

Fall 2021

SYLLABUS

BIO 318 - 001 **Invertebrate Zoology** 4.0 credit hours

TIME: 12:00 – 1:15 PM TR
PLACE: CMS Auditorium (1105) and CMS 1209 (Lab)
INSTRUCTOR: Joseph Pawlik
OFFICE: 2333 MG
OFFICE HOURS: 12:00-1:00 TR or by appointment.
TEXT: **Living Invertebrates**, 1987, by Pearse/Buchsbaum, Blackwell/Boxwood Press.
Out of print – cheap copies online at eBay, Abebooks, or free copies for use in the lab.



GRADING: 40% on 4 of 5 1-hour exams (1 throw-out), 30% on final; 30% on lab. Grades are based on the mean and standard deviation of final course scores. Exams must be taken when scheduled; a missed exam will be considered a throw-out -- there will be **ABSOLUTELY NO EXCEPTIONS** to this policy.

THE DEPT. OF BIOLOGICAL SCIENCES STRONGLY SUPPORTS THE ACADEMIC HONOR CODE AS STATED IN "THE STUDENT HANDBOOK AND CODE OF STUDENT LIFE" AND WILL NOT TOLERATE ACADEMIC DISHONESTY.

NOTE: You MUST also be enrolled in LABORATORY (BIO 318-200 or 201).

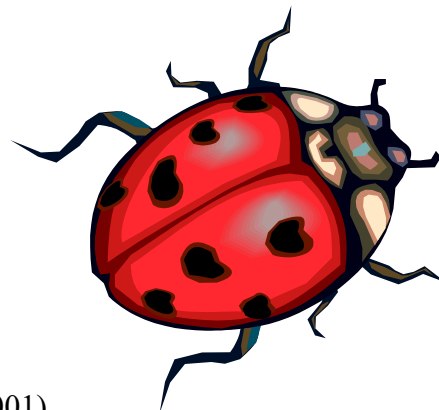
Please NOTE: cell phones are ABSOLUTELY banned from use during lectures!

* * * * * **COURSE SCHEDULE** * * * * *

Aug 19	(R)	Course introduction. Origins of life and invertebrates. Chpts. 1, 30.	Oct 19	(T)	Annelida, Other worm phyla. Chpt. 18
			21	(R)	EXAM 3 , Arthropods. Chpt. 20.
Aug 24	(T)	Origins, cont.			
26	(R)	Jargon, Protozoa. Chpt. 2.	Oct 26	(T)	Arthropods, Crustacea. Chpt. 21.
			28	(R)	Crustacea.
Aug 31	(T)	Protozoa.			
Sep 02	(R)	Porifera. Chpt. 3	Nov 02	(T)	Chelicerata, Myriapoda. Chpts. 22, 23.
			04	(R)	Insects. Chpt. 24.
Sep 07	(T)	Porifera, Cnidaria. Chpts 5, 6.			
09	(R)	EXAM 1 , Cnidaria.	Nov 09	(T)	Insects, Onychophora. Chpt. 19.
			11	(R)	EXAM 4 , Lophophorates. Chpt. 26.
Sep 14	(T)	Cnidaria, Ctenophora. Chpt. 7.			
16	(R)	Platyhelminthes. Chpts. 8-10.	Nov 16	(T)	Chaetognatha, Echinodermata Chpts. 25, 27
			18	(R)	Echinodermata, Hemichordata. Chpt. 28.
Sep 21	(T)	Platyhelminthes, Gnathostomulida Mesozoa, Nemertea. Chpt. 4, 11.			
23	(R)	Nematoda. Chpt. 12.	Nov 23	(T)	Chordata. Chpts. 29, 30
			25	(R)	<i>Holiday</i>
Sep 28	(T)	Pseudocoelomates, Meiofauna, Tardigrada. Chpts. 13, p. 316.			
30	(R)	EXAM 2 , Mollusca. Chpts. 14, 15.	Nov 30	(T)	EXAM 5
Oct 05	(T)	Mollusca.			
07	(R)	<i>Holiday</i>			
Oct 12	(T)	Mollusca, Annelida Chpts. 16, 17.	Dec 09	(R)	FINAL EXAM 11:30 – 2:30PM
14	(R)	Annelida.			

Fall 2021

SYLLABUS



BIO 318-200,201: LABORATORY: Invertebrate Zoology

TIME: 2:00 – 4:50 pm, M/T

PLACE: 1209 MG

INSTRUCTOR: Joseph Pawlik
(see Syllabus for LECTURE)

NOTE: You MUST be enrolled in LECTURE (BIO 318-001).

TEXT: None required. You must buy a RING BINDER (see below).

GRADING: Lab grade is 30% of course grade. Breakdown of lab grade: 30% on notebooks, 30% on midterm and 40% on final. Exams must be taken when scheduled -- there will be **ABSOLUTELY NO EXCEPTIONS** to this policy.

