# Course Syllabus: Physical Geology
## McCoy College of Science, Mathematics, and Engineering
## GEOS-1134-101
## Fall 2026

### Contact Information

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### Course Description

Welcome to Physical Geology! In this course, you'll discover that geology is more connected to your everyday life than you might expect. You'll learn about the building blocks of our planet, its minerals and rocks, which also make up the resources we depend on to improve our lives and advance our technology. We'll explore how Earth's processes create geologic features like the Grand Canyon, deserts like Death Valley, the Basin and Range, and vast rift zones such as the East African Rift. You'll also see how Earth's inner and outer forces drive earthquakes, volcanoes, and mountain building. Together, we'll uncover the story of our dynamic planet, how it has changed over the vast expanse of geologic time, and how this knowledge can raise our awareness of geologic hazards and environmental concerns, guiding what we can do to mitigate them collectively and individually.

### Textbook & Instructional Materials

Physical Geology by Charles (Carlos) Plummer, Diane Carlson, and Lisa Hammersley. 17th Edition. Use Connect (digital access).

### Student Handbook

Refer to: Student Handbook

### Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

Office of Student Conduct

## Grading

There will be three lecture exams. The first two will each count for 15% of your final grade, and the third, the "Final Exam," will count for 20% of your course grade. All lecture exams are cumulative and comprehensive. Homework assignments, quizzes, and lab assignments will account for 40% of your course grade. The remaining 10% will be assigned to a research paper. The use of AI tools in preparing the research paper is not permitted. Submission of an appropriate research paper is required to earn an A in the course. A rubric for the research paper will be provided at the time of the assignment.

Table 1: Points allocated to each assignment.

| Graded Items | Contribution to the Final Course Grade |
|---|---|
| Exam 1 and 2 (each) | 15% |
| Exam 3 (Final Exam) | 20% |
| Homework Assignments | 10% |
| Research Paper | 10% |
| Quizzes | 5% |
| Lab Assignments | 25% |

Table 2: Total points for final grade.

| Grade | Points |
|---|---|
| A | Greater than 90 |
| B | 80-90 |
| C | 70-79 |
| D | 60-69 |
| F | Less than 60 |

## Homework

Homework will be assigned during or after the completion of each topic. All assignments will be posted in D2L with due dates. The questions are comprehensive and may be drawn from any of the materials covered. Late submissions will be accepted with a penalty: 10% for one week past due, 20% for two weeks past due, and after three weeks, a grade of zero may be recorded for the missed homework.

## Quizzes

See the "Grading" section for details – quizzes will be given randomly. Students are encouraged to attend all sessions so they do not miss any of the quizzes.

## Exams

See the "Grading" section for details – **all exams** are provided in-person, unless otherwise specified. The first two exams must be completed within 50 minutes.

The Final Exam can be 110 minutes long. Students who have worked with DSS will be given additional time to complete exams.

## Research Paper

Students will be asked to submit topics of interest on which they will write a 5-6 pages long research paper. A go by will be posted in D2L along with a grading rubric.

## Mid-Term Exam

See the "Grading" section for details. There will be two mid-term exams. Both are cumulative and comprehensive.

## Final Exam

See the "Grading" Section for details. There will be two review sessions before the Final Exam. The Final Exam is 110 minutes long. Students who have worked with DSS will be given additional time to complete exams.

## Extra Credit

Extra credit assignments are not accepted in this course. The instructor may make revisions if deemed necessary.

## Late Work

The following penalties will apply in all cases of late submissions (unless other arrangements have been made in advance): 10% for one week past due; 20% for two weeks past due; 30% for three weeks past due. Submissions more than three weeks overdue may receive a grade of zero.

## Make Up Work/Tests

Students who have missed assignments because of serious and difficult circumstances may reach out to the instructor with evidence, and their request maybe accommodated if found convincing.

## Important Dates

Change of Schedule & Late Registration: August 24-27, 2026. See Academic Calendar.
Deadline to file for graduation: September 21, 2026. See Academic Calendar.
Last Day to drop with a grade of "W:" November 23, 2026, at 4:00 p.m. See Academic Calendar.
Refer to: Drops, Withdrawals & Void

## Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of 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.

## Attendance

Attendance is mandatory. Quizzes will be given randomly. Students are encouraged to attend all sessions.

## Instructor Class Policies

As we initiate discussions in D2L, please be polite and respectful in your engagement. Do not use AI for your Research Paper project.

## Change of Schedule

For Fall 2026, a student who drops a course but remains enrolled in another course may receive a 100% refund for the dropped course through September 8, 2026. After September 8, 2026, the dropped-course refund is 0%. Refer to the published Schedule of Classes and refund schedule for applicable dates and policies.

## 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, (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.

## College Policies

*Campus Carry Rules/Policies*
Refer to: Campus Carry Rules and Policies

*Smoking/Tobacco Policy*
Midwestern State University seeks to provide a safe, healthy, pleasant environment for its faculty, staff, and students. To this end, the use of tobacco products, including smoke and smokeless tobacco, and the advertising, sale, free distribution, and discarding of tobacco products shall be prohibited in all indoor

and outdoor facilities and in all university vehicles. The policy extends to faculty, staff, students, vendors, guests, and visitors.

