

Historical Geology (GEOS 1234)

McCoy College of Science, Mathematics, and Engineering
Fall 2026

General Course Information

- Lecture Meetings: Monday, Wednesday, Friday | 11:00 am – 11:50 am | Bolin Hall 247
- Laboratory Meetings: ***Labs begin in week 2.** Attend only the section you are registered for.
 - Section 11A: Tuesday | 1:00 pm – 2:50 pm | Bolin Hall 119 | Jacob Heidema
 - Section 11B: Wednesday | 1:00 pm – 2:50 pm | Bolin Hall 119 | Porama Ana
 - Section 11C: Thursday | 3:00 pm – 4:50 pm | Bolin Hall 119 | Madeline Price
- Course D2L Site: We will only use the main course site for the lecture section, there will be no content in the laboratory section sites.
 - [Link to the Historical Geology D2L Site](#)

Instructor Information

- Professor
 - Dr. Steven J. Rosscoe | steven.rosscoe@msutexas.edu | 940.397.4448
Office Hours: MWF 8:00 am – 8:50 am, 10:00 am – 10:50 am | Bolin Hall 101A
Virtual Office Hours: M 10-10:50 am or By Appointment | [Zoom Office Hours Link](#)
- Laboratory Instructors (responsible for teaching and grading laboratory sections)
 - Jacob Heidema | jheidema1015@my.msutexas.edu
 - Porama Ana | pana1105@my.msutexas.edu
 - Madeline Price | mcprice0401@my.msutexas.edu

Course Description

Formation and evolution of the Earth from its origins to the present. Special focus is placed on integrating geological and biological concepts through Earth history, including plate tectonics, mountain building, and major evolutionary events. Additional emphasis is placed on connections to societal issues, including mass extinctions and global climate change.

Course Learning Objectives

The successful completion of this course will be evaluated around the following course learning objectives. Each of these course learning objectives include aspects of both content knowledge and skills development. Students will:

1. Investigate the foundational principles used in unraveling the history of the Earth (plate tectonics, deep time, evolution).
2. Develop an understanding of the major geological and evolutionary events that have occurred throughout geologic time.
3. Apply these understandings to the geology of Texas, Oklahoma, and unique geological environments across the United States.

4. Develop proper laboratory skills and analytical techniques that are foundational to the study of the geological sciences (mineral and rock identification, basic fossil identification environmental interpretation, and correlation).

Instructional Materials

The following materials are required for the successful completion of the course. In designing this course all efforts were made to keep your costs as low as possible. There is no lab manual to purchase and traditional textbooks.

Required Textbooks

These books are available in traditional formats and are also available as audiobooks.

- **Hazen, Robert M. 2013.** The Story of Earth: The First 4.5 Billion Years, From Stardust to Living Planet. Penguin, 306 p. ISBN 9780143123644
- **Brannen, Peter. 2017.** The Ends of the World: Volcanic Apocalypses, Lethal Oceans, and Our Quest to Understand Earth's Past Mass Extinctions. Harper Collins, 322 p. ISBN 9780062364814

Required Software Applications

- Microsoft Office: Word, PowerPoint [Free Access to Microsoft Office 365](#)
 - Required for completion of laboratory activities.
- PDF Reader
 - PDFs are used to provide some course materials; a browser PDF reader or Adobe Acrobat will be necessary to view them.

Recommended Textbooks (Not Required)

This textbook is not required, but much of the detailed information in the lecture portion of this course is covered very well in this text. Should you find yourself struggling to learn the lecture material it would be an excellent resource.

- **Wicander, R. and Monroe, James S. 2016.** Historical Geology: Evolution of Earth & Life Through Time, 8th Edition. Cengage Learning. 448 p.

Supplemental Readings

These readings are provided as PDFs in D2L, specifically to prepare you as pre-lab readings for some of the laboratory activities you will be completing in this course.

- **Rosscoe, Steve J. 2026.** Historical Geology Lab Readings (provided as PDFs in D2L).
- Other readings as necessary.

