

**SYLLABUS: Earth, Planetary, and Space Sciences 15**  
**Introduction to Oceanography**  
**Fall 2018**

**General Course Information:**

Instructor: Edwin Schauble  
3642 Geology  
schauble@ucla.edu  
310-206-9292 (x69292 from UCLA)

Office Hours:  
Mon./Tues. 3-4pm (tentative)  
or by appointment

Teaching Assistants:

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Webpages: <https://ccle.ucla.edu/course/view/18F-EPSSCI15-1>  
and [http://www2.epss.ucla.edu/~schauble/EPSS15\\_Oceanography/](http://www2.epss.ucla.edu/~schauble/EPSS15_Oceanography/)

Lectures: Monday, Wednesday, and Friday 1:00pm – 1:50pm, Room: MOORE 100

Lectures and reading are roughly synchronized, but there will be times when they don't overlap. You are responsible for all material covered in lectures or reading. Lecture notes will be placed on the course website before or shortly after each lecture.

Laboratories: Lab section attendance is required: **Attending less than six (6) labs will result in an incomplete or failing grade.** All lab quizzes will count towards the final grade. The course webpage and UCLA schedule of classes

(<https://sa.ucla.edu/ro/public/soc/Results?t=18F&sBy=classidnumber&id=411045200>) list section days & times. All lab sections meet in 3820 Geology. Reading materials for lab sections will be distributed via the class webpage. Please read these before each lab, and bring a copy with you. Lab sections will provide the opportunity to apply concepts learned in class, and will also cover new material not presented in lecture. If you need to miss a meeting of your regular lab section, contact your TA as soon as possible (ahead of time, unless there's an illness or emergency) to arrange a make-up in a different lab section during the same week. It may not be possible to make up lab work after the end of the week.

Reading: Our text is Essential Invitation to Oceanography, by Paul Pinet. We will be reading almost the entire book.

Grading: The course grade is based on two lecture exams (35%), one final exam (25%), and labs (40%). Lecture exams contain mostly multiple-choice questions drawn from lectures and reading assignments, with some short answer questions. SCANTRON forms for each exam will be provided in class. Students should bring a #2 pencil and photo-ID to all exams. The final will have the same format as lecture exams, but will be cumulative, covering the whole quarter. Lab grades are based on completion of each lab exercise (6%), weekly quizzes (24%) and a lab final (10%) that will be given in lab during the last week of class. If you cannot attend a quiz or exam because of an unavoidable scheduling conflict, make arrangements with the instructor *ahead of time*; make-ups for missed exams will be given only in the case of a verifiable illness or family emergency. Usually, lab quizzes can only be made up during the same week so contact your TA as soon as you can!

Review Sessions: Q&A-type review sessions will be held before each lecture exam and the final.

Final Exam: Wednesday, December 12, 8:00-11:00am. Location to be announced later.

## Tentative Course Calendar – EPSS15 – Fall 2018

Wk.	Date	Day	Lecture & Topic	Reading before Lecture	Lab
0	28-Sep	F	1 Introduction		
1	1-Oct	M	2 Oceans on Earth and Elsewhere	Ch. 1	1) Maps & Charts
	3-Oct	W	3 The Shape of the Seafloor I		
	5-Oct	F	4 The Shape of the Seafloor II	Ch. 2	
2	8-Oct	M	5 Evidence for Plate Tectonics I		2) Isostasy,
	10-Oct	W	6 Evidence for Plate Tectonics II		Bathymetry,
	12-Oct	F	7 How Plate Tectonics Works	Ch. 3	& Physiography
3	15-Oct	M	8 Sediments on the Seafloor I		3) Plate Tectonics
	17-Oct	W	9 Sediments on the Seafloor II	Ch. 4	
	19-Oct	F	10 Properties of Water		
4	22-Oct	M	11 Salts in Seawater and Seawater Density		4) Marine Sediment
	24-Oct	W	12 Gasses in Seawater and pH		
	26-Oct	F	- LECTURE EXAM 1 (Ch. 1-4)		
5	29-Oct	M	13 Wind	Ch. 5	5) Seawater
	31-Oct	W	14 Southern California Climate		
	2-Nov	F	15 Ocean Currents I		
6	5-Nov	M	16 Ocean Currents II	Ch. 6	6) Ocean Circulation
	7-Nov	W	17 Waves		
	9-Nov	F	18 Breaking Waves	Ch. 7	
7	12-Nov	M	- NO CLASS - VETERAN'S DAY		7) Oceanic Food
	14-Nov	W	19 Tides	Ch. 8-9	Chains
	16-Nov	F	20 Domains of Life and Photosynthesis		
8	19-Nov	M	- LECTURE EXAM 2 (Ch. 5-7)		8) Intertidal Habitat
	21-Nov	W	21 Biological Productivity	Ch. 10-11	
	23-Nov	F	- NO CLASS - THANKSGIVING		
9	26-Nov	M	22 Plankton	Ch. 12	Lab reviews
	28-Nov	W	23 Nekton		
	30-Nov	F	24 Benthos	Ch. 13-14	
10	3-Dec	M	25 Ocean Resources		Lab Final
	5-Dec	W	26 Climate Change I	Ch. 15	
	7-Dec	F	27 Climate Change II		
Finals	12-Dec	W	- 8:00-11:00am, location TBD		