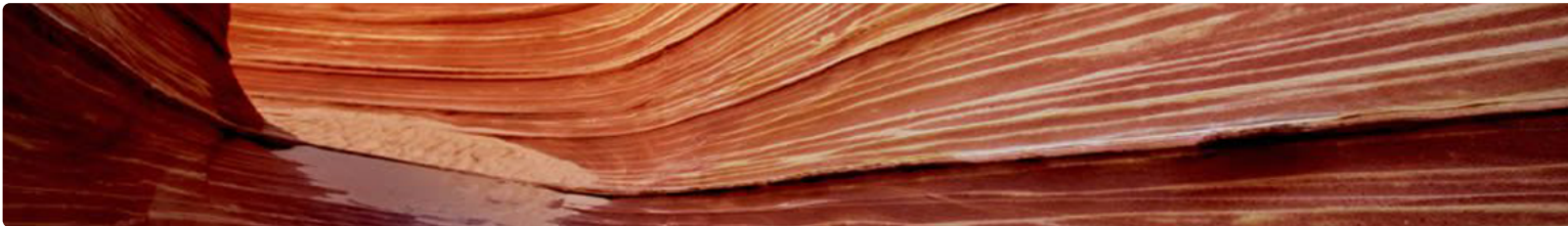


GEO 1010 Introduction to Geology



Instructor Contact Information

Dr. Weihong Wang

✉ Email: Best way to communicate with me is through Canvas email. However, you can use my UVU email (weihong.wang@uvu.edu (<mailto:weihong.wang@uvu.edu>)) if you have to.

📞 Office phone: 801-863-7607

🏢 Office location: PS 218

🕒 Office hours: Using the provided hour office times or by appointment

Inclusion Statement

I am committed to creating an inclusive and welcoming learning environment for all students. In this class, all people and viewpoints are respected. Discrimination or harassment of any kind is not tolerated. If you have a name and/or set of pronouns that differ from those that appear in official university records, please let me know. If you feel comfortable, please consider sharing with me any concerns you may have about inclusion in our classroom so we can address them. I value the diverse perspectives and identities - including but not limited to age, ability, cultural background, gender identity and expression, immigration status, language, learning differences, nationality, race, religion, sexual orientation, socioeconomic status, and veteran status - that students bring to this class. Your suggestions will help me improve as an instructor and help create a better community for learning for all students in this course.

Course Description

Geology is the science that pursues an understanding of the Earth, including the materials that make up the Earth and the physical processes that sculpt the surface of the Earth. The Earth impacts us all from the energy and raw materials we use every day to the natural disasters that strike without warning. This course is an introduction to physical geology, and will help you to have a basic understanding of Earth processes and the way that humans interact with their home planet.

🎯 Course Learning Objectives

Upon successful completion of this course, students will be able to:

1. Identify major rock types and rock forming minerals.
2. Explain the role of different rock types and rock forming minerals in plate tectonics, the rock cycle, and surficial and interior geological processes.
3. Describe the geologic time scale.
4. Explain the ways in which geologic resources and geologic data benefits society.
5. Critically evaluate popular news articles and proposed policies related to Geology and the Earth Sciences.
6. Apply the laws and principals of relative and absolute dating to evaluate geologic cross sections and maps.
7. Apply the scientific method, including multiple working hypotheses, to analyze and evaluate geologic data and problems outside of the classroom.

📚 Materials and Technology

- Required textbook: Marshak, S. Essentials of Geology. 4th or 5th Edition. Norton, New York. If you prefer, you can certainly get the 6th edition, but you are not required to get the newest edition.
- You DO NOT need an access code to Essentials of Geology, just the textbook. You can get an online or hard copy of the book.
- Access to Canvas, document, and spreadsheet software (Google docs is fine), and Google Maps.

Also UVU has a number of resources here to help you. More information here: [Resources for success](#) ➡

https://www.uvu.edu/firstyear/docs/resources_for_success.pdf

❓ How This Course Works

- This course is organized using the Modules tab. Each week you will have to complete ONE unit except week 3. For week 3, you would need finish two units (unit 3 and 4 on Minerals). Each unit contains a reading quiz, an interactive lecture, an applied online activity, and a discussion. Some of the assignments require field experiments or work, so make sure to plan ahead for the week's assignments. For a detailed schedule, make sure to examine the Modules tab.
- The most effective way to complete each unit is to do the assignments in the following recommended order: 1) read the assigned chapter(s); 2) complete the interactive lecture slides; 3) complete the online quiz; 4) complete the online activity and discussion assignment.
- You will have **THREE** tries to answer each question on the interactive lecture slides. Please try your best to find the correct answer.
- You will have **ONE attempt** to complete each quiz.
- **All midterm exams and the final exam are open-book and open-notes, but timed.**
- You will have **ONE attempt** for each midterm, and you will have 90 minutes to finish 45 questions.
- You only have **ONE attempt** for the final exam, and you will have 110 minutes to finish 55 questions.
- As a student you can expect this course to challenge and engage you as a learner. You will be expected to work in groups, engage in class discussions, complete assignments as required, and succeed as a student in this online course.