Grading Information

The formal grade for this course is determined by your performance on lecture exams, a podcast project, laboratory activities, and laboratory mini exams. Your grade is calculated by dividing the points you earned during the semester by completing assignments by the total number of points possible in the semester. The letter grade for the course follows the traditional university style.

Assessments Related to the MSU Core Curriculum

As a core curriculum course at Midwestern State University (Life & Physical Sciences – 030N) this course works to develop skills and reports assessments in critical thinking, communication skills (written communication), empirical and quantitative skills (quantitative literacy), and teamwork.

Table 1: Allocation of Points by Assignment Type

The table below shows the total number of points for each major category of assignment that are possible this semester. For more details about the assignments see the section for that assignment in this portion of the syllabus.

Assignments (Quantity)	Points
Lecture Examinations (4/5)	200
Course Project (1)	100
Lab Activities (10/11)	200
Laboratory Examination (1)	050
Total Points	550

Table 2: Points, Percentage, and Letter Grade Values

The table on the following page shows the point-value and percentage-value required to reach a particular letter grade in the course. The table reflects the optimal running of the course where there are no missed days or activities. The instructor reserves the right to change the point distributions to reflect such changes. The percentage requirements will remain unchanged throughout the semester. Percentage grades are rounded to the nearest whole percent.

Grade	Points	Percentage
A	495 and up	90% and up
B	440 to 494	80% to 89%
C	385 to 439	70% to 79%
D	330 to 384	60% to 69%
F	Less than 330	59% or less

Lecture Examination Information

During the semester there will be five examinations given online through the D2L course management system (50 points each). These examinations are to be taken at the end of each module, after you have watched and taken notes on all video lecture and read the required readings. Examinations will be available for you to take as early as the opening date of the module. You may take the examination at any point during the three-week-long module, but must complete it by the module due date. The examinations will consist of 50 multiple choice questions (1 point each). The multiple-choice questions will focus on vocabulary and key concepts and Earth processes. You will have 60 minutes to complete each examination. Exams will close and auto submit after 60 minutes. At the end of the semester the lowest examination grade will be dropped. Your grade is determined by your top four examination grades. Examination due dates can be found in the course due date calendar located on the last page of this syllabus.

- Examinations are individual exercises.
- You ***may not** take examinations with each other.
- You ***may not** use internet resources while taking the examination. ***NOTE** this includes any internet resource – other people, websites, search engines, artificial intelligence.
- You may use your course textbooks and your lecture notes from class.
- You are responsible for studying and learning the material before taking the examination (~1 minute per question is standard and more than enough time if you have properly studied for the examination).
 - You will not have enough time to look up every question if you do not study in advance for the examination. Study is key.

Course Project Information

One of the driving themes in a Historical Geology course is that of change. The Earth and the life upon it are constantly changing. These changes are often complicated and inter-related between life and the Earth. As such, the dynamic changes of our planet are key to understand. In a course, the lecture material must only graze and highlight some of the important changes in Earth history. But you should also take time to learn about one of these changes in a detailed way. You will be working with an assigned group of your peers on an assigned topic about one of Earth's major mass extinctions.

The project consists of two components and individual essay written by you (not AI, not another person, not by someone paid to write answers, etc.) demonstrating that you have read the required materials and prepared for the group project by comprehending the materials. All essays will be submitted through Turn-it-in on D2L. Turn-it-in will assess the similarity of your paper to other submitted papers, your paper to materials on the internet, and your materials to AI generated materials. The second component is an audio recording or video recording of your group conducting an informative podcast about the mass extinction you have been assigned. All students must participate in their group discussion board by sharing their availability and contact information for their peers in the group. Group participation will be assessed by surveys that each group member must submit to earn a grade on the group project. All group members must participate in group meetings, participate outside of group meetings, and perform equally in the resulting podcast. Details on structure, grading, and assessment can be found on the course D2L site.

