

UNIVERSITY OF PENNSYLVANIA
INTRODUCTION TO GEOLOGY
EESC 1000-910
SUMMER I, 2022
Syllabus Draft

Instructor

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Office hours: By appointment

Course Meeting Times

This is an online course. Class activities and assignments will be completed both synchronously in the Zoom video conferencing platform and asynchronously in Canvas.
In addition to the live zoom sessions, pre-recorded lectures will be posted in Canvas.

Synchronous class sessions will be held on Zoom on Tuesdays and Thursdays 5:15 PM - 6:45 PM (EST)

Textbook

Tarbuck, E.J. and Lutgens, F.K. (2020) Earth. An Introduction to Physical Geology, 13th edition. Pearson. ISBN-10: 0135188318

Course Description

This course is designed to provide the student with an understanding of the fundamentals of Geology. The course offers an introduction to processes and forces that form the surface and the interior of the Earth. Topics include, changes in climate, the history of life, as well as earth resources and their uses.

College/LPS Requirements

This course fulfills the Sector VI Physical World and Quantitative Data Analysis requirements for all College and LPS Undergraduates.

Class Format

This course consists of eleven topics (listed on the schedule below). Each topic will have assigned readings and lectures. A weekly assignment and a discussion board assignment will be posted in Canvas. For each topic there will be a live Zoom session (Tuesdays and Thursdays 5:15 PM – 6:45 PM EST)), which will be recorded for those of you are unable to attend due to time zone differences. In addition to the live zoom sessions, pre-recorded lectures will also be added to Canvas.

Participation

Regularly participating is critical to your learning and success in the course. Students are expected to attend the live zoom sessions and come prepared to the zoom session by completing the reading assignment and by watching the pre-recorded lectures. If you are not able to attend the live zoom session you are expected to watch the recording.

Grading

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|-------------------------------------|-----|
| Quizzes | 35% |
| Assignments | 25% |
| Discussions | 20% |
| Current Event Presentation | 15% |
| Current Event Presentation Comments | 5% |

Late assignments will be penalized five percentage points per day past the due date. Submissions will not be accepted more than one week past the submission deadline unless an extension has been granted.

Quizzes: Nine quizzes will be assigned using Canvas Quizzes (See schedule below and Canvas for due dates)

Assignments: a total of five assignments will be given throughout the course. (See schedule below and Canvas for due dates and description for each of the assignments)

Discussions: a total of five discussions will be assigned throughout the course. (See schedule below and Canvas for due dates and description for each of the discussions)

Current Event Presentation in Geology: Each student will complete one current event presentation during the 5 and a half weeks of the Summer I session. So, each week starting with Week #2, we will have about 6 total individual student current event presentations related to Geology. Students will create an asynchronous presentation that other students will respond to by providing comments or feedback. Each student will make use of the VoiceThread tool (see instructions posted in Canvas) to present a power-point for 8 to 10 minutes about their current event. This should include (1) a brief summary of their current event and (2) 2 - 3 discussion questions posed to the class. Each student will present a current event topic over the course of Summer I duration. Schedule and instructions available under Current Event assignment.

Current Event Presentation Comments: Each student is required to comment or provide feedback on all of the current event presentations from other students in order to gain the full 5% of the grade. Comments and/or feedback needs to be submitted on a weekly basis for all of the current events presented on a given week. (See schedule below and Canvas for due dates)

Grading

Your final grade will be based on your final percentage in the course as follows:

99-100% A+

92-98% A

90-91% A-

88-89% B+

82-87% B

80-81% B-

78-79% C+

72-77% C

70-71% C-

68-69% D+

62-67% D

60-61% D-

59% and below F

Diversity, Equity and Inclusion

The Earth and Environmental Science (EES) Department embraces human diversity and intends equity and inclusion in our community and our classrooms. We expect instructors, staff, and students to respect our diversity. We encourage you to contact our Climate, Diversity, Equity and Inclusion (CDEI) Committee EES-CDEIC@groups.sas.upenn.edu if you need support or have suggestions for how our CDEI efforts in EES can improve.

Academic Dishonesty and Plagiarism

You are responsible for knowing what constitutes plagiarism and avoiding it. Please see the University's Academic Integrity Guides for Students, available at <https://catalog.upenn.edu/pennbook/>

Policy on Religious Holidays

The University recognizes/observes holidays listed on <https://chaplain.upenn.edu/worship/holidays/>. If you observe any other holidays, please make special arrangements in person with us within the first two week of class.

Policy on Accommodations for Disability

Students who seek an accommodation for a disability should refer to the “Disability Accommodation” policy found on the UPenn Website under “Policies and Guidelines” and “Student Support Services and Organizations”. Because documentation is required and will be reviewed thoroughly, students are advised to request accommodations early in the semester.

COURSE SCHEDULE

The Canvas site will be updated regularly with relevant readings and assignments.

| Date | Topic | Due Dates for Assignments, Discussions, Current Events, Current Event Comments, and Quizzes |
|------------------|--|--|
| Tuesday, May 24 | Earth Structure, Composition, & History | |
| Thursday, May 26 | Minerals | Discussion 1: Thursday, May 26 Assignment 1: Friday, May 27 Quiz 1: Friday, May 27 |
| Tuesday, May 31 | The Rock Cycle, Igneous Rocks, & Volcanoes | Current Event: Tuesday, May 31 (see Canvas for schedule) Quiz 2: Wednesday, June 1 |
| Thursday, June 2 | Weathering of Soils | Current Event Comments: Thursday, June 2 Discussion 2: Thursday, June 2 Assignment 2: Friday, June 3 Quiz 3: Friday, June 3 |
| Tuesday, June 7 | Sedimentary Rocks | Current Event: Tuesday, June 7 (see Canvas for schedule) Quiz 4: Wednesday, June 8 |

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| Thursday, June 9 | Plate Tectonics & Origin of Mountains | Current Event Comments: Thursday, June 9 Discussion 3: Thursday, June 9 Assignment 3: Friday, June 10 Quiz 5: Friday, June 10 |
| Tuesday, June 14 | Earthquakes | Current Event: Tuesday, June 14 (see Canvas for schedule) Quiz 6: Wednesday, June 15 |
| Thursday, June 16 | Mass Wasting | Current Event Comments: Thursday, June 16 Discussion 4: Thursday, June 16 Assignment 4: Friday, June 17 Quiz 7: Friday, June 17 |
| Tuesday, June 21 | Fluvial Systems | Current Event: Tuesday, June 21 (see Canvas for schedule) Quiz 8: Wednesday, June 22 |
| Thursday, June 23 | Groundwater & Water Resources | Current Event Comments: Thursday, June 23 Discussion 5: Thursday, June 23 Assignment 5: Friday, June 24 Quiz 9: Friday, June 24 |
| Tuesday, June 28 | Water Quality | |