an introduction to the Earth sciences and will prepare you for further coursework in the Environmental Studies program. It will also give you a working knowledge and vocabulary to take other physical geography and geology courses. Moreover, it will introduce you to some of the cutting-edge technologies used in the earth sciences, potentially drawing some of you into an earth science related career path/major. The course format is in person, with several remote meetings throughout the semester.

The objectives of this course include:

- An understanding of the nature of science and the scientific method.
- The importance of thinking critically about scientific data.
- A basic understanding of the rocks and minerals that make up the earth and the ability to identify the most important types of rocks and minerals and how they are formed (the rock cycle).
- A basic understanding of plate tectonics, volcanism, earthquakes, mountain building
- An understanding of the vastness of geologic time, the Principle of Uniformitarianism and how geologists assess the ages of geologic features.
- An understanding of the formation and distribution of natural resources and the costs and benefits of their extraction.

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 PGEOG14100, 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

Learning Outcomes:

By the end of this course, students will be able to:

- Describe the key components of the scientific method.
- Describe and identify rocks and the geologic processes that formed them.
- Relate geologic processes and the distribution of rocks, minerals, and geologic resources to the theory of Plate Tectonics.
- Explain the causes and evidence for anthropogenic climate change in the context of the Earth System

Course Structure

All materials will be available on the **Hunter College Blackboard** site and further explained in class. Blackboard will have a "**Weekly coursework**" page. For each week there will be folder labeled by topic containing recommended reading, additional articles, an assignment, and/or other materials. Students are expected to complete all the work in each folder on a weekly/biweekly basis as specified. Class meetings will be held in person as per college policy with several remote meetings throughout the semester.

Required materials:

Essentials of Geology, 7th 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. https://www.norton.com/books/9780393882728This is likely cheaper than the bookstore. Please contact me if you have any issue regarding purchase of the textbook.

In this course we will be using Gradescope: an automatic grading program from UC Berkeley. **CLASS CODE: 6Z6YPJ**. All assignments will be submitted to Gradescope. All test and assignment grades will be posted via Gradescope. An email with access information will be sent to your email of record on Blackboard once the semester begins. In that email: you will be provided a link to click and set up your Gradescope password. Once the password is set you will be able to login using email of record on Blackboard and the password you made through the link. You should check Gradescope regularly to see what assignments are due. Each assignment is provided with a name, status, release and due date.

The status will either tell you whether an assignment was submitted or not, or it will show the grade you got for said assignment when grades are posted. To submit an assignment, you click on the assignment name and select a file to submit/drag and drop, similar to how you would submit something on Blackboard. After a successful submission you should see if your submission was successful and you will get an email confirming your submission went through.

• Course expectations:

Attendance: You are expected to attend lecture regularly and complete the associated assignments on a weekly basis. Given that COVID 19 has presented new challenges for everyone, including child care, sick care etc. you will have a window of time to complete homework/assignments.

Readings: You are expected to read the assigned chapters and readings in their entirety

Exams: This course will have three exams. Exams will not be cumulative. Exam questions will cover the material from in person meetings, Voicethreads, recordings, videos, and textbook. Many questions will be based on questions asked in class and in homework questions.

Assignments: This course will multiple assignments each week. These include:

Guided Learning homework assignments

Relevant articles: reading and discussions

Policies

All assignments must be turned in by the due date/time.

Students are allowed to miss two assignments with no penalty.

If you miss an exam accurate documentation must be provided in order to take the exam within a one-week period, with a 20% reduction in the grade.

Course evaluation/grading: Assignments Guided Learning exercises Exams Assignments (field trip, presentations, VFEs) Class Participation (participation in surveys, lecture questions, etc) Weighting 25% 55%

Participation is a very important part of your final course grade. It can include anything from asking questions and participating in class discussions during the lecture.

A final grade of IN (incomplete) is not normally given in this course except, again, under the most extraordinary and documented circumstances. You must contact me within 48 hours of the scheduled day/time of the final exam and complete a Contract to Resolve an Incomplete Grade. Otherwise, I will average your exam, attendance, and participation grades and record what you have earned. To qualify for Credit/No Credit you must have completed all assignments, taken the three exams, and have satisfactory attendance and participation. The Hunter College grading system will be used in this class and can be viewed in the latest undergraduate catalog available online at http://catalog.hunter.cuny.edu/.

As per CUNY, an **Unofficial Withdraw** (**WU**) is assigned to students who <u>attended a minimum of one class</u>. It is important to understand the definition of a WU and the difference between this grade and an F grade. The conditions for assigning the WU grade include:

- 1. A student's enrollment has been verified by the course instructor, and
- 2. The student has severed all ties with the course at any time before the final exam week and, consequently, has failed to complete enough course work -- as specified in the course syllabus -- to earn a letter grade, and
- 3. The student has not officially withdrawn from the course by completing the process for a W grade, or made arrangements to receive an INC.

Hunter College statement 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. Plagiarism, dishonesty, or cheating in any portion of the work required for this course will be punished to the full extent allowed according to Hunter College regulations.

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.

- 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 (itrose@hunter.cuny.edu or 212-650-3262) or 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.

Tentative Schedule for Spring 2023

*** This schedule may be altered slightly during the course of the semester ***

WEEK		TODIC/A CTIVITY
WEEK	DATES	TOPIC/ACTIVITY
1	Jan. 26	Introduction, materials/ responsibilities
2	Jan. 30	Prelude
	Feb. 2	Chapter 1: Earth in Context
3	Feb. 6	Chapter 2: The Way the Earth Works, Plate Tectonics
	Feb. 9	Chapter 2: The Way the Earth Works, Plate Tectonics
4	Feb. 13	NO CLASSES SCHEDULED
	Feb. 16	Chapter 3: Patterns in nature, minerals
5	Feb. 20	NO CLASSES SCHEDULED Feb. 21st Monday schedule
	Feb. 23	Chapter 3: Patterns in nature, minerals
6	Feb. 27	REVIEW
	Mar. 2	EXAM 1
7	Mar. 6	Interlude A: Introducing rocks
	Mar. 9	Chapter 4: Up From the Inferno, Magma and Igneous Rocks
8	Mar.13	Chapter 4: Up From the Inferno, Magma and Igneous Rocks
	Mar. 16	Chapter 5: Wrath of the Vulcan, Volcanic Eruptions
9	Mar. 20	Chapter 6: Pages of the Earth's Past, Sedimentary Rocks
	Mar. 23	Chapter 6: Pages of the Earth's Past, Sedimentary Rocks
10	Mar. 27	Chapter 7: Metamorphism, A Process of Change
	Mar.30	REVIEW
11	Apr. 3	EXAM 2
	Apr. 6	SPRING BREAK
12	Apr. 10	SPRING BREAK
	Apr. 13	SPRING BREAK
13	Apr. 17	Chapter 11: A Biography of Earth
	Apr. 20	Chapter 16: A Hidden Reserve, Groundwater
14	Apr. 24	Chapter 17: Dry Regions, The Geology of Deserts
	Apr. 27	Chapter 18: Amazing Ice, Glaciers and Ice Ages
15	May. 1	Chapter 19: Global Change in the Earth System
	May. 4	Chapter 19: Global Change in the Earth System
	May 11	LAST CLASS, REVIEW
	TBD	FINAL EXAMINATION