Course Syllabus - Bi 357: Marine Biology - Winter 2015
(as of 1/22/15)

Lectures: Tuesday and Thursdays, 2:00-3:20 PM, Deady Hall, rm 208
Labs: Mondays in Huestis Hall, rm 112: 10:00-11:50 AM, 12:00-1:50 PM, and 2:00-3:50 PM

Professor:
Dr. Marley Jarvis (marley@uoregon.edu)
Office hours: by appointment (drop ins welcome): I'm usually in my office Tuesdays and Thursdays. You can find me in the Sutherland Lab at 473 Onyx Bridge, lab phone number: (541) 346-4076. I will be there most Tuesdays, Thursdays, and Friday mornings as well as periodically on other days. Feel free to drop in to ask questions, or schedule an appointment. You may also do so by email. The biology department has a private office and conference rooms we can use as needed (advance notice is helpful). If you need more than about 10 minutes, you should schedule an appointment rather than drop in.

Graduate Teaching Assistants:
Full-time TA: Samantha Zeman (szeman@uoregon.edu)
    Office hour: Wednesdays from 11:00 AM -12:00 PM in room Onyx 360.
Half-time TA: Keats Conley (keats@uoregon.edu)

Undergraduate Lab Assistants:
Katy Kachmarik (katyk@uoregon.edu)
Alexandra Poje (poje@uoregon.edu)
Megan Williams (mhw@uoregon.edu)

Textbooks:
There are no texts that I require for purchase in this class. The following are my recommendations for further reading if you are interested. As these are commonly used text books, if you want to buy your own copy, I would suggest searching for an older edition online. I would recommend sticking with editions newer than 1990 at least, and preferably newer than 2000. Note that names of many organisms and taxonomic relationships are currently undergoing change so you may need to update your older versions with an online literature search.
- Marine Biology, by Peter Castro and Michael Huber (on reserve in the science library).
- Whelks to Whales: Coastal Marine Life of the Pacific Northwest, by R. Harbo (on reserve in sci library).
- Seashore Life of the Northern Pacific Coast, by E. Kozloff (on reserve in sci library).
- Essentials of Oceanography, by Tom Garrison (a good introductory oceanography text).
- The Elements of Style, by Strunk and White. This is an excellent, short (<100 pages) book on grammar and writing in the English language. If you read and follow the suggestions in this book, it will improve your writing dramatically: I highly recommend it. If you prefer to have a hard copy in your hand like I do, a used copy is very cheap online (around $5), and a few copies are on reserve in the library. Additionally, a free pdf is available here (or just google Strunk and White + pdf): http://faculty.washington.edu/heagerty/Courses/b572/public/StrunkWhite.pdf

Course Policies:
- Questions and discussions are welcomed during class and labs - don't feel shy about speaking up!
- You are more than welcome to drop by with questions outside of class and/or schedule an appointment, but excessive e-mailing and dropping in should be avoided: check to see if your question is answered in the syllabus, plan accordingly, and ask questions within class time whenever possible. Please be respectful of the time of your instructors and TAs.
- Please do not text, use phones, or computers for anything other than taking notes during class. Abuse of technology during class will affect your grade.
- Late assignments are typically not accepted. You must pre-arrange something with your instructor or TA if you will not be able to submit an assignment on time (except for in an emergency).
- I expect each of you to abide by the University's policy on academic misconduct, described at http://conduct.uoregon.edu. Information on plagiarism at www.libweb.uoregon.edu/guides/plagiarism/students. Plagiarism, cheating and other acts of academic dishonesty are serious offenses and will be handled accordingly.
- If there are aspects of the instruction or design of this course that result in barriers to your inclusion, please notify me as soon as possible. You are also welcome to contact Disability Services in 164 Oregon Hall, 346-1155.