This project covers and assesses critical thinking, teamwork, and communication attributes of the MSU core curriculum. [AACU Critical Thinking: explanation of issues, influence of context and assumptions, conclusions and related outcomes; AACU Written Communication: context and purpose for writing, content development, genre and disciplinary conventions; AACU Teamwork: facilitates the contributions of team members, individual contributions outside of team meetings, fosters constructive team climate].

Laboratory Activities

The historical geology course requires the completion of 11 laboratory activities. ***If you do not attend and complete the lab activities, the statistical odds are that you will fail the course.** Each

lab is worth 20 points. Due dates for each lab can be found on the course due dates table (last page of this document). The best 10 lab grades of 11 will be used to calculate your final grade.

For most of the laboratory activities you will have:

- A prelab reading (read before coming to lab).
- A video introduction to the laboratory material (view before coming to lab).
- Lab handouts provided in the lab.
- Activity materials (Video, PowerPoints, Documents).

At the start of each lab meeting your TA will introduce the important concepts and review the important safety procedures and laboratory methods. This is important, be there at the start of lab. Attendance will be taken. ***If you are marked absent and turn in a lab, it will not be graded, unless you made arrangements to make up the lab in person and did so.** Each lab must be completed and turned in directly to the TA (not the professor) at the start of the next laboratory meeting. Please note, each semester new specimens, maps, and other materials are used. Do not rely on past students' work to get you through this course.

The lab on geologic histories is used to develop and assess quantitative skills for the MSU core curriculum. The quantitative skills will include ordering strata and geological events using the principles of stratigraphy, determining isotopic concentrations and ratios, and calculating the age of a sample using the provided half-life. [AACU Quantitative Literacy: calculation, application/analysis, assumptions]

Laboratory Exam

To test your laboratory skills and ability to use the techniques taught throughout the lab you take an in-person laboratory exam worth 50 points during the last lab meeting of the semester. This lab exam will consist of stations, you will have a set period of time at each station to complete the activity for that station. After rotating through the stations you will have the remainder of the lab period to go back to any stations you would like to revisit and complete the examination.

Extra Credit

The only extra credit opportunities in this course will be given to the entire class, do not ask for individual extra credit. There is one planned extra credit activity (Introduce Yourself Extra Credit (see details in D2L). Additional extra credit assignments may be assigned as the semester progresses at the discretion of the instructor. Extra credit assignments are assignments that have due dates; no late credit will be given.

Late Work Policy

This is an online course where each assignment has a week or more of lead time before their due date. ***No late work will be accepted.** Missed labs and examinations may be made up with a legal, paper-documented, excuse.

Make-Up Work/Tests

For legal, paper-documented excuses make-ups for labs and examinations can be completed. Make-up work should be arranged for in advance wherever possible. The instructor will give you a new deadline that is reasonable for the course timeline. ***No make-up work (lecture or lab) will be allowed beyond 10 days past the original deadline.**

The group project cannot be made-up as it requires active participation in the group throughout the semester. While your group should work with your schedule to include you and reschedule meetings due to illness, if you do not participate at all you will not be able to make-up the assignment.

Note: You must complete the assignments, laboratories, and examinations presented in this syllabus. ***No substitute assignments will be allowed to compensate for poor performance or missed deadlines.**

Instructor Classroom Policies

The following policies are the policies that are integral for our successful completion of the course and should be read thoroughly. If you have any questions, please see the instructor.

Academic Honesty Policy

Academic dishonesty is considered cheating, collusion, and plagiarism. Any unauthorized assistance during the completion of assignments, using on aids beyond those authorized for an assignment, or the use of other people or services to complete assignments is considered cheating. Working with others in a way that is not authorized by the instructor to complete assignments is considered to be collusion. Plagiarism is the use of another person's materials (by paraphrase or direct quotation) without giving them full and clear acknowledgement. The use of material prepared by another person or agency selling term papers and academic materials is also considered plagiarism. ***If a student is caught cheating, colluding, or plagiarizing on any assignment the assignment grade will automatically be a zero. Two or more violations will result in failure of the course.**

Artificial Intelligence Policy

This course is classified as an ***AI Prohibited Course**. The use of any artificial intelligence (AI) in completing course assignments is NOT allowed. AI in this sense is any technology that summarizes, writes, or answers questions on its own. Recent court rulings have allowed lawsuits to go forward against Chat GPT and other AI operators because it directly plagiarizes the use of others. College is about you learning to write, you developing your voice, and you learning how to process, summarize, and properly cite information. Any use of AI is considered a violation of this academic honesty policy.

