Oceanography
Three Seas Fall 2006
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Textbook: Biological Oceanography an Introduction 2nd edition, Lalli and Parsons

Week1: Sept. 12
Lecture: **Origin of Oceans**
Formation of the Earth and its Oceans
Properties of Water
Plate Tectonics
Chemistry of the Oceans
Lab: **Intro to Hydrographic Equipment**
CTD, UW-PAR, Current Meters, Temperature and Salinity measurement.
Reading: Text: Ch 1 & 2 (salinity)
This Dynamic Earth: Online textbook
http://pubs.usgs.gov/gip/dynamic/dynamic.html

Week 2: Sept. 19
Lecture: **Physical Oceanography**
Chemistry of the Oceans (Con't)
Oceanic Zones
Air-Sea Interactions
Ocean Circulation
Waves
Lab: **Oceans'06** MTS/IEEE Meeting
Reading: Text: Ch 2

Week 3: Sept. 26
Lecture: **Biological Oceanography**
Biodiversity
Phytoplankton and Primary Production
Zooplankton
Lab: **Biological sampling**
Plankton tows, Seine net, microscopy
Reading: Text: Ch 3 & 4

Week 4: Oct 3
Research Cruise
Lab: **Analysis of cruise data**

Week 5: Field Trip

Week 6: Oct 17
Lecture: **Biological Oceanography Continued**
- Cycling
- Wood Webs
- Fisheries

Lab: **Fish Lab**
- Identification
- Video

Reading: Text: Ch 5 & 6

Week 7: Oct 24
Lecture: **Paleooceanography and Climate Change**
- Ice ages
- Global warming
- Carbon and Oxygen isotopes

Lab: Experimental design preparation for final cruise

Week 8: Oct 31
Lecture: **Modern Oceanography topics**
- Student lectures

Lab: Experimental design preparation for final cruise

Week 9: Nov 7
Research cruise

Week 10: Nov 14
Final Exam
Lab Reports due