

海洋學概論(含實習) - Spring 2025

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 19	Introduction The growth of oceanography The planet oceanus	0~2	
26	The origin of ocean basins	3	志文
Mar 5	Marine sedimentation	4	
12	The Properties of Seawater	5	
19	Wind and ocean circulation	6	
26	Wind and ocean circulation	6	
Apr 2	Waves in the ocean	7	
9	Tides	8	
16	Midterm Exam	1~7	
20	海洋實習		庭光
23	Marine Ecology	9	Mary
30	Biological Productivity in the Ocean	10	
May 7	The Dynamic Shoreline Coastal Habitats	11~12	
14	海洋實習報告		
21	Ocean Habitats and Their Biota The Ocean's Resources The Human	13~14	
28	Presence in the Ocean Global Climate Change and the Oceans	15~16	
Jun 4	Final Exam	8~16	