*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.

*Campus Carry*
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 has 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.

*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 MSUReady – Active Shooter. Students are encouraged to watch the video entitled "*Run. Hide. Fight.*" which may be electronically accessed via the University police department's webpage: *"Run. Hide. Fight."*

## Grade Appeal Process

Students who wish to appeal a grade should consult the Midwestern State University MSU Catalog

*__Notice:__ Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

## Course Schedule:

We will be covering 23 topics of Physical Geology in 15 weeks. These topics are interrelated in many ways. The assignments, the lab activities, and the discussions we will have in D2L will help us relate the various topics and appreciate Earth's system.

# Course Schedule

| Week | Date | Topic |
|---|---|---|
| Week - 1 | Monday, August 24, 2026 | Introducing Geology, the Essentials of Plate Tectonics and Other Important Concepts |
| Week - 1 | Wednesday, August 26, 2026 | Atoms, Elements, and Minerals I |
| Week - 1 | Friday, August 28, 2026 | Atoms, Elements, and Minerals II |
| Week - 2 | Monday, August 31, 2026 | Igneous Rocks, the Origin and Evolution of Magma, and Intrusive Activity I |
| Week - 2 | Wednesday, September 2, 2026 | Igneous Rocks, the Origin and Evolution of Magma, and Intrusive Activity II |
| Week - 2 | Friday, September 4, 2026 | Volcanism and Extrusive Rocks I |
| Week - 3 | Monday, September 7, 2026 | Labor Day Holiday - No Class |
| Week - 3 | Wednesday, September 9, 2026 | Volcanism and Extrusive Rocks II |
| Week - 3 | Friday, September 11, 2026 | Weathering and Soil I |
| Week - 4 | Monday, September 14, 2026 | Weathering and Soil II |
| Week - 4 | Wednesday, September 16, 2026 | Sediment and Sedimentary Rocks I |
| Week - 4 | Friday, September 18, 2026 | Sediment and Sedimentary Rocks II |
| Week - 5 | Monday, September 21, 2026 | Metamorphism and Metamorphic Rocks |
| Week - 5 | Wednesday, September 23, 2026 | Time and Geology I |
| Week - 5 | Friday, September 25, 2026 | Time and Geology II |
| Week - 6 | Monday, September 28, 2026 | Mass Wasting |
| Week - 6 | Wednesday, September 30, 2026 | Exam - 1 |
| Week - 6 | Friday, October 2, 2026 | Streams and Floods I |
| Week - 7 | Monday, October 5, 2026 | Streams and Floods II |
| Week - 7 | Wednesday, October 7, 2026 | Groundwater I |
| Week - 7 | Friday, October 9, 2026 | Groundwater II |
| Week - 8 | Monday, October 12, 2026 | Glaciers and Glaciation |
| Week - 8 | Wednesday, October 14, 2026 | Deserts and Wind Action |
| Week - 8 | Friday, October 16, 2026 | Waves, Beaches, and Coasts |
| Week - 9 | Monday, October 19, 2026 | Geologic Structures I |
| Week - 9 | Wednesday, October 21, 2026 | Geologic Structures II |
| Week - 9 | Friday, October 23, 2026 | Earthquakes |
| Week - 10 | Monday, October 26, 2026 | Earth's Interior and Geophysical Properties |
| Week - 10 | Wednesday, October 28, 2026 | Earth's Interior and Geophysical Properties |
| Week - 10 | Friday, October 30, 2026 | Exam - 2 |
| Week - 11 | Monday, November 2, 2026 | The Sea Floor |
| Week - 11 | Wednesday, November 4, 2026 | Plate Tectonics - The Unifying Theory I |
| Week - 11 | Friday, November 6, 2026 | Plate Tectonics - The Unifying Theory II |
| Week - 12 | Monday, November 9, 2026 | Plate Tectonics - The Unifying Theory III |
| Week - 12 | Wednesday, November 11, 2026 | Mountain Belts and the Continental Crust I |
| Week - 12 | Friday, November 13, 2026 | Mountain Belts and the Continental Crust II |
| Week - 13 | Monday, November 16, 2026 | Global Climate Change |
| Week - 13 | Wednesday, November 18, 2026 | Resources I |
| Week - 13 | Friday, November 20, 2026 | Resources II |
| Week - 14 | Monday, November 23, 2026 | The Earth's Companions I |
| Week - 14 | Wednesday, November 25, 2026 | Thanksgiving Holiday - No Class |
| Week - 14 | Friday, November 27, 2026 | Thanksgiving Holiday - No Class |
| Week - 15 | Monday, November 30, 2026 | The Earth's Companions II |
| Week - 15 | Wednesday, December 2, 2026 | Exam Review I |

| Week | Date | Topic |
|---|---|---|
| Week - 15 | Friday, December 4, 2026 | Exam Review II |
| Week - 16 | TBA | Exam - 3 |

*Note: The course schedule is tentative. Depending on the pace of the course and other circumstances, we may not cover all topics listed. Classes may also temporarily transition to an online format when circumstances do not allow in-person instruction.*

Schedule note: Labor Day is September 7, 2026. Thanksgiving holiday for students is November 25-29, 2026; classes resume November 30. The last class day is December 4, and final examinations are December 5-10.