



Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

Semester: Spring 2025

Year: 2025

Course Prefix: GEO

Course and Section #: GEO 101H-002-202520

Course Title: Introduction to Geology PP

Credits: 3

Course Description

Studies planet Earth: its materials, structure, dynamics, and surface features. Taken alone it is designed for non-science students who want a broad introduction to earth science and a greater appreciation of their physical surroundings. Taken in conjunction with laboratory exercises in GEO 1015, the class is sufficiently rigorous to articulate as an introductory geology class.

Course Attributes

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Michael Stearns

Student Learning Outcomes

Upon successful completion, students should 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.
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Course Materials and Texts

Marshak, S. Essentials of Geology. 4th Edition or newer. Norton, New York.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Assignments (in-class assignments, homework, and quizzes) 40%

- Quizzes about the class material may be assigned to encourage participation and will consist of several multiple-choice questions. These quizzes may be given online or in class.
- In-class assignments make up most of your mark and will be short hands-on group projects focused on a concept from the discussions.
- Take home projects will consist of watching videos, small reading and/or writing exercises, or various other short homework assignments.
- I will drop your lowest two in class assignments

Midterm assessments 30% (2 total)

Midterms will be 50 minute via Canvas, open note, and individual. Midterms will cover roughly three chapters each, and have roughly 10 questions from each of the three chapters covered. They are worth 15% of your final grade each.

Final assessment 20%

This is a cumulative/comprehensive final test to show off all that new geologic knowledge you have gained! The final test will be roughly 50 questions and emphasize the material after midterm #3. That means there will be 30–40 questions from the last chapters covered and 10–20 questions covering key concepts from previous chapters (midterms 1 and 2). There may even be repeated questions from previous midterms.

Term Project 10%

We will brainstorm and discuss the format and requirements of a term-length project during the first two weeks of classes. In past offerings this project has taken many forms, for example, service-learning projects, student-made video tours of geologic sites, slide shows, research papers, etc.

Course averages are normalized to a percentage (per 100) scale. Final grades will be based on the following scale:

- A \geq 93%
- A- = 90–92.9%
- B+ = 87–89.9%
- B = 84–86.9%
- B- = 81–83.9%
- C+ = 78–80.9%
- C = 73–77.9%
- C- = 70–72.9%
- D+ = 67–69.9%
- D = 64–66.9%
- D- = 60–63.9%
- E < 60%

Missed Tests and Assignments:

- In-class participation and assignments cannot be made up for *unexcused*. If you do not come to class, you will not do well in the course. You will have roughly one graded in-class assignment per week.

- Missed tests can only be rescheduled with a doctor's note or prior arrangement with me. Make up tests will differ from normally scheduled tests.
- No make ups will be given after graded tests are returned to the class (roughly one week)
- Late assignments will be penalized 10% for every day that they are late
- It is your responsibility to know when tests are given. I will send emails or post announcements on Canvas so you should make sure your announcements are set to receive them for the course.

Required or Recommended Reading Assignments

One or two relevant chapters from the required textbook will be assigned weekly for each unit of the course.

General Description of the Subject Matter of Each Lecture or Discussion

Tentative Class Schedule (this is likely to change based on our pace in the course). Also see Canvas for a detailed schedule.

	Overarching Topic	Monday	Wednesday
Week 1	Rock Cycle	6-Jan	8-Jan
Week 2	Atoms, Crystals, & Minerals	13-Jan	15-Jan
Week 3	Atoms, Crystals, & Minerals	20-Jan	22-Jan
Week 4	Plate Tectonics	27-Jan	29-Jan
Week 5	Plate Tectonics	3-Feb	5-Feb
Week 6	Igneous Processes: Melting & Crystallization	10-Feb	12-Feb
Week 7	Igneous Processes: Magmas & Lavas	17-Feb	19-Feb
Week 8	Sedimentary Processes: Weathering, Erosion, & Transport	24-Feb	26-Feb
Week 9	Sedimentary Processes: Deposition & Environments	3-Mar	5-Mar
Week 10	Spring Break	10-Mar	12-Mar
Week 11	Geologic Time: Tools	17-Mar	19-Mar
Week 12	Geologic Time: Earth History	24-Mar	26-Mar
Week 13	Earthquakes, Mountains, & Faults	31-Mar	2-Apr
Week 14	Earth's Freshwater	7-Apr	9-Apr
Week 15	Global Climate Change	14-Apr	16-Apr
Week 16	Review	21-Apr	23-Apr
Week 17	NA	28-Apr	30-Apr

Required Course Syllabus Statements

Generative AI

Artificial Intelligence Statement (adapted from Temple University statement)

Artificial intelligence (AI) programs are not a replacement for your human creativity, originality, and critical thinking. Thinking, researching, and writing are skills that take time to develop and give you a unique voice as a person. Using AI tools can support those activities *and* be ethical in certain academic settings.

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 is accurate, does not violate intellectual property laws, contains no misinformation, or contains no unethical content). Your use of AI tools must be properly documented and cited 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.

Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.