

INTRODUCTORY HISTORICAL GEOLOGY

Geology 104 - Fall 2023- Section: 201

Instructor: Giuseppina Mattiotti, PhD

E-mail: gkysar@gmu.edu

Laboratory location Exploratory Hall 1309

Office Hours: Thursday, 10AM - Noon PM – Exploratory Hall 3437

Lab Course Material:

Required: Historical Geology Workbook, 5th edition, 2018, ISBN: 9781792430756

<https://he.kendallhunt.com/product/historical-geology>

The workbook is also available at the GMU bookstore. Used versions are not suitable because the exercises need to be completed on the workbook.

General information and lab policies

- This course fulfills the requirements for the GMU Core courses in the natural science, specifically, learning outcome 5: students will participate in scientific inquiry and communicate the elements of the process, including: a) making careful and systematic observations, b) developing and testing a hypothesis, c) analyzing evidence, and d) Interpreting results.
- GEOL 104 lab sections are scheduled for the duration of 2 hours 45 minutes.
- The laboratory consists of 13 lab sessions and 2 lab exams: one midterm and one final. Attendance to the lab is mandatory. See assessment section for details
- Up to 2 labs can be made up and the mandatory attendance exempted, provided the exercise is made up and submitted within a week of the scheduled lab time.
- Students are encouraged to participate actively in the lab activities and to collaborate at the solution of the problems presented during the session. Each student is required to submit their own work; group work is encouraged, but each student must submit their own work.
- Students take responsibility for their actions during GEOL 104 lab time. Students participating are bound by all university Policies and uphold the GMU Honor Code. Disruptive behavior during lab time will not be tolerated.

Course assessment policy

- Course is assessed based on lab exercises scores and the two mandatory exams (Midterm and final). Exams are based on the lab material.
- Each lab and lab exam are evaluated as follows:

Assessment	%
LAB 1	3
LAB 2	3.5
LAB 3	3
LAB 4	3
LAB 5	3.5
LAB 6	3
LAB 7	3.5
LAB 8	3.5
LAB 9	2
LAB 10	3
LAB 11	3.5
LAB 12	2
LAB 13	3.5
Lab exam 1	30
lab Exam 2	30
Total %	100

- Final grade is assigned based on the following score to letter grade scale

Letter Grade	Percent Grade
A+	97-100
A	93 to <97
A-	90 to <93
B+	87 to < 90
B	83 to <87
B-	80 to < 83
C+	77 to <80
C	73 to <77
C-	70 to < 73
D	65 to <70
F	<65

- Deadlines are specified for each exercise, most exercises are due at the end of the lab. Exams are taken only during the scheduled time. Late submissions carry a 15% penalty. No lab exercise is considered for grading a week after it is due. Exams are taken as scheduled. Make up exams carry a penalty of 15%.
- There in no extra-credit scheduled for this class.

GMU policies

- [Academic Integrity](#) It is expected that students adhere to the George Mason University Honor Code as it relates to integrity regarding coursework and grades. The Honor Code reads as follows: "Student members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work." More information about the Honor Code, including definitions of cheating, lying, and plagiarism, can be found at the Office of Academic Integrity website at [pdf of the honor code](#)
- [Disability Accommodation](#). If you need special accommodations/arrangement for the class and the exams, you must first file with the [Office of Disability Services](#) (ext: 993-2474)
- [Diversity](#) and [Inclusion](#): Faculty, staff and students in this course welcome and value individuals and their differences including race, economic status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and disability.
- As a faculty member I am required to report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's [Title IX Coordinator](#) per [university policy 1412](#). If you wish to speak with someone confidentially, please contact the [Student Support and Advocacy Center](#) (703-380-1434) or [Counseling and Psychological Services](#) (703-993-2380) and [Mason's Title IX Coordinator](#) (703-993-8730; titleix@gmu.edu)
- Privacy: [Student privacy](#) is governed by the [Family Educational Rights and Privacy Act \(FERPA\)](#) and is an essential aspect of this course. Students must use their MasonLive email account to receive important University information, including communications related to this class. In accordance with FERPA regulation, I will not respond to messages sent from or send messages to a non-Mason email address.

Resources and suggestion for academic success

- [GMU Resources](#): GMU has additional resources for your academic success; among others: [Academic success workshops](#) (see calendar), [University Life for students](#).

GEOL104 LABORATORY calendar – FALL 2023

Lab Session	Topic *	Date First day of the topic
1	Review of major rock forming minerals, rocks and plate tectonics	8/22
2	Sedimentary rocks, sedimentary environments and structures	8/29
3	The sedimentary archive under the microscope. Sands and microfossils	9/5
4	Stratigraphy rules, unconformities and correlations – Relative dating	9/12
5	Radiometric dating	9/19
6	Lithostratigraphic Correlations -The geologic time scale	9/26
7	Exam 1 – on Campus	10/3
8	Modes of fossilization Reef builders: Sponges, Corals, Bryozoans and Brachiopods	10/17 (10/10 is a “scheduled” Monday; there are no Tuesday classes on 10/10)
9	Mollusks, Arthropods and Echinoderms	10/24
10	Pollen in the fossil record	10/31
11	Geology of Virginia and Fairfax	11/7
12	Dinosaur Biomechanics	11/14
13	Evolution in the fossil record – Human evolution	11/21
14	Geology of National Parks - Review	11/28
	Exam 2 - ONLINE	12/12

*Course instructor reserves the right a change/rearrange of the lab topics to fit the class needs.