NOTEBOOKS: You must keep a RING BINDER containing notes of your observations made during class. The ring binders are available at the bookstore: 1"- spine, D-ring, any color. **YOU MUST USE THIS KIND OF RING BINDER.** You will also need filler paper for inside the binder. For each station of a lab, you will write the date and station number at the top of a new sheet and take notes **FOR THAT STATION ONLY**. You will sort the sheets for each lab. When scheduled, you will leave your notebooks in 1209 CMS and they will be graded.

ATTENDANCE: Provided there is no overcrowding, you can attend lab on either day. Lab stations will be set-up and available M-W, allowing students to do labs in their own time and at their own pace. However, exams **must be taken** during class time.

* * * * * **LAB SCHEDULE** * * * * *

Aug	23, 24	(M or T)	Protozoa
	30, 31	(M or T)	Sponges
Sep	06, 07	(M or T)	Cnidaria; <i>Notebooks Due</i>
	13, 14	(M or T)	Platyhelminthes
	20, 21	(M or T)	Pseudocoelomates
	27, 28	(M or T)	Mollusca
Oct	04, 05	(M or T)	NO LAB
	11, 12	(M or T)	Annelida
	18, 19	(M or T)	MIDTERM EXAM , <i>Notebooks Due</i>
	25, 26	(M or T)	Arthropods I
Nov	01, 02	(M or T)	Arthropods II
	08, 09	(M or T)	Lophophorates
	15, 16	(M or T)	Echinodermata
	22, 23	(M or T)	Hemichordata, Chordata <i>Note: short week!</i>
Dec	29, 30	(M or T)	FINAL EXAM , <i>Notebooks Due</i>

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GOALS FOR **BIO 318** (Lecture and Lab): By the end of this class, students will be able to:

- (1) Explain the process by which life and invertebrate animals originated on earth.
- (2) Identify the phyla of invertebrate animals, and recognize their distinguishing features.
- (3) Compare the body plans of major taxa, and explain how they impact morphological diversity.
- (4) Assess the methods by which zoologists have historically categorized invertebrates.
- (5) Explain convergent evolution of unrelated invertebrate taxa.
- (6) Predict differences in organ systems for respiration and excretion based on size and habitat.
- (7) Understand differences in life histories of major invertebrate taxa.

BIO 318 Syllabus – Additional important information -- please read these two pages!!

COVID-related information: As of August 2nd, the university has required the use of face coverings indoors. You will not be permitted to join an in-person class without a face covering. Failure to comply will result in referral to the Dean of Students. Any student who has a medical concern with wearing a face covering should contact the Disability Resource Center at (910) 962-7555. If you are not already vaccinated, please consult with your healthcare provider and consider getting vaccinated. [Vaccines](#) are available through the UNCW Student Health Center. Effective August 23, any student on campus who has not provided proof of vaccination will be required to participate in weekly surveillance testing. Please do not come to class when you are not feeling well or are experiencing any COVID-19 symptoms. If you have been exposed to COVID-19 or are concerned about exposure, please contact the Student Health Center at (910) 962-3280 for specific information about testing, contact tracing and quarantine/isolation requirements, which differ for vaccinated and non-vaccinated individuals, according to CDC guidance.

Academic Integrity: All members of UNCW's community are expected to follow the academic Honor Code. Please read the UNCW Honor Code carefully, as covered in the UNCW Student Handbook and available here: <http://www.uncw.edu/odos/honorcode/>. Academic dishonesty in any form will not be tolerated in this class.

Disability Resource Center UNCW supports the right of enrolled students to a full and equal educational opportunity and is committed to reasonable accommodations for individuals with documented disabilities or who are impacted by Title IX concerns. Students with disabilities for whom accommodations may be necessary must be registered with, and provide official notification through, UNCW's [Disability Resource Center](#). Once established, responsibility for disability-related accommodations and access is shared by DRC, faculty, and the student.

Non-Discrimination Policy Individuals who wish to report any form of gender-based discrimination or sexual misconduct/harassment should contact UNCW's [Title IX Office](#). Students may also report incidents of misconduct to faculty; however, be aware that faculty are required by law to notify the Title IX office. If students seek confidential resources without reporting an incident, UNCW departments exempt from mandatory reporting are [CARE](#) Interpersonal Violence Prevention & Response, University Counseling, and Abrons Student Health Center.