**Grading:**

*Midterm and Final: 25% each ≈ 50%* (Note that the final is more like a second midterm: it is not cumulative, but rather is based on material since the midterm)

*Lab notebook: 15%*

*Paper reviews (4 total): 25%*

*Participation and Effort: 10%: I expect those enrolled in this course to be passionate about marine biology, pay attention, engage with their peers, TAs and instructors, and be thoughtful participants of this course. I do not necessarily expect shy, introverted people to raise their hands and speak in front of the class daily. However, I want to see engaged, interested learners that are willing to put the energy and time into the course material.*

**Field Trip:**

We will have one field trip to the Oregon coast to go tide-pooling in week 2, and participation is mandatory for the course. You will be given Rite in the Rain paper (please bring pencils) and clip boards, as well as field guides to share with other students. Please draw and observe three organisms in detail as “character studies” to include with your lab notebook for grading. More than three is fine, but I’m looking for depth rather than number. For example, if you chose to observe a hermit crab, you should draw one large, highly detailed image and label carefully. You then may want to show close up drawings of claws, special appendages, etc. Sit with your specimen for a while, and make detailed notes on behavior, location, habitat, etc. For example, where can you find this organism in the intertidal? Always under rocks, out in the open, or...? Be sure to include a size reference for scale of all drawings.

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**Course Schedule Outline (subject to change)**

Schedule will likely change due to guest lecturers’ availability. Please check blackboard for most recent copy of the syllabus when in doubt.

**Week 1: General Oceanography**

Mon, Jan 5: **No lab**

Tues, Jan 6: General introduction, discuss syllabus. Lecture 1: Introduction to the Ocean

Thurs, Jan 8: Lecture 2: Introduction to Oceanography

**Week 2: Rocky Intertidal**

Mon, Jan 12: Lab 1: Literature search and selection of papers for paper reviews

Tues, Jan 13: Intro to the diversity of marine life and Intertidal Ecology Part 1

Thurs, Jan 15: Intertidal Ecology Part 2 and Field Trip preparation

Sat, Jan 17: Mandatory all-day field trip to the coast (Charleston/OIMB)

**Week 3: Plankton (and microbes)**

Mon, Jan 19: **No lab (Martin Luther King Jr. Day)**

Tues, Jan 20: Guest lecture: Alan Shanks, marine snow and blue water diving, **Paper Review #1 due at beginning of class**

Thurs, Jan 22: Phytoplankton and Zooplankton.

**Week 4: Pelagic habitat continued**

Mon, Jan 26: Lab 2: Plankton and Oceanography (water stratification)

Tues, Jan 27: Primary Productivity. **Lab notebook hand-in** (in lecture)

Thurs, Jan 29: Ocean Nekton

**Week 5: Sharks, Mammals, and Birds**

Mon, Feb 2: Lab 3: Shark Dissection (Lab notebooks returned), **Paper Review #2 due at beginning of class** (submit on Blackboard under Assignments tab)

Tues, Feb 3: Marine Mammals

Thurs, Feb 5: Guest lecture: Jan Hodder, sea birds and island habitats
Week 6:
Mon, Feb 9: Lab 4: TBA
Tues, Feb 10: **Mid-term (in class)**
Thurs, Feb 12: TA/BULA lectures

Week 7:
Mon, Feb 16: Lab 5: TBA
Tues, Feb 17: Hard bottom subtidal and kelp forest habitats, **Paper Review #3 due at beginning of class** (submit on Blackboard under Assignments tab)
Thurs, Feb 19: Guest lecture: Richard Emlet, estuaries, salt marshes, and mudflats

Week 8:
Mon, Feb 23: Lab 6: TBA
Tues, Feb 24: Guest lecture: Craig Young, the deep sea and early ocean exploration
Thurs, Feb 26: Subtidal soft-sediment communities

Week 9:
Mon, Mar 2: Behavior and Adaptation
Tues, Mar 3: Tropical habitats: mangroves and coral reefs, **Paper Review #4 due at beginning of class** (submit on Blackboard under Assignments tab)
Thurs, Mar 5: Guest lecture: Leif Rasmuson, Fisheries and management techniques

Week 10:
Mon, Mar 9: No lab -- Exam Review (attendance optional, but turn in your lab notebooks) **Lab notebooks due in exam review session.**
Tues, Mar 10: Polar seas, fisheries, and MPAs
Thurs, Mar 12: **Final (in class)**