

# PHYSICAL GEOLOGY LABORATORY

GEOL 103-210

George Mason University

Fall 2025

**Instructor:** Caroline Miller

**Email:** [cmille87@gmu.edu](mailto:cmille87@gmu.edu)

**Office:** Research Hall Room 248

**Office Hours:** Thursdays 11:30 am – 1:30 pm

*Virtual or in-person via appointment!*

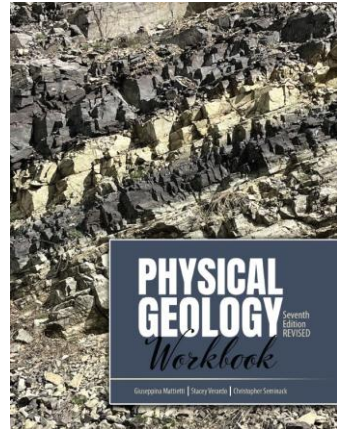
**Classroom:** Exploratory Hall Room L503

**Class Time:** Wednesdays 1:30 pm – 4:10 pm

**Mandatory Laboratory Workbook:** *Physical Geology Workbook*, Mattiotti/Verardo/Seminack, Kendall Hunt, 7<sup>th</sup> Edition REVISED. ISBN 979-8-3851-3174-7

[Physical Geology Workbook | Higher Education \(kendallhunt.com\)](https://www.kendallhunt.com/physical-geology-workbook)

*NOTE THE COLOR OF THE COVER. Be sure to purchase the blue-grey version, NOT the black cover!*



## General Information

- This course is taken either concurrently or after completing the associated lecture (GEOL 101). As a Mason Core Natural Science course, successful completion of this course will require students to:
  1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding:
    - evolves based on new evidence
    - differs from personal and cultural beliefs
  2. Recognize the scope and limits of science.
  3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).
  4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
  5. Participate in scientific inquiry and communicate the elements of the process, including:
    - Making careful and systematic observations
    - Developing and testing a hypothesis
    - Analyzing evidence
    - Interpreting results

- It is the student's responsibility to verify their enrollment status in this lab section.
- This course consists of 14 lab sessions that are each scheduled for the duration of 2 hours 45 minutes—expect to spend that amount of time in lab.
- Students are encouraged to participate actively in the lab activities and to collaborate towards the solution to the problems presented during the session.
- This course will be hosted on Canvas for the Fall 2025 semester. Please ensure you are familiar with accessing and navigating this platform. Resources and support are available [here](#) to help you get started. If you have any questions, do not hesitate to reach out to me or contact the ITS Support Center for assistance.
- All work submitted in this course must be your own original work; use of AI writing tools, such as ChatGPT, are prohibited in this course and will be considered a violation of academic integrity. All violations will be reported to the Office of Academic Affairs.
- Students take responsibility for their actions during lab time. Students participating are bound by all university policies and must uphold the [GMU Honor Code](#). Disruptive behavior during lab time will not be tolerated and may result in dismissal from the lab classroom.
- You can find additional information about policies that affect students in all courses at GMU by accessing the [GMU Course Policy Addendum](#).

### Assignments & Grading

Of the 14 total sessions, 12 will be used for exercises and 2 will be used for the midterm and final exam. All exercises must be turned in at the end of class before exiting the lab. If you are unhappy with your grade on an assignment, you have 1 week from the date the grade was posted to contact me to discuss it—after this time has passed, grades are finalized. Please note that the grading for this course is *entirely separate* from the grading of the associated lecture—they are separate courses. Grading is determined as follows:

Midterm	30
Final Exam	40
Weekly Exercises	30

Total Points	100
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97-100	A+
93-96	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
60-69	D
0-59	F

## Important Policies

- *Arriving to Lab:* There will be a 10-minute grace period at the beginning of class where I will briefly catch you up on the instructions that you have missed. After this, instructions will not be repeated. You are permitted to enter the lab if you arrive after the grace period; however, the later you arrive, the less time you have to complete the exercise.
- *Attendance:* Make-ups labs will not be administered. Missing a lab can be detrimental to your overall lab grade, as you will not be taught the information that will be on the exams. If you have an extenuating circumstance, please contact me so that we can address the situation.
- *Late Work:* Late work is not accepted; however, if you are experiencing an extenuating circumstance, once again let me know as soon as possible so that we can address it.
- *Communication:* At the beginning of each week, I will make an announcement in Canvas that provides a brief overview of what we will be learning in class and any additional information you need to know. Canvas automatically sends all announcements as emails as well, so if you are not regularly checking the course page, you should receive an email with the same information. I aim to respond to all emails within 2 business days of their delivery, so if you do not receive a response within that time frame, please do not hesitate to send a follow-up message (chances are, your email was lost somewhere in my inbox).
- *Use of Technology:* You are permitted to use devices such as computers and tablets when appropriate; however, please be respectful of our time together and do not engage in activities unrelated to class. Cell phones are to be muted and used only for emergencies. Headphones and other devices used for listening to music are not permitted during class time.

## Additional Notes

- *Preferred Name and/or Pronouns:* If your preferred name differs from the name present in your student profile, please make me aware of this discrepancy so that I can address you correctly. I will also respect your preferred pronouns. Please advise me of your preferences early in the semester so that I may make the appropriate changes.

## Course Schedule

This schedule is subject to change as the semester progresses, and all modifications will be announced to students as soon as possible.

*IMPORTANT NOTE:* Please see that we will NOT meet during the first week of the semester; rather, our first class will be held during the second week on *September 3*. Additionally, our final exam is not scheduled during the University's exam period; instead, it will be administered during the last week of regular classes.

Session	Date	Topic
1	3-Sept	Common Rock-Forming Minerals
2	10-Sept	Igneous Rocks
3	17-Sept	Sedimentary Rocks
4	24-Sept	Metamorphic Rocks
5	1-Oct	Rock Review
6	8-Oct	<i>EXAM ONE</i>
7	15-Oct	Topographic Maps
8	22-Oct	Volcanic Processes
9	29-Oct	Stream Erosion
10	5-Nov	Coastline Morphology & Mass Wasting
11	12-Nov	Earthquake Analysis
12	19-Nov	Geologic Structures
13	26-Nov	<i>No Class—Thanksgiving Break</i>
14	3-Dec	<i>FINAL EXAM</i>