

State University of New York at Cortland
Department of Biological Sciences
BIO 401 & 501 - Invertebrate Zoology
Fall 2011

Course Information:

4 Credit Hours

Lecture: Van Hoesen 140 MWF 3:00-3:50

Laboratory: Bowers 237 T 8:30-11:20

Professor Information:

Dr. Brian R. Rivest

Phone: (607) 753-2712

Office: Van Hoesen D111

Office Hours: MWThF 2-3, T 3-4

E-mail: rivestb@cortland.edu

Required Books: Brusca & Brusca, Invertebrates, 2nd ed.

Recommended: Borror, Dictionary of Word Roots and Combining Forms

Required lab gear: safety goggles, gloves

Course Description: (F-C) Functional morphology, life histories and evolutionary relationships of selected invertebrate phyla. Three lectures, one three-hour laboratory. Prerequisite: BIO 111 or 202.

Course Attendance Policy: Attendance is not taken, but is essential for deriving full benefit from lectures and labs. Students will be held responsible for all missed material.

Evaluation of Student Performance: There will be two lecture exams, a final, and three lab exams. All six exams will carry equal weight. There may be additional exercises, projects or papers whose weights will be announced.

Goals/Objectives of the Course: Biology 401 is an upper level biology elective designed to expose students to some of what is known about multicelled invertebrate animals. (The heterotrophic protists will not be covered.) BIO 501 is the graduate level equivalent of this course. Although the syllabus below suggests the course is simply a survey of the various animal phyla, this approach is just a framework to provide you with an opportunity to learn not only about invertebrate diversity, but also about adaptation, evolution, reproductive patterns, and how invertebrates have provided many useful models for studying basic biological phenomena.

Students with Disabilities: If you are a student with a disability and wish to request accommodations, please contact the Office of Student Disability Services located in B-40 Van Hoesen Hall or call (607) 753-2066 for an appointment. Information regarding your disability will be treated in a confidential manner. Because many accommodations require early planning, requests for accommodations should be made as early as possible.

Course Schedule and Activities:

Tentative Schedule

<u>Date</u>	<u>Lecture: BO140; M,W,F 3:00-3:50</u>	<u>Lab: S237; T 8:30-11:20</u>
8/29	Introduction	
8/31	Porifera	No lab
9/2	Porifera	
9/5	Labor Day - no lecture	
9/7	Cnidaria - General	Porifera
9/9	Hydrozoa	
9/12	Anthozoa	
9/14	Scyphozoa	Cnidaria, Ctenophora
9/16	Ctenophora	
9/19	Platyhelminthes - Turbellaria	
9/21	Cestoda, Trematoda	Platyhelminthes
9/23	Nemertinea	Nemertinea, Pseudocoels
9/26	Pseudocoelomates - Nematodes	
9/28	Rotifers, Gastrotricha	<u>LAB EXAM I</u>
9/30	<u>LECTURE EXAM I</u>	
10/3	Annelida	
10/5	Annelida	Annelida
10/7	Annelida	
10/10	Echiura, Sipuncula, Pogonophora	Echiura, Sipuncula
10/12	Mollusca - General, Gastropoda	& Larval Biology
10/14	October Break - no lecture	
10/17	Gastropoda	
10/19	Bivalvia	
10/21	Cephalopoda	Mollusca
10/24	Polyplacophora, Scaphopoda	
10/26	Ectoprocta	Lophophorata
10/28	Brachiopoda	
10/31	Phoronida	
11/2	<u>LECTURE EXAM II</u>	<u>LAB EXAM II</u>
11/4	Arthropoda	

11/7	Arthropoda	
11/9	Arthropoda	Arthropoda I
11/11	Arthropoda	
11/14	Arthropoda	
11/16	Echinodermata - General	Arthropoda II
11/18	Asteroidea	
11/21	Ophiuroidea, Echinoidea	
11/23	Thanksgiving Break - no lecture	No Lab
11/25	Thanksgiving Break - no lecture	
11/28	Echinoidea	Echinodermata,
11/30	Holothuroidea, Crinoidea	Chaetognatha, Urochordata
12/2	Chaetognatha	
12/5	Urochordata	
12/7	Urochordata	<u>LAB EXAM III</u>
12/9	Hemichordata	

FINAL EXAM: Friday Dec. 16, 1-3 p.m.