

11:704:324—Invertebrate Zoology Fall 2009 Lecture: MTH 10:55 –12:15, RAB-206. Lab: TH 12:35–3:30 or 3:55-6:55, BIO-101.

INSTRUCTORS: Primary: Mr. David Howe, Instructor, howe@aesop.rutgers.edu
Phone: 2-9164, Waller Hall, 2nd Floor, Office Hours: Make an appointment via email, I am flexible.
Lab: Wes Brooks, wrbrooks@rci.rutgers.edu. Office hours by appt.

COURSE MATERIALS: No text! Required: A single ~100 sheet, quadrille ruled lab notebook. NO SPIRAL BINDINGS! Cook/Douglass Co-op bookstore: #77645 (\$13.95) . Staples: Item: 858198 Model: 11624-CC \$2.79. Websites: www.rutgersonline.net, <http://animaldiversity.ummz.umich.edu/site/index.html>.

COURSE DESCRIPTION: This course examines the diversity of non-vertebrate animals from evolutionary, ecological, and physiological perspectives.

COURSE OBJECTIVES:

- ❑ Express understanding of the fundamental differences among invertebrate taxa.
- ❑ Demonstrate knowledge of the relationships among taxa.
- ❑ Demonstrate the ability to make careful observations of specimens.
- ❑ Demonstrate skills in identifying invertebrate animals.
- ❑ Gain an appreciation for the diversity of animals.

COURSE POLICIES:

Attendance: Lecture and lab attendance will be taken into account in final grade. Prior arrangement must be made for absence from an exam.

Grading: 90-100%: A. 86.7-90%: B+. 80-86.6%: B 76.7-80%: C+. 70-76.6%: C.

Projected assignments and their valuation: (subject to slight revision)

- ❑ 3 exams: 100 pts. each. Will be held in lab and will cover material from lecture, lab, and reading. Third exam is not cumulative.
- ❑ Weekly quizzes, total 50 pts: 2 lowest scores will be dropped
- ❑ Project in pairs: 1 species page to be contributed to Animal Diversity Web: 50 pts.
- ❑ Lab: 100 pts — notebook, other assignments, and as determined by the TA.
- ❑ Discretionary: 20 pts. — Participation, group activities, attendance, attitude
- ❑ Peer Evaluation: 5 pts. — Contribution to group project

Late Assignment Policy: 5% will be deducted for each day an assignment is late.

ACADEMIC HONOR CODE:

Each student has the responsibility (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the university community, and (3) to foster a high sense of integrity and social responsibility on the part of the university community.

Cheating and Plagiarism: **Plagiarism** is defined as the use of any information, published, or unpublished without acknowledgement. **Cheating** occurs when you use the work of another student in place of your own. Neither will be tolerated. It is extremely important that you distinguish your own ideas from those of others. You must always acknowledge sources. If you have any questions, see the instructor.

AMERICANS WITH DISABILITIES ACT:

Students with disabilities needing academic accommodation should contact the New Brunswick Campus Coordinator for Students with Disabilities at (732) 932-1711.

SYLLABUS CHANGE POLICY: This syllabus is a guide for the course and is subject to change. Notice will be given. If you find an error, please contact me.

COURSE CONTENT AND OUTLINE

Sept 3	Intro; Animals, taxonomy, systematics;	
Sept 8, 10	Quiz 1; Major divisions	
Sept 14, 17	Quiz 2; Porifera and Placazoa	Lab 1:
Sept 21, 24	Quiz 3; Cnidaria	Lab 2
Sept 28, Oct 1	Quiz 4; Deuterostomia	Lab 3
Oct 5, 8	Quiz 5; catch-up, review	Exam 1 & Lab books due 8 th
Oct 12, 15	Quiz 6; Protostomes: Platyhelminthes	Lab 4; Species+refs due 15 th
Oct 19, 22	Quiz 7; Lophophorates, misc. trochozoans;	Lab 5
Oct 26, 29	Quiz 8; Annelida	Lab 6
Nov 2, 5	Quiz 9; Mollusca	Exam 2 & Lab books due 5 th
Nov 9, 12	Quiz 10; Subphylum Chelicerata	Lab 7; Rough draft to grp. 12 th
Nov 16, 19	Quiz 11; Subphylum Crustacea	Lab 8; Rough draft to me: 19 th
Nov 23, 26	Subphylum Uniramia I; No class 26th	
Nov 30, Dec 3	Quiz 12; Subphylum Uniramia II,	Lab 9
Dec 7, 10	Quiz 13; Other ecdysozoans	Exam 3; Lab books due 10 th
Dec 17		Species Accounts Due
Dec 22	Grades submitted	

ASSIGNMENTS:

Quizzes:

We will have quizzes every Monday at the beginning of class. You will be guided as to the content of these quizzes. Sources for the quizzes will include both past and future material. For example, you should pre-read about the taxa to be discussed the week of the quiz on the Animal Diversity Web, or from the posted lectures. Your lowest 2 scores will be discarded.

Lab Notebooks:

You will be required to sketch specimens and satisfactorily answer questions. In some cases, research outside of class will be needed to answer the questions satisfactorily. Your TA will not provide answers, only guidance. You should make notes relevant to yourself that will enable you to recognize the specimens in the future and recall important structures or concepts they were used to illustrate. Lab books will be turned in the day of each exam for grading. A penalty will be added if turned in late.

Team Project:

Groups will be assigned. Pairs within each group will produce a species account for the Animal Diversity Web. Species will be chosen from a list. Each pair within a group will proof-read the other pairs work. The proof-read document will be submitted by a proof-reader. I will deduct 1 point from the grade of each group member for each draft that I receive that has not been proof-read or is late.

On the following web page you can find instructions for the accounts, however, the selection and submission process will differ. You will be given further instructions.

http://animaldiversity.ummz.umich.edu/site/teach/contributor_guidelines.html

Lab Procedures:

Use gloves or appropriate tools when handling specimens or dissection material. Use goggles if pouring any liquids. No beverages or food in the room. To avoid breaking slides, do not use the high magnification on any microscope unless specifically told to do so. Be sure to note the location of the eyewash, chemical spill shower, and fire extinguisher. No flames will be used or permitted.