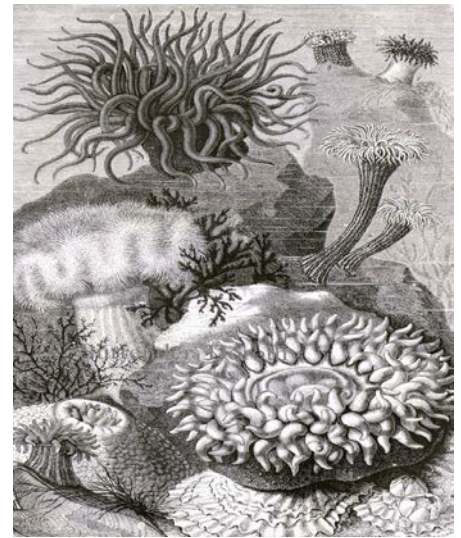


Fall 2018

## SYLLABUS

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

TIME: 12:00 – 1:15 PM TR  
PLACE: Auditorium (1105) and 1209 MG (Lab)  
INSTRUCTOR: Joseph Pawlik  
OFFICE: 2333 MG  
OFFICE HOURS: By appointment.  
TEXT: **Living Invertebrates**, 1987, by Pearse/Buchsbaum, Blackwell  
Out of print – cheap copies online at Abebooks, Amazon,  
eBay, or copies available for use in 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 total points for both lecture and lab. 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).

**Please note: Cell phones are banned from lectures! Laptop users must sit in last row.**

\* \* \* \* \* **COURSE SCHEDULE** \* \* \* \* \*

Aug 23 (R)	Course introduction. Origins of life and invertebrates. Chpts. 1, 30.	Oct 23 (T)	Annelida, Other worm phyla. Chpt. 18
Aug 28 (T)	Origins, cont.	25 (R)	<b>EXAM 3</b> , Arthropods. Chpt. 20.
30 (R)	Jargon, Protozoa. Chpt. 2.	Oct 30 (T)	Arthropods, Crustacea. Chpt. 21.
Sep 04 (T)	Protozoa	Nov 01 (R)	Crustacea.
06 (R)	Porifera. Chpt. 3	Nov 06 (T)	Chelicerata, Myriapoda. Chpts. 22, 23.
Sep 11 (T)	Porifera, Cnidaria. Chpts 5, 6.	08 (R)	Uniramia. Chpt. 24.
13 (R)	<b>EXAM 1</b> , Cnidaria.	Nov 13 (T)	Uniramia, Onychophora. Chpt. 19.
Sep 18 (T)	Cnidaria, Ctenophora. Chpt. 7.	15 (R)	<b>EXAM 4</b> , Lophophorates. Chpt. 26.
20 (R)	Platyhelmenthes. Chpts. 8-10.	Nov 20 (T)	Chaetognatha, Echinodermata. Chpts. 25, 27
Sep 25 (T)	Platyhelmenthes, Gnathostomulida. Mesozoa, Nemertea. Chpt. 4, 11.	22 (R)	<i>Holiday</i>
27 (R)	Nematoda. Chpt. 12.	Nov 27 (T)	Echinodermata
Oct 02 (T)	Pseudocoelomates, Meiofauna, Tardigrada. Chpts. 13, p. 316.	29 (R)	Hemichordata, Chordata. Chpts. 28, 29, 30
04 (R)	Mollusca. Chpts. 14, 15.	Dec 04 (T)	<b>EXAM 5</b>
Oct 09 (T)	<b>EXAM 2</b>		
11 (R)	<i>Holiday</i>		
Oct 16 (T)	Mollusca, Annelida Chpts. 16, 17.	Dec 13 (R)	<b>FINAL EXAM</b> 11:30 – 2:30PM
18 (R)	Annelida.		

Fall 2018

# SYLLABUS



## BIO 318-200: LABORATORY: Invertebrate Zoology

TIME: 2:00 – 4:50 PM, T

PLACE: 1209 MG

INSTRUCTOR: Joseph Pawlik  
(see Syllabus for LECTURE)

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

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 "3-hole" 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: 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	28	(T)	Protozoa
Sep	04	(T)	Sponges ( <i>note: M is Labor Day!</i> )
	11	(T)	Cnidaria; <i>Notebooks Due</i>
	18	(T)	Platyhelminthes
	25	(T)	Pseudocoelomates
Oct	02	(T)	Mollusca
	09	(T)	<i>NO LAB - Holiday</i>
	16	(T)	Annelida
	23	(T)	<b>MIDTERM EXAM, Notebooks Due</b>
	30	(T)	Arthropods I
Nov	06	(T)	Arthropods II
	13	(T)	Lophophorates
	20	(T)	Echinodermata <i>Note: short week!</i>
	27	(T)	Hemichordata, Chordata
Dec	04	(T)	<b>FINAL EXAM, Notebooks Due</b>

\* \* \* \* \*

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 morphology relates to trophic mode.
- (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.