

EBS 566/666: Estuary and Ocean Systems II

Description

This course is offered as a continuation from Estuary and Ocean Systems I, although EOS I is not required for enrolment. Students who have not taken EOS I, however, may need to do some background reading in order to acquire a sufficient background for some of the topics to be covered. EBS 566/666 will cover biological features of estuary and ocean systems, focusing mainly on plankton and benthic organisms. In order give context to the biological features of these systems, a physical context will first be presented.

This is a team-taught course with three exams and three assignments.

Instructors

Dr. Antonio Baptista (Weeks 1-4)

Dr. Tawnya Peterson (Weeks 4-7)

Dr. Margo Haygood (Weeks 7-10)

Grading and assignments

Grades will be determined from the following components:

Exam #1 (24 h take home):	15	Week 4 (1/27/2010)
Exam #2:	20	Week 7 (2/17/2010)
Exam #3:	20	Week 11 (3/17/2010)
Assignment#1:	15	Weeks 1-4
Assignment #2:	10	TBD
Assignment #3:	10	TBD
Participation	10	

Recommended text:

Miller, C.B. (2004). *Biological Oceanography* (2004), Blackwell Publishing, 402 pages.

Week	Date	Lecture #	Topic	Instructor
1	1/4	1	Introduction to ocean observatories I	Baptista
	1/6	2	Introduction to ocean observatories II	Baptista
2	1/11	3	Descriptive estuarine and plume circulation I	Baptista
	1/13	4	Descriptive estuarine and plume circulation II	Baptista
	1/18	5	Holiday- MLK Jr Day	
3	1/20	6	Introduction to circulation modeling I	Baptista
	1/25	7	Introduction to circulation modeling II	Baptista
4	1/27	8	EXAM	
5	2/1	9	Energy flow and trophic pathways	Haygood/Peterson
	2/3	10	Bacteria and Archaea in the oceans	Haygood
6	2/8	11	Benthic habitats and organisms	Haygood
	2/10	12	Pelagic habitats and organisms	Haygood
7	2/15	--	Presidents Day Holiday	
	2/17	13	EXAM	
8	2/22	14	Bioluminescence	Haygood
	2/24	15	Fish and fisheries	Haygood
9	3/1	16	Primary production and photosynthesis in the sea	Peterson
	3/3	17	Phytoplankton functional groups, evolution, and biogeochemical cycles	Peterson
10	3/8	18	Grazing and the microbial loop	Peterson
	3/10	19	Biological-physical coupling	Peterson
	3/15	20	The oceans, global climate change, and human health	Peterson
11	3/17	21	EXAM	