

# Course Syllabus: Geography 3 Oceans and Atmosphere

Summer Session A 2020

**Instructor:** Damilola Eyelade: [dami.eyelade@geog.ucsb.edu](mailto:dami.eyelade@geog.ucsb.edu) Office:

Office hours: Tuesday 11am–1pm online via zoom or by appointment.

**Lecture:** Mon., Tue., Wed., Thur., 9:30—10:35 am, Online via video links.

**Section:** Tue., 2:00–3:20 pm, Online via zoom.

**Teaching Assistant:** Kristina Fauss: [kristina.fauss@geog.ucsb.edu](mailto:kristina.fauss@geog.ucsb.edu) Office:

Office hours: Monday 1- 2pm and Wednesday 2-3pm online via zoom or by appointment

## Course textbook (required)

Christopherson, Robert W.; Birkeland Ginger, E (2018). *Geosystems: an introduction to physical geography*. Pearson, 10th edition. (*students can use older editions*)

## Course website

All course materials are posted on UCSB GauchoSpace including lectures, required readings, lab exercises, grades, and announcements. Check regularly for updates.

## Learning objective

Introduction to the physical processes that shape the patterns and structure of the earth's oceans and atmosphere. Additionally, students will become knowledgeable about the spatial distribution and scales of phenomena such as currents, tides, refraction and reflection.

## Course goals

- knowledge of the physical principles and processes governing the circulation and characteristics of the earth's oceans and atmosphere.
- knowledge of the dynamic interactions between the oceans and the atmosphere and how these impact organisms in the oceans and coastal environments.
- Understanding spatial scales and maps that apply to oceanic and atmospheric processes.
- Understanding how to think critically and use appropriate concepts in analyzing problems or situations involving oceanic and atmospheric processes.

## Grading

Item	Date	Weight
Section Attendance	Weekly	5%
Online quizzes	Due Every Friday	10%
Midterm exam 1	Thur. 2 July	15%
Midterm exam 2	Thur. 16 July	15%
Lab assignments	5 weekly labs	30%
Final exam	Thur. 30 July	25%

## Rules and Regulations:

### Quizzes and section assignment:

There will be 6 weekly quizzes consisting of 5-6 multiple-choice questions about readings for the week. These will be due 1pm every Friday. Late quizzes will not be accepted. There will be a total of five (5) lab assignments throughout the quarter. All labs will be submitted on GauchoSpace. Labs are due by the start of section one week after they have been assigned by the TA, except otherwise stated. Once gauchospace stops accepting submissions you will need an override to submit. Contact your TA if you need more time, but note that **Late work** can be penalized by deducting 10% of the assignment's total point value for each day it is late, up to a 70% maximum deduction.

## Sections

Students will meet for section once a week online via zoom. Section time is primarily used for working on lab assignments but may also be used for reviewing difficult concepts and exam review. Section attendance is **mandatory**. An absence maybe excused in the case of a documented emergency (documentation required).

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## Exams

There are two midterm exams throughout the quarter, each covering 1/3rd of the course material. The final exam is cumulative (covers all course material) but will emphasize material from the last third of the class. If you cannot take an exam at the scheduled time, you must notify me beforehand to be eligible for a make-up exam. Letter grades will be assigned at the end of the quarter based on the following scale:

A+ 97–100%	A 93–96%	A- 90–92%
B+ 87–89%	B 83–86%	B- 78–80%
C+ 77–79%	C 73–76%	C- 68–70%
D+ 67–69%	D 63–66%	F <63%

\*\*\*\* Final percentage grades will be rounded up or down to the nearest whole number.

## Academic Standards

The guidelines for academic behavior and the procedures for violations are established by the University of California. You are responsible for being familiar with these. Copying someone else's answers is a violation of these standards. Collaboration is not permitted on examinations.

## Email Policy

I endeavor to respond to all emails within 24 hours. Response may be slower during weekends.

