

GEL 16: The Oceans

Winter 2017

Tu & Th, 3:10-4:30pm in 1002 Giedt Hall

Professor: Dr. Hill

1129 Earth/Physical Sciences Bldg (EPS)

E-mail: please use Piazza (see below)

please note: Professor Hill is based at Bodega Marine Laboratory

Office Hours:

- Office hours are by appointment, and scheduled during the week before the midterm and the final exam (schedule TBA).
- We will use **Piazza** for class discussions & emailing your Professor: This system is highly catered to getting you help fast and efficiently from classmates and your Professor. Rather than emailing questions to the teaching staff, please post your questions on Piazza. Find our class page at: <https://piazza.com/ucdavis/winter2017/gel16/home>

Required Textbook: *Investigating Oceanography* (Sverdrup & Kudela)

Connect + LearnSmart online access is recommended

Course Websites: *Canvas & Piazza*

GEL 16 Grading Scheme:

In-class participation (group discussions, assignments)	20%
Weekly Assignments (online, due every Tues by noon)	20%
Mid-term Exam	25%
Final Exam	35%

The **Midterm** will be multiple choice, covering lectures 1-8. The **Final Exam** will be multiple choice and cumulative, covering all topics in the class, with emphasis on those covered in the last half of class.

Policies on Exams:

- There will be **no** makeup examinations unless you are sick and have a doctor's note. **Don't miss the exams!**
- Cheating and plagiarism will not be tolerated in this course - participation in such endeavors will earn you a failing grade.

Course Schedule

Homework is due every Tuesday by noon. Assignments will be posted several days in advance on Smartsite.

<u>Date</u>	<u>Day</u>	<u>Lecture Topic</u>	<u>Chapter</u>	<u>Pages - 1st Ed</u>	<u>Pages - 2nd Ed.</u>	<u>Homework (Canvas)</u>
10-Jan	Tues	1 - Intro to class, Ocean History	Prologue	3-23	3-23	
12-Jan	Thurs	2 - Origins of Earth & Oceans	1	26-47	26-47	
17-Jan	Tues	3 - Plate Tectonics	2	50-81	50-81	Ch1, 2
19-Jan	Thurs	4 - Ocean Sediments	3	84-105*	84-105*	
24-Jan	Tues	5 - Properties of Seawater	4	112-129	114-131	Ch 3, 4
26-Jan	Thurs	6 - Properties of Seawater II	5	132-141*	134-142*	
31-Jan	Tues	7 - Carbon cycle	5	140-144*	143-146*	Ch 5
2-Feb	Thurs	8 - Atmospheric circulation	6	152-155, 158-164*	54-158, 162-171*	
7-Feb	Tues	MIDTERM EXAM				
9-Feb	Thurs	9 – Atmospheric circulation II	6	164-179*	172-183*	
14-Feb	Tues	10 - Ocean circulation	7	192-196, 204-211*	36-200, 207-214*	Ch 6, 7
16-Feb	Thurs	11 - Oceans & Climate	16	422-432*	428-440*	
21-Feb	Tues	12 - Waves	8**	214-234**	218-238**	Ch 8, 16
23-Feb	Thurs	13 - Waves and Tides	8-9**	244-257*	248-261**	
28-Feb	Tues	14 - Life in the Sea	11, 12	289-335*	295-343*	Ch 9, 11
2-Mar	Thurs	15 - Ocean Ecosystems	13-14	interesting to you, plus key terms.	interesting to you, plus key terms.	
7-Mar	Tues	16 - Humans & The Ocean	15	395-419	402-425	Ch 12, 15
9-Mar	Thurs	17 - Humans & The Ocean				
14-Mar	Tues	no class - study for final!				
16-Mar	Thurs	no class - study for final!				
23-Mar	3:30pm, Thur	FINAL EXAM				

* in these cases, we don't read the whole chapter

** these chapters have more math than what is required for the course. Focus on key concepts and terms.