Classroom Civility Policy

Learning, especially in science, can be a very challenging process. Learning often requires putting yourself out there and being vulnerable. Science also happens to be at the forefront of information which may conflict with personal beliefs. Your beliefs are yours and nothing will

change that, though those beliefs may not get you credit on the exam. We are focused on science and what understandings have been developed in the field. Additionally, no scientist thinks the same way as every other scientist. To develop the best understandings of our universe, we must seek input from all people in the field.

In my classroom, we strive to create an environment where everyone is respected and valued for who they are. We are all here together, learning together, and working toward the same goal. This is not a place for hate of any kind. The use of derogatory language, hate speech, or violence is absolutely unacceptable in this classroom and in any setting related to the course. Learn to work with and value all people. Be civil and treat each other with respect. Do your best to listen to each other, in any conversation. Use of derogatory language, hate speech, or violence will result in removal to the classroom or the course.

Dr. Rosscoe is available to help if you have any concerns or questions about building a positive classroom environment. The campus also has numerous resources related to a safe and welcoming experience at MSU. Also, don't forget the MSU Safety App.

- [Title IX Misconduct](#): Dating violence, sexual assault, sexual harassment, stalking, and other forms of sexual misconduct.
- [Bias Incident Reporting](#): Bias and hate incidents related to race, gender, or sexual identity.
- [Disability Grievance Procedures](#): Discrimination on the basis of disability.

COVID-19 and Illnesses Policy

Since COVID-19, classroom health has been a necessary and probably long overdue focus. While there are no longer COVID-19 policies in place by the university the following procedures are scientific best practices. These same principles can be applied to any viral infection (flu, cold, etc.).

- If you become ill and have symptoms, get tested.
- If you are positive for COVID-19, stay home. It's good for your recovery and good for protecting your peers.
- Illness happens and if you absolutely must be in public, wear a mask. Even a cloth mask reduces the chance you will spread the illness to others.
- If you stay home or miss assignments, be sure to get a doctor's note and excuse. It allows the instructor to help you make things up.

In the case of long-term illnesses or medical situations that will prevent you from attending classes regularly, contact the professor as soon as possible. We will work together to make sure that you can succeed, just make sure it is Doctor-documented. I can't do much to help, if I don't know until the day before the semester ends.

Electronic Devices Policy

Use of electronic devices for taking notes is allowed in my classroom. The use of social media or streaming anything is not an appropriate use of technology during class. If your use of technology is non-educational or is being disruptive to your peers, you will be asked to leave. If you're in the

back of the room, ear buds in, and smiling as you watch something on your device, I do notice. Don't be that person.

Recording Classes Policy

***Recording classes is generally prohibited without the professor's explicit permission.** Such recordings, when permitted are for personal use only and may not be uploaded to the internet or otherwise shared, transmitted, or published without the professor's prior consent. Some faculty may not permit recordings of their classes. When it is feasible and appropriate, students may record classes to accommodate disabilities under the Americans with Disabilities Act, with prior approval of Disability Support Services. Such recordings may not be uploaded to the internet or otherwise shared, transmitted, or published.

Course Grades and Grade Bumps Policy

In my courses, a grade is earned by accumulating points throughout the semester. The grade you earn in the course is determined by the number of points you earn through the timely completion of assignments. As such, at the end of the semester, there are no grade bumps given out. Do not ask how or if you can be bumped up to the next letter grade, if you haven't earned the points, you will not be able to get that grade.

If you believe there to be an error in the calculation of your grade, whether it is on a specific assignment or the whole course feel free to ask me to re-evaluate and double check. I will do so happily. For specific assignments, be prepared to give me specific reasons you feel the grade is wrong (which wrong answer do you think was right, etc.).

