

Invertebrate Zoology

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Office hours: TBA

Lecture: T & Th 9-9:50 am Rm 101 Science Center

Laboratory: Fri 1-5pm Rm 207 Science Center

Course Description:

Students in this course will examine the morphology, physiology, behavior, ecological, and phylogenetic relationships of the major groups of invertebrates. In the first half of the course, students will be introduced to the defining characteristics of the major groups of invertebrates. In the second half students will learn how the organisms presented earlier interact with their environment and each other to form important ecological systems. The laboratory will include observations and experiments on live and preserved animals, and an independent experimental research project.

Learning Objectives:

By the end of the course students will be able to:

- Define, explain, and use terms and concepts that describe the diversity of invertebrate bodyplans
- Compare and contrast major animal groups with respect to skeletons, muscles & movement, nervous systems, growth, feeding, gas exchange, excretion, water balance, defense, and reproduction
- Identify the physical and chemical challenges of specific habitats and describe adaptations to those challenges

Text:

Brusca and Brusca: The Invertebrates

Supplementary readings will also be assigned.

Academic Honesty Policy:

Participation in this course requires that you honor the Saint Joseph's University honesty policy. Please read the 2006-2007 University Catalog for more information. Any acts of dishonesty in this course will result in a failing grade for the course and the student will be referred to the Vice President for Academic Affairs for further action.

Evaluation:

Quizzes	10%
Midterms (2)	20% each
Final	25%
Project	25%

- Quizzes will be given about once a week. You may drop the lowest two quizzes
- Specifics of the project requirements and grades will be provided later.

Letter grades will be assigned as follows:

A 93-100	A- 90-92	B+ 87-89	B 83-86	B- 80-82
C+ 77-79	C 74-76	C- 70-73	D+ 67-69	D 60-67
F < 60				

Quiz, Exam, and Lab Policy:

There will be no make-up exams or quizzes without notification prior to the exam.

Make up exams are at the discretion of the instructor. However, no make-up exam will be given without a letter from the proper authorities. Make-up exams will be essay style or oral (instructor's choice).

No make-up quizzes will be given, regardless of circumstances.

Attendance in the laboratory is mandatory. Missing 2 labs will result in a full letter grade deduction on your final grade. Each lab you miss in excess of 2 will result in an additional full letter grade deduction on your final grade. There is no substitute for the hands-on experience you will receive in the lab.

Learning Styles:

Students with Disabilities: For those who have or think that you may have a disability (learning, physical or psychological) for which you may be requesting reasonable academic adjustments, you are encouraged to contact Services for Students with Disabilities, Room 113, Science Center, 610-660-1774 or 610-660-1620 as early as possible in the semester. Accommodations can only be given to student with current (within 3 years) documentation.

Students are encouraged to discuss their instructional and accommodation needs with their professors early in the semester.

All requests for extended-timed to take examination in a distraction free environment must be discussed with your professor a minimum of one week prior to the scheduled date of the examination.

Tentative Class Schedule:

	Date	Subject	Reading
T	1/15	Introductions/Origins	Chapter 1
Th	1/17	Intro to metazoa	Chapter 2 (3)
F	1/18	Research project Intro, Porifera	Chapter 6
T	1/22	Intro to Eumetazoa/Cnidaria	Chapter 8
Th	1/24	Cnidaria/Ctenophora	Chapter 9
F	1/25	Cnidaria Lab	
T	1/29	Nemertea/Platyhelminthes	Chapter 10
Th	1/31	Platyhelminthes	
F	2/1	Flatworm diversity	
T	2/5	Annelids	Chapter 13
Th	2/7	Annelids	
F	2/8	EXAM I/Annelid diversity and anatomy	
T	2/12	Arthropods	Chapter 15, 18
Th	2/14	Arthropods	Chapter 16
F	2/15	Arthropod Lab /Insect Lecture	Chapter 17
T	2/19	Mollusc	Chapter 20
Th	2/21	Mollusc	
F	2/22	Mollusc Lab	
T	2/26	Lophophorates/Echinodermata	Chapter 21, 22
Th	2/28	Echinodermata/Chordates	pp 854-871
F	2/29	Echinoderms and Chordates	
T	3/4	<i>Spring Break</i>	
Th	3/6	<i>Spring Break</i>	
F	3/7	<i>Spring Break</i>	
T	3/11	Sensory ecology	Handout
Th	3/13	Sensory Ecology	Handout
F	3/14	EXAM II/Practical	
T	3/18	Reproductive ecology	Handout
Th	3/20	Feeding ecology	Handout
F	3/21	Easter Break/No Classes	
T	3/25	Behavioral Ecology	Handout
Th	3/27	Locomotion	Handout
F	3/28	Research projects	

T	4/1	Deep Benthos		Handout
Th	4/3	Oceanic Water Column		Handout
F	4/4	Easter Break		
T	4/8	Rocky Intertidal		Handout
Th	4/10	Estuarine		Handout
F	4/11	Research projects		
T	4/15	Parasite Systems		Handout
Th	4/17	Lentic Systems	\	Handout
F	4/18	Research projects		
T	4/22	Lotic Systems		
Th	4/24	Presentations		
F	4/25	Presentations		