

INTRODUCTORY HISTORICAL GEOLOGY-LABORATORY GEOL-104 GEORGE MASON UNIVERSITY SPRING 2022 SEMESTER SECTION 209: 7:20 PM – 10:00 PM Thursdays

INSTRUCTOR INFORMATION

Instructor: Wilma B. Aleman-GonzalezE-mail: walemang@gmu.eduOffice Hours: Please make an appointment if you need to see me. Don't hesitate to e-mail me to ask questions.

REQUIRED COURSE MATERIALS

1. 1 - Historical Geology Workbook, 5th edition, 2018, ISBN: 9781792430756 https://he.kendallhunt.com/product/historical-geology

GENERAL INFORMATION AND LABORATORY POLICIES

- 1. It is the student's responsibility to verify the enrollment status in this lab section.
- 2. The laboratory course consists of 13 lab sessions, 12 exercises, and 2 lab exams (see laboratory schedule below with dates and lab topics).
- 3. There will be TWO exams to test your required knowledge of the material.
- 4. 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 hypothesis, c) analyzing evidence, and d) interpreting results.
- 5. Students participating are bound by all university policies and uphold the GMU Honor Code.
- 6. The instructor reserves the right to make changes to the syllabus. In case of a change the instructor will notify the students ahead of time.

Exams will be based on the material we covered during our labs. Make sure you are knowledgeable and comfortable with the laboratory material.

Make up-exams?

Make up exams **WILL NOT** be allowed.

LABORATORY EXERCICES

- 1. Each topic will have an associated lab exercise to be completed on a weekly basis. The purpose of each lab is to reinforce fundamental concepts and to provide a setting for practical application and problem solving for each topic.
- 2. Students should read each lab exercise prior to each lab period.
- 3. Assignments are due the Wednesday before our next lab (e.g. Review of major rock forming minerals, rocks and plate tectonics: 1-27-2022, you need to complete and turn in this lab by Wednesday 2-2-2022).
- 4. I do not accept late laboratory exercises.

GRADING SCHEME

Laboratory: Laboratory Exam #1: 90 points Laboratory Final Exam #2: 90 points Laboratory Assignments: 12 assignments, 15 points each Total: 360 points

Letter Grade	Percent Grade
A+	97-100
Α	93-96
A-	90-92
B+	87-89
В	83-86
В-	80-82
C+	77-79
С	73-76
C-	70-72
D+	67-69
D	65-66
E/F	Below 65

GMU POLICIES

<u>Academic Integrity</u> 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 <u>pdf of the honor code</u>

<u>Disability Accommodation.</u> If you need special accommodations/arrangement for the class and the exams, you must first file with the <u>Office of Disability Services (ext:</u> 993-2474)

<u>Diversity</u> and <u>Inclusion</u>: 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 <u>Title IX Coordinator</u> per <u>university</u> <u>policy 1412</u>. If you wish to speak with someone confidentially, please contact the <u>Student Support and Advocacy Center</u> (703-380-1434) or <u>Counseling and</u> <u>Psychological Services</u> (703-993-2380) and <u>Mason's Title IX Coordinator</u> (703-993-8730; <u>titleix@gmu.edu</u>)

Privacy: <u>Student privacy</u> is governed by the <u>Family Educational Rights and Privacy</u> <u>Act (FERPA)</u> 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 SUGGESTIONS FOR ACADEMIC SUCCESS

<u>GMU Resources:</u> GMU has additional resources for your academic success; among others: <u>Academic success workshops (see calendar)</u>, <u>University Life for students</u>.

LABORATORY SCHEDULE

Lab	Topic *	Date
Session		First day of the topic
1	Review of major rock forming minerals, rocks and	1/27
	plate tectonics	
2	Sedimentary rocks, sedimentary environments and	2/3
	structures	
3	Stratigraphy rules, unconformities and correlations	2/10
	– Relative dating	
4	Radiometric dating and the geologic time scale	2/17
5	The sedimentary archive under the microscope.	2/24
	Sands and microfossils	
6	Lithostratigraphic Correlations -The geologic time	3/3
	scale	
7	Exam 1	3/10
8	Modes of fossilization	3/24
	Reef builders: Sponges, Corals, Bryozoans and	
	Brachiopods	
9	Mobile Invertebrates: Mollusks, Arthropods and	3/31
	Echinoderms	
10	Pollen in the fossil record	4/7
11	Geology of Virginia and Fairfax	4/14
12	Dinosaur Biomechanics	4/21
13	Evolution in the fossil record – Human evolution	4/28
14	Geology of the National Parks	5/5
	Exam 2	5/12

*Unforeseen circumstances might result in a change/rearrangement of the lab topics.