Desire-to-Learn (D2L)

Extensive use of the MSU D2L learning management system is required in this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into D2L through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Computer Requirements

Taking this course involves the completion of all lecture exams, reading quizzes, and discussions in the course learning management system (D2L). This class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. ***Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered a reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.** Computers are available on campus in various areas of the buildings as well as the Academic Success Center. ***Your computer being down is not an excuse for missing a deadline!!** There are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student

computers due to both liability and resource limitations however they are able to help you get connected to our online services. For help, log into D2L.

Inclement Weather Policy

In cases of extreme weather events that delay or close campus and where those delays or closures impact the course:

- If the closure or delay includes lecture meeting time, the lecture will not meet and the lecture schedule for the semester will be modified.
- If the closure or delay includes a laboratory meeting time, the laboratory will not meet and all remaining laboratory meetings for the week will be cancelled to keep the lab sections on the same schedule. Lab due dates and lab quiz dates will be adjusted.
- If due dates are impacted by the delay or closure, they will be rescheduled.
- All changes to the course schedule will be posted, in writing, in D2L.

NOTE: Because all students do not have equal or reliable access to technology and internet, especially in times of inclement weather, we WILL NOT shift to online in cases of inclement weather.

University Policies and Information

The following information and policies apply to this course. Please read each of these policies and ask your instructor if you have any questions.

Important Dates

- First Day of Classes: August 25th, 2025
- Change of Schedule and Late Registration: August 25th-28th, 2025
- Labor Day University Holiday: September 1st, 2025
- Last Day to File for December Graduation: October 6th, 2025
- Priority Deadline to File for May Graduation: October 8th, 2025
- Last Day for "W" (Drops after this date receive "F": November 24th, 2025
- Thanksgiving Holiday: November 26th to 28th, 2025
- Last Day of Classes: December 5th, 2025
- Final Examinations: December 6th to 11th, 2025
- Graduate Commencement: December 12th, 2025
- Undergraduate Commencement: December 13th, 2025

Attendance

Students are expected to attend all meetings of the classes in which they are enrolled. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered as part of the grade, the instructor should so inform students of the specifics in writing at the beginning of the semester in a syllabus or separate attendance policy statement. An instructor who has an attendance policy must keep records on a daily basis. The instructor must give the student a verbal or written warning prior to being dropped from the class. Instructor's records will stand

as evidence of absences. A student with excessive absences may be dropped from a course by the instructor. Any individual faculty member or college has the authority to establish an attendance policy, providing the policy is in accordance with the General University Policies.

Change of Schedule

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

Refund and Repayment Policy

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exist in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to [Disability Support Services](#).

Campus Carry Rules/Policies

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit [Campus Carry Rules and Policies](#).

Active Shooter

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit [Safety / Emergency Procedures](#).

Smoking and Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by MSU. Adult students may smoke only in the outside designated-smoking areas at each location

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on university property or at university-sponsored activities.

Grade Appeal Process

Following the appropriate procedure for grade appeals requires you to speak to your instructor first, so talk to your instructor. Students who wish to appeal a grade should consult the Midwestern State University [Undergraduate Catalog](#).

Lecture Topic Schedule

The following is the schedule for the lecture topics we will study during the semester. This schedule will vary over the semester as some topics may move quicker or slower than expected. At the end of each unit, if there is time, we will hold an impromptu review session. Readings are indicated from the required textbooks are indicated where appropriate, though students should read the two course textbooks prior to the start of Unit 3 (Week 7). The recommended text has topics that align very nicely with each topic in the lectures. ***Note: Changes in the course syllabus, procedures, assignments, and schedule may be made at the discretion of the instructor.**

