

Marine Invertebrate Zoology - Three Seas Fall 2006

Instructor: Dr. Andrew Altieri
Email: Altieri@neu.edu
Phone (O): 781-581-7370 ext.304
Phone (C): 401-378-3635
Office: MSC #25

T.A.: Genevieve "G" Bernatchez
Email: bernatchez.g@neu.edu
Phone (O): 781-581-7370 ext. 327
Phone (C): 617-780-7289
Office: MSC #20

Texts: Biology of the Invertebrates, Jan E. Pechenik (5th edition)
Ecology of Atlantic Shorelines, Mark D. Bertness (1st edition) – supplemental
Marine Animals of Southern New England and New York, H. Weiss – supplemental
The Practical Guide to the Marine Animals of Northeastern N. America, L. W. Pollock

Materials: Students should have safe and comfortable footwear and clothes for lab activities and field trips. Students will also need to acquire a bound notebook in addition to the assigned text.

Class meetings: Class will generally meet Wednesday 9am-noon, and 1pm-5pm. Some activities will extend beyond those hours and/or be held on other days. Please report any schedule conflicts to the Instructor as far ahead of time as possible so that appropriate make-up work can be assigned.

Field trips: In addition to lecture and lab activities within the MSC classrooms, there will be several trips to field sites to explore invertebrates in their natural settings. Students are responsible for having their notebooks, appropriate footwear and clothes, and other items of personal comfort necessary for an extended period of time outdoors and in variable weather.

Notebook: Every student will bring their bound notebook to all lab and field outings to record their observation and thoughts through text and diagrams. We will collect notebooks periodically and evaluate for thoroughness, completeness, neatness, and most importantly higher level thought. Be sure that your notebook has your name on it, and that every entry has a date.

Participation: Students will earn credit for being active learners. We will give participation credit for engaging instructors and other students with thoughtful questions, comments, and activities. Inquisitive, enthusiastic, and helpful students will be rewarded. We will also award credit for helping instructors prepare, conduct, and clean up class activities.

Writing assignment: A written report inspired by field activities will be assigned. Students will interpret patterns observed during field trips with their understanding from lecture and lab activities. The written report will be supported with primary literature. Details will follow.

Show-n-Tell: Each student will give a brief presentation (10 min.) to the class on a species of their choice. We will ask students to share that choice with us to ensure there is no redundancy in presentation. The presentation should cover the natural history, functional morphology, and ecology of the species. Students should incorporate powerpoint at a minimum, and can also add chalkboard, skits, field and lab demonstrations, etc. in their pursuit of the ultimate show-n-tell.

Quizzes: Pop quizzes will be given periodically at the start of lectures. Quizzes will be based on readings assigned in preparation for a given lecture.

Exams: There will be two exams during the term. Each exam will be comprised of a written portion based on lecture/reading material, and a practical portion based on laboratory activities. Concepts and organisms introduced during field trips may appear on the exam as well. Exams will generally not be cumulative, but greater concepts and important details from earlier sections may be necessary to answer questions on subsequent exams.

Course grading*:

| | |
|--------------------|-----|
| Notebook | 10% |
| Participation | 10% |
| Writing assignment | 10% |
| Show-n-Tell | 5% |
| Quizzes | 5% |
| Exams | 60% |

Course Schedule*:

| Week | Date | Morning | Afternoon | Reading |
|------|-----------------------|------------------------|------------------------|-------------|
| 1 | Sept. 13 | Intro to Inverts | Protozoa | BOTI 1,2,3 |
| 2 | Sept. 20 | Sponges | Sponges | 4 |
| 3 | Sept. 27 | Cnidarians, Ctenophore | Cnidarians, Ctenophore | BOTI 5,6,7 |
| 3 | Sept. 30 (Sat) | Nahant intertidal | Nahant intertidal | EOAS 5 |
| 4 | Oct. 3 (Tues) | Mysis boat trip | | |
| 4 | Oct. 4 | Flatworms | Nemertean | BOTI 8,9,11 |
| 5 | Oct. 10-13 | Cobscook | Cobscook | |
| 6 | Oct. 18 | Annelids | Annelids & G | BOTI 13 |
| 6 | Oct. 20 (Fri) | | Ipswich marsh | EOAS 6,7 |
| 7 | Oct. 25 | Exam 1 of 2 | Molluscs | BOTI 12 |
| 8 | Nov. 1 | Molluscs | Arthropods | BOTI 14 |
| 9 | Nov. 8 | Arthropods | Nematodes | BOTI 16 |
| 10 | Nov. 15 | Lophophorates | Lophophorates | BOTI 19 |
| 11 | Nov. 22 | TG break | TG break | |
| 12 | Nov. 29 | Echinoderms | Echinoderms | BOTI 20 |
| 13 | Dec. 6 | (Hemi)chordates | (Hemi)chordates | BOTI 21,22 |
| 14 | Dec. 13 | Exam 2 of 2 | Show-n-Tell | |

Key dates*:

Exams Oct. 25 and Dec. 13
 Show-n-Tell: Topic-Nov. 15; Presentation-Dec. 13
 Written assignment due: Nov. 1
 Notebooks collected: Sept. 20, Dec. 13

*The grading policy will not change, but the schedule probably will.