Important Copyright Note:

Any dissemination of class notes, lecture slides, recordings, handouts, copies of exams, or any other course materials without permission of the instructor is prohibited by UNCW policy. UNCW Copyright Use and Ownership Policy (<http://www.uncw.edu/policies/documents/01210.copyrightpolicy.pdf>) specifies that class notes and related materials are considered derivative of original intellectual property of the course instructor. Therefore, the instructor (not the student) owns the copyright and must provide specific permission to distribute and/or reuse those materials for anything other than personal use and scholarship by the student. Commercial use, display, or dissemination of such notes, copies, or recordings—as well as posting to websites--will generally constitute an infringement of copyright and the Honor Code. Materials that qualify as student-owned are listed in the policy.

Diversity, Equity, Inclusion:

I embrace diversity, equity, and inclusivity in the classroom and in academia. I strive to make this class inclusive for all students, free of discrimination based on race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, or physical and learning ability. I value your presence and contributions to this course and our department. If you think I can improve the accessibility and inclusivity of our learning environment, please reach out to me with suggestions.

The following sections have been developed in consultation with multiple individuals and groups on campus to insure effective and appropriate communication:

Diversity, Equity, and Inclusion: What to expect of your department

The UNCW Department of Biology and Marine Biology seeks to promote equity and diversity. We respect and welcome all people, with zero tolerance for discrimination of any kind. Discrimination includes all derogatory,

inappropriate, and negative incidents including, but not limited to, words and actions based on personal biases related to race, color, gender, gender identity, national origin/ancestry, citizenship, religion, age, maternity, marital status, indigenous status, social origin, disability, sexual orientation, or veteran status. It is your right to learn in a safe environment and to be treated with dignity and respect, no matter your visible or nonvisible differences.

Diversity, Equity, and Inclusion: What we expect of you

It is expected that students and instructors collaborate to foster an equitable and inclusive learning environment and hold themselves accountable for being respectful. Members of the UNCW community coexist with those who are different from themselves and it is our responsibility to nurture, respect, and appreciate those differences. We engage in civil discourse as a part of the learning enterprise, but do not tolerate harassment or discriminatory behavior that seeks to marginalize or demean members of our community.

UNCW Community Safety & Resources

UNCW is against violence and harassment of any kind. If you are concerned about a harassment situation, resources are available from [CARE](#) (910-962-2273) or through the [Campus Police](#) (910-962-3184). To officially (but anonymously) report any incident of gender-based discrimination or sexual misconduct/harassment, [fill out this report](#). Any other concerns or suggestions can be reported anonymously via our [Departmental Comment Card](#).

UNCW Code of conduct

We will uphold the values endorsed in the [Seahawk Respect Compact](#) regardless of the mode of instruction. Any student behavior deviating from this code will be reported to the Dean of Students and may result in academic penalties up to and including academic suspension and dismissal.

Land Acknowledgement

The Department of Biology and Marine Biology pursues education and research on organisms and ecosystems locally, regionally, and globally. We recognize that the campus and associated properties and intellectual capital of UNC Wilmington are a product of the land and history that brings us here today. UNCW and associated properties are located within the home of the Catawba, Lumbee, and Waccamaw Siouan People, and North Carolina is home to the Coharie, Lumbee, Meherrin, Occaneechi Saponi, Haliwa Saponi, Waccamaw Siouan, Sappony, and the Eastern Band of Cherokee ([Oxendine](#), n.d.; [Native Land](#), 2021). We recognize the historical injustices and violence brought through purposeful erasure of indigenous people, communities, and culture of our region. We acknowledge the contributions of indigenous people and we honor their history, cultural wisdom, and environmental stewardship that are vital for us to enact restorative change. ([U.S. Department of Arts and Culture Honor Native Land Guide](#)). See Land Acknowledgement at [UNCW Office of Diversity and Inclusion](#) for more information.

Wilmington History

The Department would like to recognize that Wilmington and UNCW have benefitted from the impacts of racism and slavery, specifically the abuses and human rights violations perpetuated against Black people. Research shows that up to 45 percent of white households in 1860 benefited directly from slavery, which includes white families who owned the land on which UNCW and its properties now exist ([Davidson](#), n.d.). In 1898, white supremacists murdered countless black citizens, displaced thousands, and overthrew the government in the Wilmington Massacre of 1898 (see [Zucchino, 2020](#)). The Wilmington Massacre led to a state-wide disfranchisement campaign that stripped political power from African American community members for decades. It resulted in land and property loss, and supported laws and practices that gave white residents social, political, and economic power. The gains received by white residents would later benefit UNCW via land, donations, and funding to the university. For more information, see:

- [UNCW Office of Arts Black History Exhibit](#)
- [Cape Fear Museum 1898 Massacre Timeline](#)
- [Upperman African American Center](#)
- [Antiracism resources from UNCW Randall Library's collection](#)

In light of historical and modern events, the department commits to acknowledging and to overcoming these inequities via educating department community members on our history and diversity and inclusion topics, developing stronger ties to underrepresented Wilmington groups, uplifting BIPOC voices, and more actions; see our [SAND webpages](#).