Week	Dates	Monday Topic	Wednesday Topic	Friday Topic
1	Aug 24 to Aug 28	Introduction <i>No Readings</i>	Science <i>No Readings</i>	Historical Geology <i>No Readings</i>
2	Aug 31 to Sep 04	Deep Time <i>No Readings</i>	Relative/Absolute Age <i>No Readings</i>	Relative Age <i>No Readings</i>
3	Sep 07 to Sep 11	No Class <i>Labor Day Holiday</i>	Absolute Age <i>No Readings</i>	Geologic Timescale <i>No Readings</i>
4	Sep 14 to Sep 18	Continental Drift <i>No Readings</i>	Seafloor Spreading <i>No Readings</i>	Plate Tectonics <i>No Readings</i>
5	Sep 21 to Sep 25	Plate Boundaries <i>No Readings</i>	Plate Boundaries <i>No Readings</i>	Hot Spots <i>No Readings</i>
6	Sep 28 to Oct 02	Selection <i>No Readings</i>	Speciation <i>No Readings</i>	Evolution <i>No Readings</i>
7	Oct 05 to Oct 09	The Big Bang <i>Hazen Ch. 1</i>	Birth of the Earth <i>Hazen Ch. 1</i>	A New Moon <i>Hazen Ch. 2</i>
8	Oct 12 to Oct 16	Crustal Evolution (VIDEO) <i>Hazen Ch. 3, 4</i>	Water/Atmos. (VIDEO) <i>Hazen Ch. 4</i>	Origin of Life <i>Hazen Ch. 6</i>
9	Oct 19 to Oct 23	Oxidation <i>Hazen Ch. 7</i>	Supercontinents <i>Hazen Ch. 8, 9</i>	A Complicating Life <i>Hazen Ch. 10</i>
10	Oct 26 to Oct 30	Paleozoic Intro <i>No Readings</i>	Mobile Belts <i>No Readings</i>	Paleozoic CFCs <i>No Readings</i>
11	Nov 02 to Nov 06	Appalachians <i>No Readings</i>	Pangaea <i>No Readings</i>	Pangaeian Origins <i>No Readings</i>
12	Nov 09 to Nov 13	Diversifying Life <i>Brannen Ch. 1</i>	Mass Extinctions <i>Brannen Ch. 2, 3</i>	Mesozoic-Cenozoic Intro <i>No Readings</i>
13	Nov 16 to Nov 20	Cordilleran Orogeny <i>No Readings</i>	Evolving Continent <i>No Readings</i>	Diversification <i>Hazen Ch. 10</i>
14	Nov 23 to Nov 27	Diversification <i>Hazen Ch. 10</i>	No Class <i>Thanksgiving Holiday</i>	No Class <i>Thanksgiving Holiday</i>
15	Nov 30 to Dec 04	Extinction <i>Brannen Ch. 5-7</i>	The Future <i>Hazen Ch. 11</i>	Wrap Up <i>No Readings</i>

Additional Information

- If we do not finish the content for a three-week unit within the class time, the remaining lecture content will be released as video lectures in D2L.
- I will be attending a conference October 12-15, 2026. Lectures will be video lectures on D2L.
- The final exam block is Monday, December 7, 2026, from 10:30 am to 12:30 pm. The exam is online, in person attendance is not required. I will be available in my office at that time.

Laboratory Activity Schedule

The following is a table of all laboratory activities required for the successful completion of this course in Historical Geology. Pre-laboratory readings and activities are indicated for each topic, if required. All laboratory activities are due by at the start of the next lab meeting and are to be turned in directly to the Teaching Assistant. ***NOTE: Changes in the course syllabus, procedures, assignments, and schedule may be made at the discretion of the instructor.**

