

Spring 2010

SYLLABUS



BIO 318 **Invertebrate Zoology** 4.0 credit hours

TIME: 1:00 – 2:15 PM TR
PLACE: CMS Auditorium, 1105 and 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, Exlibris, or used bookstores.
 Several copies available for use in lab to check out on an overnight basis.

GRADING: 40% on 4 of 5 1-hour exams (1 throw-out), 30% on final; 30% on lab; grading on a modified curve. 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).

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

Jan 07	(R)	Course introduction. Origins of life and invertebrates. Chpts. 1, 30.	Mar 09	(T)	<i>Holiday</i>
			11	(R)	<i>Holiday</i>
Jan 12	(T)	Origins, cont.	Mar 16	(T)	EXAM 3 , Arthropods. Chpt. 20
14	(R)	Jargon, Protozoa. Chpt. 2.	18	(R)	Arthropods, Crustacea. Chpt. 21.
Jan 19	(T)	Protozoa	Mar 23	(T)	Crustacea.
21	(R)	Porifera. Chpt. 3	25	(R)	Chelicerata, Myriapoda. Chpts. 22, 23.
Jan 26	(T)	Porifera, Cnidaria. Chpts 5, 6.	Mar 30	(T)	Uniramia. Chpt. 24.
28	(R)	EXAM 1 , Cnidaria.	Apr 01	(R)	<i>Holiday</i>
Feb 02	(T)	Cnidaria, Ctenophora. Chpt. 7.	Apr 06	(T)	Uniramia, Onychophora. Chpt. 19.
04	(R)	Platyhelmenthes. Chpts. 8-10.	08	(R)	EXAM 4 , Lophophorates. Chpt. 26.
Feb 09	(T)	Platyhelmenthes, Gnathostomulida	Apr 13	(T)	Chaetognatha, Echinodermata
11	(R)	Mesozoa, Nemertea. Chpt. 4, 11.			Chpts. 25, 27
		Nematoda. Chpt. 12.	15	(R)	Echinodermata
Feb 16	(T)	Pseudocoelomates, Meiofauna,	Apr 20	(T)	Hemichordata, Chordata.
18	(R)	Tardigrada. Chpts. 13, p. 316.			Chpts. 28, 29, 30
		EXAM 2 , Mollusca. Chpts. 14, 15.	22	(R)	EXAM 5
Feb 23	(T)	Mollusca	Apr 29	(R)	FINAL EXAM 11:30 – 2:30PM
25	(R)	Mollusca, Annelida Chpts. 16, 17.			
Mar 02	(T)	Annelida			
04	(R)	Annelida, Other worm phyla. Chpt. 18			

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BIO 318-200,201: LABORATORY: Invertebrate Zoology

TIME: 2:30 – 5:30 pm, T or R
PLACE: 1209 MG
INSTRUCTOR: Joseph Pawlik
(see Syllabus for LECTURE)

NOTE: You MUST be enrolled in LECTURE (BIO 318-001) to take this course!
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; grading on a modified curve. 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.

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

Jan	12 or 14	(T or R)	Protozoa
	19 or 21	(T or R)	Porifera
	26 or 28	(T or R)	Cnidaria; <i>Notebooks Due</i>
Feb	02 or 04	(T or R)	Platyhelmenthes
	09 or 11	(T or R)	Pseudocoelomates
	16 or 18	(T or R)	Mollusca
	23 or 25	(T or R)	Annelida
Mar	02 or 04	(T or R)	MIDTERM EXAM, Notebooks Due
	09 or 11	(T or R)	<i>No Lab - Holiday</i>
	16 or 18	(T or R)	Arthropods I
	23 or 25	(T or R)	Arthropods II
	30 or 01	(T or R)	Lophophorates <i>Note: holiday week</i>
Apr	06 or 08	(T or R)	Echinodermata
	13 or 15	(T or R)	Hemichordata, Chordata
	20 or 22	(T or R)	FINAL EXAM, Notebooks Due

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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.