Important Due Dates:

- All quizzes are due Friday midnight.
- All Applied Learning Activities are due Friday midnight.
- All initial discussion post is due Wednesday midnight and comment posts are due Friday midnight

- Each midterm and final exam will open for three days.

Student Responsibilities:

- *Start class the first week of the term.*
- ***Be accountable by setting aside regular time each week to complete course activities and assignments on time as noted per the due dates.***
- *Learn how to use Canvas including communication tools (e.g. discussion, Canvas inbox, etc.). If you have technology-related problems contact the [Service Desk](https://www.uvu.edu/servicedesk/)  (<https://www.uvu.edu/servicedesk/>).*
- *Abide by ethical standards. Your work must be your own.*
- *Contact your instructor as early as possible if an emergency arises. Do NOT wait until the last minute to ask for an extension.*

Instructor Responsibilities:

- *Respond to emails within TWO business days. If multiple emails are received regarding the same question or concern, they may be responded to with an announcement to the entire class.*
- *Provide timely, meaningful and constructive feedback on assignments.*
- *Facilitate an effective learning experience.*
- *Refer students to appropriate services for issues that are non-course content specific. For instance, technical issue, writing labs, accessibility services, etc.*
- *Mentor students through the course.*

Grading and Late Work Statement

All assignments are to be completed and submitted online through Canvas.

Grading Scale: This scale represents your percentage of total points

Grade	%	Grade	%
A	95-100	C	73-76.9
A-	90-94.9	C-	70-72.9
B+	87-89.9	D+	67-69.9
B	83-86.9	D	63-66.9
B-	80-82.9	D-	60-62.9
C+	77-79.9	E	<60

Assignment Categories

Activity	Percent
Interactive Lectures	10
Reading Quizzes	15
Applied Online Activities	25
Discussions	15
Midterms Exams	15
Cumulative Final Exam	20

Late Work

No late work is accepted. All work should be submitted through Canvas. I do understand that life sometimes happens and you will miss an assignment. In order to build in some flexibility in the course, we will drop a few assignments in each assignment category. If something happens, please be in touch over email and we can work together to find a solution. Send me a note the sooner the better if it looks like you are slipping!

Attendance

You should maintain an active presence in this online class. This means that will participate in discussions every week by posting original content, and also commenting on at least two group members. Detailed directions are provided for each discussion.

Assignment and Assessment Descriptions

- **Interactive Lectures: 10% of total grade**

These interactive lectures consist of interactive slides where you can watch videos, animations, complete interactive activities on the slides. It is essential to go over the lecture slides after reading the textbook chapters. The slides will help you to understand the core of the topics in each chapter.

- **Reading Quizzes: 15% of total grade**

These short reading quizzes are designed to keep you on track with the reading so that you are better prepared for the assignments and discussions. Reading introduces fundamental concepts and lays the foundation upon which we will build other class activities. Quizzes are due Friday midnight.

Your two lowest reading grades will be dropped.

- **Applied online activities: 25% of total grade**

These exercises are designed for to apply concepts from the readings to real life scenarios of earth system science. These assignments will have you collecting and analyzing data, calculating results, and communicating ideas through writing and other media. Applied online activities are due Friday midnight.

Your two lowest learning activity grades will be dropped,

- **Discussions: 15% of total grade**

Discussions will be opportunities to explore topics together. Posts to the discussion should add significantly to the conversation and support your point of view. *Comments that do not add significantly to a discussion will receive* no credit. It is okay to disagree in a discussion. In fact, much learning happens when we disagree. However, we need to be respectful and keep our online classroom a safe place to learn.

Due dates for discussions correspond with the initial post date which is on Wednesday midnight. Follow up comments are due by Friday midnight.

Your two lowest discussion grades will be dropped, but the "Introductions" and "What will you remember?" discussion assignments won't be dropped.

- **Midterm Exams: 15% of total grade**

Midterm exams are periodic summative assessment to check your progress during the semester. Midterm exams consist of 45 multiple choice questions and will be open-book and open-notes, but timed. You will have ONE ATTEMPT to finish the questions, and you will have 90 minutes to complete the questions.

Your one lowest midterm exam grades will be dropped

- **Cumulative Final Exam: 20% of total grade**

The cumulative final exam is the summative assessment for what you have learned during the semester. The cumulative final exam consists of 55 multiple choice questions and will be open-book and open-notes, but timed. You will have 110 minutes to complete the cumulative final exam. You only have ONE ATTEMPT for the final, so make sure you are well-prepared for it before taking it.

