



# INVERTEBRATE PALEONTOLOGY

GEOL 312 BIOL 435 GEOL 512

Spring 2026

**Instructor:** Dr. Stacey Verardo

**Contact information:** sverardo@gmu.edu

**Class hours:** Lecture: Tuesdays and Thursdays 9:00-10:15am

Laboratory: Tuesdays 10:30 - 1:15pm

**TEXT:** Invertebrate Paleontology and Evolution 4<sup>th</sup> ed

author: Clarkson

ISBN: 978-0632052387

**NOTES:** Attendance is **expected** in this class. This is NOT a course where you can learn the material by relying on course content and the textbook.

**Laboratory:** Labs will be posted on Canvas

## LECTURES

### SECTION 1 -PALEOBIOLOGY

January 20	The Fossil Record and Fossil Variation
January 22	Fossil Variation and Species and Speciation
January 27	Systematics and Evolution
January 29	Extinction
February 3	Paleoecology
February 5	Paleoecology
February 10	Biogeography and Biostratigraphy
February 12	review
February 17	<b>EXAM 1</b>

### SECTION 2 -PALEONTOLOGY

February 19	Early Life
February 24	Trace Fossils
February 26	Protista
March 3	Porifera
March 5	Cnidarians/ Bryozoan
March 10	SPRING BREAK
March 12	SPRING BREAK

March 17	Brachiopoda	
March 19	Review	
March 24	<b>EXAM 2</b>	
March 26	Mollusca	
March 31	Mollusca	
April 2	Arthropoda	
April 7	Arthropoda	
April 9	Echinodermata	
April 14	Hemichordate/Conodont	
April 16	Plants	
April 21	laboratory practical	
April 23	review	
April 28	Presentations	
April 30	Presentations	
May 7	<b>FINAL EXAM</b>	NOTE: This exam begins at 8:00am

### **IMPORTANT DATES:**

January 20	NO LAB, first week
February 6	TOPIC DEADLINE
February 17	NO LAB, EXAM
March 24	NO LAB, EXAM
April 21	Laboratory exam
April 28	Class Presentations
April 30	Class Presentations
<b>May 7</b>	<b>FINAL NOTE: EXAM BEGINS AT 8AM</b>

### **COURSE REQUIREMENTS**

1. **Attendance** at all scheduled lecture and laboratory sections are required to achieve the requisite level of knowledge in this course.

#### **2. Grading**

**60%** of your total Paleontology grade will be from the three lecture exams. Each will be equally weighted at 20% for the class.

**30%** of the total grades will come from the lab grade. Individual lab grades incorporate 15% of the grade and one lab practicum (i.e. fossil ID exam) equals 15% of the grade.

**10%** of the grade will be from a presentation to the class on one of the topics listed above. Each team will consist of two students and all topics are cleared through me.

The deadline to choose a topic is February 1, 2024

Make up exams will NOT be given.

All exams will emphasize material presented in the lectures.

Students are responsible for all material in the textbook readings.

Exams are closed book.

# INVERTEBRATE PALEONTOLOGY LAB

MANDATORY: You must have a sketchpad, pencils, and a good eraser.

Laboratory exercises supplement lectures and provide "hands-on" experience for lecture topics.

Labs are to be completed within the lab period (Tuesdays 10:30am-2:45pm) BUT they will be accepted up to two days later (Thursdays at 10:30am). Labs submitted later will have points taken from each lab.

## SCHEDULE Tuesdays 10:30am -1:15pm

January 20	No lab
January 27	Sedimentary environments & Tectonic Setting
February 3	Reef Builders
February 10	Mobil Invertebrates
February 17	LECTURE EXAM 1
February 24	Trace fossils, Microfossils
March 3	Porifera, Cnidaria
March 10	SPRING BREAK
March 17	Lophopores
March 24	LECTURE EXAM 2
March 31	Mollusks
April 7	Arthropods
April 14	Echinoderms and Hemicordata
April 21	Practical
April 28	Paleontology presentations

## GMU POLICY GUIDELINES

These university and class policies are important to understand:

- Integrity: GMU has an Honor Code with guidelines regarding academic integrity; please see <http://oai.gmu.edu> for more information.
- Disability: If you are a student with a disability and you need academic accommodations, please see me and also contact the Office of Disability Services (ODS) at 703-993-2474 or <http://ods.gmu.edu>. All academic accommodations must be arranged through the ODS.
- Diversity: Diversity is a core value at GMU; please see <http://ctfe.gmu.edu/professional-development/mason-diversity-statement> for more information.
- Privacy: Students must use their MasonLive email account to receive important University information, including messages related to this class. Please see <http://masonlive.gmu.edu> for more information.

- *Electronics*: Please be respectful of our time together and do not engage in activities that are unrelated to class. Cell phones may be left on but muted and used for emergencies only.