Week	Dates	Lab Activity
1	Aug 25, 26, 27	No Lab Meetings <i>First Week of Classes</i>
2	Sep 01, 02, 03	Lab 1 – The Rock Forming Minerals <i>Historical Geology Ch. 1, Pre-Lab Vid.</i>
3	Sep 08, 9, 10	Lab 2 – The Igneous Rocks <i>Historical Geology Ch. 2, Pre-Lab Vid.</i>
4	Sep 15, 16, 17	Lab 3 – The Clastic Sed. Rocks <i>Historical Geology Ch. 3, Pre-Lab Vid.</i>
5	Sep 22, 23, 24	Lab 4 – The Non-Clastic Sed. Rocks <i>Historical Geology Ch. 4, Pre-Lab Vid.</i>
6	Sep 29, 30, Oct 01	Lab 5 – The Metamorphic Rocks <i>Historical Geology Ch. 5, Pre-Lab Vid.</i>
7	Oct 06, 07, 08	Lab 6 – Topographic Maps and Profiles <i>Historical Geology Ch. 6</i>
8	Oct 13, 14, 15	No Lab Meetings <i>Geological Society of America Meeting in Denver</i>
9	Oct 21, 22, 23	Lab 7 – Geologic Maps and Cross Sections <i>Historical Geology Ch. 7</i>
10	Oct 27, 28, 29	Lab 8 – Measured Sections and Correlations <i>Historical Geology Ch. 8</i>
11	Nov 03, 04, 05	Lab 9 – Depositional Environments 1: The Rocks <i>Historical Geology Ch. 9</i>
12	Nov 10, 11, 12	Lab 10 – Depositional Environments 2: The Fossils <i>Historical Geology Ch. 10</i>
13	Nov 17, 18, 19	Lab 11 – Geologic Histories <i>Historical Geology Ch. 11</i>
14	Nov 24, 25, 26	No Lab Meetings <i>Thanksgiving Holiday</i>
15	Dec 01, 02, 03	Laboratory Final Examination <i>Covering all Lab Activities from the Semester</i>

Course Due Dates in Chronological Order

The following table lists the due dates of each assignment in the course. Note your specific lab due date correlates with the day of your lab section meeting and the lab from the previous week is due at the start of the lab meeting. ***NOTE: Changes in the course syllabus, procedures, assignments, and schedule may be made at the discretion of the instructor.**

Due Day, Date Time	Assignment
September 8, 9, 10, 2026 Start of Lab	Lab 1: The Rock Forming Minerals
Friday, September 11 th , 2026 11:59 pm	Extra Credit: Introduce Yourself Discussion
September 15, 16, 17, 2026 Start of Lab	Lab 2: The Igneous Rocks
Friday, September 18 th , 2026 11:59 pm	Examination 1: Time and Geology
September 22, 23, 24, 2026 Start of Lab	Lab 3: The Clastic Sedimentary Rocks
Sept. 29, 30, Oct. 1, 2026 Start of Lab	Lab 4: The Non-Clastic Sedimentary Rocks
October 6, 7, 8, 2026 Start of Lab	Lab 5: The Metamorphic Rocks
Friday, October 9 th , 2026 11:59 pm	Examination 2: Evolving Earth and Life Individual Essay: Assigned Extinction
October 21, 22, 23, 2026 Start of Lab	Lab 6: Topographic Maps and Profiles
Friday, October 30 th , 2026 11:59 pm	Examination 3: Precambrian Earth
October 27, 28, 29, 2026 Start of Lab	Lab 7: Geologic Maps and Cross Sections
November 3, 4, 5, 2026 Start of Lab	Lab 8: Measured Sections and Correlations
November 10, 11, 12, 2026 Start of Lab	Lab 9: Depositional Environments 1: Rocks
November 17, 18, 19, 2026 Start of Lab	Lab 10: Depositional Environments 2: Fossils
Friday, November 20 th , 2026 11:59 pm	Examination 4: Paleozoic Earth
Monday, November 23 rd , 2026 11:59 pm	Group Podcast: Assigned Extinction Group Work Survey
December 1, 2, 3, 2026 Start of Lab	Lab 11: Geologic Histories
December 1, 2, 3, 2026 End of Lab	Laboratory Final Examination
Monday, December 7 th , 2026 11:59 pm	Examination 5: Mesozoic and Cenozoic Earth

Official End Date of the Course

The last day of this course is Monday, December 7th, 2026. Following that date grades will be calculated and reported. Any work that is not submitted by 11:59 pm on December 7th, 2026 will receive a grade of zero. No work will be accepted after December 7th, 2026 at 11:59 pm.