The cumulative final exam won't be dropped.

 Course Schedule

Week	Class Plan	Reading Assignment
Unit 1	Intro to our Planet Earth	Prelude, Interlude D, Chapter 1
Unit 2	Plate Tectonics	Chapter 2
Unit 3	Minerals	Chapter 3, 12

Unit 3	Minerals	Chapter 3, 12 Midterm 1 (Prelude, Interlude A, D, and Chapter 1,2,3,12)
Unit 4	Igneous Rocks	Chapter 4, Interlude A
Unit 5	Volcanoes	Chapter 5
Unit 6	Sedimentary Rocks	Chapter 6, Interlude B
Unit 7	Metamorphic Rocks	Chapter 7, Interlude C Midterm 2 (Interlude B, C and Chapter 4,5,6,7)
Unit 8	Earthquakes	Chapter 8
Unit 9	Structural Geology	Chapter 9
Unit 10	Spring Break Excursion Report	
Unit 12	Geologic Time	Chapter 10, 11, Interlude E
Unit 13	Land Slides	Chapter 13
Unit 14	Utah Lake Water Quality Midterm 3 (Interlude E, Chapter 8,9,10,11,13)	
Unit 15	Climate Change and Air Pollution	Chapter 19
Unit 16	Intro to Nonrenewable Energy and Sustainable Energy	Chapter 12
Final Week	Cumulative Final Exam	

[Student Rights and Accountability](https://www.uvu.edu/studentconduct/students.html) ➦ [\(https://www.uvu.edu/studentconduct/students.html\)](https://www.uvu.edu/studentconduct/students.html)

- **Important note on plagiarism:** You are here to learn BUT plagiarism will hinder your learning. In this class, all written work submitted in this course, except for acknowledged quotations, is to be expressed in your own words. Copying another student's work or from other sources is not acceptable. The submission of such copied work will result in negative grades (first offense) and a failing grade for the whole course (second offense), and will also make him/her liable for referral to the UVU Conduct Office. Moderate quotation for illustrative ends is often advantageous. Such passages must be placed within quotation marks or otherwise identified. When using information from other sources, proper citation or footnotes are needed.

[Policies and Success Strategies](https://greengold.uvu.edu/_crs_info_master/success.html) ➦ [\(https://greengold.uvu.edu/_crs_info_master/success.html\)](https://greengold.uvu.edu/_crs_info_master/success.html)

[Accessibility Services](https://www.uvu.edu/accessibility-services/) ➦ [\(https://www.uvu.edu/accessibility-services/\)](https://www.uvu.edu/accessibility-services/)

- Students who need accommodations because of a disability may contact the UVU Office of Accessibility Services (OAS), located on the Orem Campus in LC 312. To schedule an appointment or to speak with a counselor, call the OAS office at 801-863-8747. Deaf/Hard of Hearing individuals, email nicole.hemmingsen@uvu.edu or text 385-208-2677.

[Campus Resources](https://www.uvu.edu/otl/students/campus_resources.html) ➦ [\(https://www.uvu.edu/otl/students/campus_resources.html\)](https://www.uvu.edu/otl/students/campus_resources.html)

- **AI Statement:**

**adapted from [Temple University \(https://teaching.temple.edu/sites/teaching/files/resource/pdf/Chat-GPT%20syllabus%20statement%20guidance.pdf\)](https://teaching.temple.edu/sites/teaching/files/resource/pdf/Chat-GPT%20syllabus%20statement%20guidance.pdf) statement on AI in classes.*

AI programs are not a replacement for your human creativity, originality, and critical thinking. Writing, thinking, and researching are crafts that you must develop over time to develop your own individual voice. At the same time, you should learn how to use AI and in what instances AI can be helpful to you.

The use of generative AI tools (e.g. ChatGPT, Google Bard, etc.) is permitted in this course for the following activities:

- Brainstorming and refining your ideas;
- Fine tuning your research questions;
- Finding information on your topic;
- Drafting an outline to organize your thoughts; and
- Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts/responses assigned to you or content that you put into a Teams/Canvas chat.
- Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool.
- Writing a draft of a writing assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty.

Any student work submitted using AI tools should clearly indicate what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, please reach out to me for a conversation before submitting your work.

Technology Support Services

✚ For 24/7 technical support contact [Instructure's Canvas Support Live Chat](https://cases.canvaslms.com/liveagentchat?chattype=student&sfid=001A000000085cNxIAI)  (<https://cases.canvaslms.com/liveagentchat?chattype=student&sfid=001A000000085cNxIAI>)

📞 (385) 204-4930 (Available 24/7)

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