## Class schedule

Wk.	Date	Topics	Reading	Section
1	Mon 22 June	Introduction, composition and properties of the atmosphere	Ch. 1 (pp. 5–7, 10–19) Ch. 3 (pp. 58–69)	Lab 1: Scales in nature
	Tue 23 June	Solar energy to Earth and seasons	Ch. 2 (pp 37-54)	
	Wed-Thurs. 24-25 June	Atmosphere and surface energy balances	Ch.4 (pp 80 -106)	
2	Mon 29 June	Atmosphere and surface energy balances	Ch.4 (pp 80 -106)	Lab 2: Radiation Budget
	Tue June 30 - Wed 1 July	Atmospheric circulation	Ch. 5 (pp. 120–138, 142–152)	
	Thurs. 2 July	Mid Term 1		
3	Mon 6 July	Composition and properties of the ocean	Ch 5 pp. 142–151, Ch 8 pp 220–222, Ch. 16 pp 463–468	Lab 3: Salinity, waves, and tides
	Tue-Wed 7-8 July	Waves and Tides	Ch. 16 (pp. 470 – 472)	
	Thurs. 9 July	Ocean circulation	Ch. 5 (pp. 142 – 149)	
4	Mon 13 July	Ocean circulation	Ch. 5 (pp. 142 – 149)	Lab 4: Ocean circulation
	Tue-Wed 14-15 July	Deep Ocean circulation	Ch. 5 (pp. 142 – 149)	
	Thurs. 16 July	Midterm 2		
5	Mon 20 July	Coastal environment and sea level	Ch. 16 (pp. 468 – 469)	Lab 5: El Niño-Southern Oscillation (ENSO)
	Tue-Wed 21-22 July	Coastal environment and sea level	Ch. 16 (pp. 476– 480)	
	Thur. 23 July	Introduction to climate	Ch 9 (pp. 250 –252,) Ch. 10 (pp. 280 – 287)	
6	Mon 27 July	Natural climate variability/feedback	Ch. 11 (pp. 288 – 300)	Review for Finals
	Tue 28 July	Anthropogenic climate change	Ch. 11 (pp. 300 – 310)	
	Wed 29 July.	Impacts of climate change	Ch. 11 (p. 310 - 313)	
	Thurs. 30 July	Final Exam		

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## Additional Information:

### Copyright Notice

All course materials (class lectures and discussions, handouts, assignments, examinations, web materials) and the intellectual content of the course itself are protected by United States Federal Copyright Law, the California Civil Code. The UC Policy 102.23 expressly prohibits students (and all other persons) from recording lectures or discussions and from distributing or selling lectures notes and all other course materials without the prior written permission of the instructor (See <http://policy.ucop.edu/doc/2710530/PACAOS-100>). Students are permitted to make notes solely for their own private educational use. Exceptions to accommodate students with disabilities may be granted with appropriate documentation. To be clear, distribution of any course materials is strictly prohibited, including posting materials online or selling them to any person or organization.

### Etiquette

To achieve a productive, comfortable, and successful learning environment for all participants, all interactions among students, TAs, and the instructor must be civil and respectful. Actions that are distracting or disruptive (e.g. talking, texting, internet surfing, and any activities unrelated to this course) are strongly discouraged. Please remember to mute all electronic devices. If you have concerns or encounter difficulties, please contact your TA or the instructor. Do not wait until the end of the quarter to ask for help.

### Responsible Scholarship and Academic Conduct

Honesty and integrity in all academic work is essential for a valuable educational experience. The Office of Judicial Affairs has policies, tips, and resources for proper citation use, recognizing actions considered to be cheating or other forms of academic theft, and students' responsibilities, available on their website at: <http://judicialaffairs.sa.ucsb.edu>.

Students are responsible for educating themselves on the policies and abiding by them. In this course, collaboration among students is permitted for assignments and weekly quizzes, but you must complete the work individually. Copying someone else's answers is a violation of these standards. Collaboration is not permitted on examinations. Academic dishonesty is not tolerated and will be reported to the University. Please ask if you are unsure about these guidelines, or see the UCSB website on Academic Conduct Managing Stress / Supporting Distressed Students Managing Stress / Supporting Distressed Students Personal concerns such as stress, anxiety, relationships, depression, or cultural differences, can interfere with the ability of students to succeed and thrive. For helpful resources, please contact UCSB Counseling & Psychological Services (CAPS) at 805-893-4411 or visit <http://counseling.sa.ucsb.edu/>. If you encounter a student in distress, please contact 805-893-3030 immediately and/or consult the Responding to Distressed Student Protocol at <http://www.sa.ucsb.edu/distressedstudentsguide>.

For general academic support, students are encouraged to visit Campus Learning Assistance Services (CLAS) early and often. CLAS offers instructional groups, drop-in tutoring, writing and ESL services, skills workshops and one-on-one consultations. CLAS is located on the third floor of the Student Resource Building, or visit <http://clas.sa.ucsb.edu>

### Disabled Students Program: accommodations for exams

Students with disabilities may request academic accommodations for exams online through the UCSB Disabled Students Program at <http://dsp.sa.ucsb.edu/>. Please make your requests for exam accommodations through the online system as early in the quarter as possible (week 1) to ensure proper arrangement. Please contact the instructor with any concerns