HISTORICAL GEOLOGY
Geology 104
George Mason University
Spring 2021
Section: 201, M 1:30-4:10 pm ET

Instructor: Margot “Maru” Nelson (she/her)
Office: Zoom
E-mail: mmelso20@gmu.edu
Office Hours: M 11 am-1 pm ET or by appointment

Mandatory Lab Material:
  https://he.kendallhunt.com/product/historical-geology-workbook
  Choose either e-book or printed copy; student will receive from the publisher a personal code for access to the online interactive version through which lab assignments are submitted
- Lab fees have been reduced to $30.00 (because of COVID19). You must purchase your own lab set of fossils from any of these providers: NASCO, Home science tools, or Amazon.

General information and lab policies
- All GEOL 102 lab sections are offered EXCLUSIVELY ONLINE, in SYNCHRONOUS mode through Blackboard Collaborate only. Student help of blackboard collaborate can be found at: https://its.gmu.edu/article-categories/tl-s/

- It is the student’s responsibility to verify his/her enrollment status in this lab section.

- NOTE that the first week of lab will be held during the SECOND week of the semester (2/1). This is to ensure that you, the student, have been given the requisite knowledge about the material.

- Your grade is based on the results of 11 Lab exercises and TWO lab exams. Exams will be given online using Blackboard and Respondus lockdown browser.

- Students take responsibility for their actions during GEOL 104 lab time. The Blackboard Collaborate Classroom is a GMU space. Students participating are bound by all University Policies and uphold the GMU Honor Code.
The lab fulfills the requirements for the GMU Core courses in the natural science, specifically, these learning outcomes: 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.

Lab assignments are to be completed and turned in within 24 hours after the lab is administered. **Labs will be submitted on Blackboard.** Late assignments will lose 1 point for each day late. Extensions will be offered in the case of illness or family emergency, to be arranged with me as quickly as possible.

Due to the online nature of the labs, make-ups sessions will not be administered. Sessions in Blackboard Collaborate Ultra will be recorded. If you are unable to attend a session, let me know and I will waive participation for that session (see below).

Lab assignments are graded by participation. Incomplete answers and skipped questions lead to deduction of points for the lab. Because participation is a key component, failure to attend Blackboard Collaborate Ultra sessions will result in the loss of 2 points for the lab.

Students are encouraged to participate actively in the lab activities and to collaborate at the solution of the problems presented during the session. However, I expect to see individuals turn in their own work. Plagiarism will not be tolerated. A first occurrence will result in 5 pts off; a second occurrence will not be accepted.

Lastly: stay safe and well—please contact me with issues that arise during this tough time. I hope this class is interesting and enjoyable, so ask me any questions you have about geology!

**Grading:**

- 11 labs, each worth 10 points = 110 points
- 2 exams, each worth 100 points = 200 points
- Total possible = 310 points
<table>
<thead>
<tr>
<th>Lab Session</th>
<th>Topic*</th>
<th>Date</th>
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<tbody>
<tr>
<td>1</td>
<td>Sedimentary rocks, sedimentary environments and structures</td>
<td>2/1</td>
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<tr>
<td>2</td>
<td>Stratigraphy rules, unconformities and correlations – Relative dating</td>
<td>2/8</td>
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<td>3</td>
<td>Radiometric dating and the geologic time scale</td>
<td>2/15</td>
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<td>4</td>
<td>Sediments under the microscope - microfossils</td>
<td>2/22</td>
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<tr>
<td>5</td>
<td>Lithostratigraphic Correlations - The geologic time scale</td>
<td>3/1</td>
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<td>6</td>
<td><strong>Exam 1</strong></td>
<td>3/8</td>
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| 7           | Modes of fossilization  
Reef builders: Sponges, Corals, Bryozoans and Brachiopods | 3/15 |
| 8           | Mollusks, Arthropods and Echinoderms | 3/22 |
| 9           | Pollen in the fossil record | 3/29 |
| 10          | Geology of Virginia and Fairfax | 4/4 |
| 11          | Dinosaur Biomechanics | 4/12 |
| 12          | Evolution in the fossil record – Human evolution | 4/19 |
| 13          | **Exam 2** | 4/26 |

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