

Marine Environmental Issues Fall Term at OIMB
Instructor: Jan Hodder (jhodder@uoregon.edu)
Class Hours: Wednesday 8.30 - 5, Friday 2 - 3.

Course Goals: In this class I plan to introduce you to some of the threats to marine ecosystem. We will focus on both the biology of the issues and some of the policy and management details to help us build a complete picture of a topic. As much as possible we will look at these issues in a global, national, and local context and explore some topics that are well understood and others that have little known information.

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 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.

We will use some of the science reports from the Pew Ocean Commission
<http://www.pewoceans.org/> as a basis for background material. These are on line or on CD. In addition you should look at the newly issued report of the US Commission on Ocean Policy
<http://www.oceancommission.gov/>

Week 1	Introduction to Issues
Sept 29	The Pew Commission
	Library Tour – Barb Butler
	Habitat Alteration - Coastal development in an estuarine situation
	Tour of Coos Bay
Friday	Reading jigsaw introduction
	Introduction to Fisheries - Empty Oceans Empty Nets video

Week 2	Reading: Pew - Ecological Effects of Fishing in marine ecosystems of the US
Oct 6	a.m. Estuarine Restoration – Craig Cornu
	South Slough restoration sites tour
	p.m. Fisheries
	Types of fisheries
	Paul Heikella – Fisheries management in the Pacific Northwest

Friday	Reading jigsaw: Fisheries
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Week 3	Fisheries issues continued
Oct 13	Ecosystem effects of fisheries
	Jessica Miller - rock fish
	Boat basin tour
	Coral reefs – Perils of <i>Plectopterus</i> video
	Preparation for student presentations
Friday	Sandra Brooke – deep sea habitats

Week 4	Reading: Pew - Marine Aquaculture in The US
Oct 20	Student Presentations – Fisheries topic
	Aquaculture
	Field trip to Lily Clausen's oyster plant
Friday	Reading jigsaw: Salmon aquaculture

Week 5 Reading: Pew - Introduced Species in US Coastal Waters

Oct 27 Introduced Species – Dunes trip

Friday Library work for introduced species presentation

Week 6 Introduced species

Nov 3 Field Trip

Student presentations – introduced species examples

Prepare for debate

Friday Biological control debate

Week 7 Reading: Pew - Marine Pollution in the US

Nov 10 Pollution

Visit to sewage plant – Rick Green

Water Quality Monitoring – Sue Powell

Reading Jigsaw: Marine Reserves

Friday Prepare for presentations – marine reserves

Week 8 Reading: Pew - Marine Reserves: A tool for Ecosystem Management and Conservation

Nov 17 Marine Biodiversity

Marine Reserves – discussion of reserve questions

Student presentations - Marine reserves

Friday Outline of finals topic due

South Slough National Estuarine Research Reserve – an example of a marine protected area – Mike Graybill

Week 9 Thanksgiving – no class – read iron enrichment papers

Week 10 Global Climate Change

Dec 1 Iron enrichment debate

Reading jigsaw – evidence for global climate change in the marine environment

Friday Graduate student presentations

Week 11 9 am Undergraduate student presentations

Finals paper due 5pm Weds Dec 8

Assessment and Grading

Participation in class, debates etc. 25%

Reading jigsaws (4 - individually graded) 25%

Presentations (3 – group graded) 30%

Finals Topic – individually graded

Presentation 10%

Paper 10%