海洋學概論(含實習) - Spring 2024

Section: Wednesday 14:20-17:20,

Text: Invitation to Oceanography, Paul R. Pinet

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GENERAL DESCRIPTION OF FORMAT AND REQUIREMENTS

Prerequisites: There are no prerequisite courses.

Goal and Approach: The course covers all of the science of oceanography. Included are discussions of the chemical, physical and thermal properties of the ocean and the interactions between the atmosphere and ocean; marine geology and the global change and effects; surface and subsurface ocean circulation; ocean wave generation and interactions; ocean tides and their environmental effects; and marine biology and the importance of microscopic plants in the ecology of the ocean and global environments.

Course Format: The course will consist of two elements, classroom lectures and two in-class exams. Classroom lectures will cover and expand upon key concepts presented in the text. Each exam will cover only the material presented since the preceding exam. Attendance of lectures is expected. Attendance will be a factor in grade decisions. No absences will help your final grade while you are on the border between two grades. Attendance of examinations is mandatory.

Grading: There will be two exams during the semester, each worth 100 points. The final exam will be taken during the scheduled final exam period. It will not be a comprehensive exam but will cover only material presented after the midterm exam. Your 80% of grade will be determined from the average of the two equally weighted exam scores, while the other 20% of grade is based on final term project and your classroom presentation.

Date	Topics	Chapter	Note
Feb	The growth of oceanography	1~2	
21	The planet oceanus		
28	和平紀念日(放假1日)		
Mar	The origin of ocean basins	3	
6			
13	Marine sedimentation	4	
20	The Properties of Seawater	5	
27	Wind and ocean circulation	6	
Apr	Wind and ocean circulation	6	
3			
10	Waves in the ocean	7	
17	海洋實習		
24	Midterm Exam	1~6	
May	Tides	8	
1			
8	海洋實習報告		
15	Marine Ecology	9~10	
	Biological Productivity in the Ocean		
22	The Dynamic Shoreline	11~13	
	Coastal Habitats		
	Ocean Habitats and Their Biota		
29	The Ocean's Resources The Human	14~16	
	Presence in the Ocean		
	Global Climate Change and the Oceans		
Jun	Final Exam		
5			