



INVERTEBRATE PALEONTOLOGY

GEOL 312 BIOL 435 GEOL 503

Spring 2024

Instructor: Dr. Stacey Verardo

Contact information: ONLY CONTACT ME BY EMAIL

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

Laboratory Tuesdays 10:30 - 1:15pm

TEXT

Ancient Invertebrates and their Living Relatives. Levin, Prentice Hall, 1999. This book is no longer in print. It is an older book but has all the requisite information we need. We will not be using it until ~the 5th week of the semester so order it SOON!

You can find it at: <https://www.amazon.com/Ancient-Invertebrates-Their-Living-Relatives/dp/0137489552>.

Lab: Labs will be posted on Blackboard

LECTURES

SECTION 1 -PALEOBIOLOGY

- January 16 The Fossil Record and Fossil Variation
- January 18 Fossil Variation and Species and Speciation
- January 23 Systematics and Evolution
- January 25 Extinction
- January 30 Paleoecology
- February 1 Paleoecology
- February 6 Biogeography and Biostratigraphy
- February 8 review
- February 13 **EXAM 1**

SECTION 2 -PALEONTOLOGY

- February 15 Early Life
- February 20 Trace Fossils
- February 22 Protista
- February 27 Porifera
- February 29 Cnidarians/ Bryozoan
- March 5 SPRING BREAK
- March 7 SPRING BREAK
- March 12 Brachiopoda

March 14	Review	
March 19	EXAM 2	
March 21	Mollusca	
March 26	Mollusca	
March 28	Arthropoda	
April 2	Arthropoda	
April 4	Echinodermata	
April 9	Hemichordate/Conodont	
April 11	Plants	
April 16	laboratory practical	
April 18	review	
April 23	Presentations	
April 25	Presentations	
May 2	FINAL EXAM	NOTE: This exam begins at 7:30am

NOTE: There are THREE lecture exams.

IMPORTANT DATES:

January 16	NO LAB, first week
February 1	TOPIC DEADLINE
February 13	NO LAB, EXAM start time at 9:30am
March 19	NO LAB, EXAM start time at 9:30am
April 16	Laboratory practical
April 23	Class Presentations
April 25	Class Presentations
May 2	FINAL

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.

SCHEDULE Tuesdays 10:30am -1:15pm

January 16	No lab
January 23	Sedimentary environments & Tectonic Setting
January 30	Reef Builders
February 6	Mobil Invertebrates
February 13	LECTURE EXAM 1
February 20	Trace fossils, Microfossils
February 27	Porifera, Cnidaria
March 5	SPRING BREAK
March 12	Lophopores
March 19	LECTURE EXAM 2
March 26	Mollusks
April 2	Arthropods
April 9	Echinoderms and Hemicordata
April 16	Practical
April 23	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.