

Marine Environmental Issues

Fall Term

Instructor: Jan Hodder (jhodder@uoregon.edu) x215

Teaching Assistant: TBA

My office is upstairs in the Terwilliger building. I do not have formal office hours but I am in my office most days and you may come see me any time. You can also make an appointment to see me if you would like.

Class Hours: Thursday 8.30 - 5, Friday 8.30 – 9.30.

BI 457/557 Marine Environmental Issues

Course description

An overview of the threats to marine ecosystems with a focus on both the science of the issues, and the policy and management actions that are undertaken to impact the issues. Habitat alteration, fisheries, global climate change and pollution are examined in a global, national, and local context. The class includes field trips, student-led presentations, group work, discussions of the literature, and preparation of a web site.

Learning Outcomes:

In this class students will:

- **Show evidence of ability to find and integrate information from the primary scientific literature and other relevant sources into presentations and class discussions of current marine environmental issues**
- **Develop effective oral presentations that integrate both the science and policy of selected marine environmental issues**
- **Critically evaluate scientific information about marine environmental issues discussed in the popular media**
- **Develop a web site with accurate content suitable for the general public**
- **Formulate and justify arguments to your peers on your ideas and values related to marine environmental issues**

I use a variety of teaching techniques including lectures and activities within the lecture, field trips, student led presentations, and discussions of the literature. At times you will work in groups and I expect you to be prepared and an active participant. I welcome your questions, ideas and will ask for your input. I give a variety of assignments so that you have the opportunity to develop your writing and observational skills, oral presentations, and thinking skills. I use a variety of assessment and evaluation techniques including individual and group graded work.

All course documents are posted on Blackboard.

Required Reading: Overfishing: What Everyone Needs to Know” by Ray Hilborn and Ulrike Hilborn. For general reading I have posted three documents on Blackboard. The first is a draft of an introduction to a yet to be published book by Kevin Noone, Rashid Sumaila, and Robert J Díazlook from the Stockholm Environmental Institute, titled, “Valuing our Ocean”. The others are two very influential reports published in the mid 2000’s that cover the topics we will be studying:

- Pew Ocean Commission reports <http://www.pewoceans.org/>
- US Commission on Ocean Policy reports <http://www.oceancommission.gov/>

Blackboard also has links to reports/web sites that expand on the topics we cover or are good resources for more in depth information and for your projects.

You will be assigned several primary literature papers which will be used in a jigsaw reading assignment.

Week 1

Introduction to Issues
Habitat Alteration - Tour of Coos Bay - Coastal development in an estuary
Library visit
Marine Biodiversity

Week 2 Tools for reversing biodiversity decline - Habitat Restoration
Habitat Restoration field trip
What makes a good power point presentation?
Introduction to class projects
Shifting baselines

Week 3 Global Climate Change Introduction
Fisheries
Seafood report
Project Work

Week 4 **Student presentations: Global climate change**
Fisheries continued

Week 5 Dunes trip focusing on introduced species

SATURDAY Heceta Head Conference

Week 6 1 Assessment of Heceta Head information
Marine Reserves
Student presentations: Introduced Species
Project Work

Week 7 No class (Heceta Head attendance)

Week 8 Aquaculture
Student presentations: Pollution

Week 9 No class Thanksgiving

Week Pollution
Visit to sewage plant
Project power point presentations

Week 11 **Web sites completed by 9 am. Peer reviews completed by 5 pm.**

Assessment and Grading – see Blackboard for grading rubrics for individual assignments.

Participation and activities in class 15% - 30 points

Overfishing reading assignment: 10% - 20 points

Reading jigsaw summaries and associated writings - (3) 15% - 30 points (10/paper A: 10 points, A-: 9 points, B+: 8 points, B: 7 points, C: 5 points)

Power point presentations (3) 30% - 60 points (20/presentation A: 20 points A-:17 points B+:16 points B: 15 points B-: 14 points C: 12 points)

Web site project 30% - 20 points for presentation, 30 points for web site and 10 points for web site review. (A:60 points A-: 57 points B+: 54 points, B:50 points, B-: 47 points C+: 44 points C: 40 points)

Final Grade	Points
A	188 – 200
A-	181 - 187
B+	176 – 180
B	168 - 175

B-	161 - 167
C+	156 - 160
C	148 - 155
C-	141 - 147