



BILD 3: Organismic and Evolutionary Biology Fall 2021

Dr Carolee Caffrey cacaffrey@ucsd.edu Lecture: MWF 10-10:50 <https://ucsd.zoom.us/j/2429831670>
Office hour (on Zoom): Mon 3:30-4:30, 5:30-6:30 pm or by appt.

Discussion sections (PST): Weds 8-8:50 am, 2-2:50 pm, 7-7:50 pm; Thurs 10-10:50 am, 4-4:50 pm

Required materials

Because we are entirely remote, you will need a computer or tablet and a reliable internet connection. You might be able to get by with a smart phone but everything will be more difficult, and some things may not work at all, including the loading of pictures in exam questions.

You will need to set up your Zoom account and install Zoom on whatever device you plan to use for the quarter. Go to <https://ucsd.zoom.us/> to get started.

Text

Biology 2e, Print ISBN 978-1-947172-51-7, Digital ISBN 978-1-947172-52-4. Updated 7/26/21.
<https://openstax.org/details/books/biology-2e>

Course objectives:

To impart to students an understanding of: 1) the process of evolution by natural selection, 2) biodiversity, 3) the biotic and abiotic processes and mechanisms of terrestrial and aquatic ecosystems.

To engage students in seeking answers to questions through the process of science.

To demonstrate the connection between biology and human lives and futures, and to empower students to think critically about current biological issues.

To instill appreciation, awe, and respect for natural systems, and a sense of responsibility therefor.

Performance assessment and grades

Departmental guidelines suggest students should be spending 8-10 hours/week on this course.

Student mastery of course material will be assessed through open-notes multiple choice exams and Discussion-section-related assignments. **Grades will be based on the total points earned (of all points available) over the quarter** and will follow a straight scale, e.g., 80% of points for a B- and 90% for an A-. Grades for all students, including those intending to graduate, will be determined in exactly the same manner.

I will be calculating your grades at the end of the quarter; not Canvas. Because Canvas weights assignments according to criteria other than my own (I am not weighting anything; all points are equal in value), the values posted in % columns in Grades are meaningless. -> **Ignore the columns in Grades that provide % values.** (I cannot get rid of them.) -> Keep track of how many points you have earned, via all routes, and compare your total to the total officially available at any given time. I will keep you posted as to total points available throughout the quarter.

There will be several extra-credit points available: a few scattered throughout the quarter, and one assignment (due after Exam 2) for 16 pts.

Lecture

I'll lecture MWF 10-10:50 on Zoom.

I'll record the lectures and post the recordings under Media Gallery on our Canvas page on the same day (once Zoom makes the recordings available).

You will do better in this course if you attend lectures in real time (if you can): you'll know as soon as I announce any issues upon which you need to act, and you can ask questions about the material I'm covering (either during lecture, or before or after; I'll get on Zoom early and hang out afterward). Also, it makes it more like you're actually in class, and I think that'll make your taking of notes more efficient and useful. **As your exams will be "open-book" (see below), excellent notes will increase your chances of acing this class.** -> So, too, will watching the video posted under Student Resources regarding succeeding in remote classes.

Reading the syllabus is another way to increase your chance of acing this class. **The syllabus is required reading. There is a quiz – the Syllabus Quiz – posted on Canvas. You will get 2 attempts to get all questions correct. This is a required part of the course, and you must complete it before Tuesday 10/5 at 7:00 pm, or you will lose 20 points from your Exam 1 score.** I'm not kidding.

I'll be showing PowerPoint slides in class and will post these on Canvas before each lecture.

For all units of lecture material, I will post **Lecture Outlines - with numbers associated with material that track numbered PPT slides - that will outline the subjects I'll talk about and include important terms.** They will totally enhance your ability to make the most out of each lecture and take excellent notes!

Text

We're using a free text from OpenStax, and I'll post guidelines regarding relevant sections and what - and what not - to worry about. If it doesn't cover a subject and I suggest something else, the reading guidelines will advise there, too.

I'll use the phrase "follow me" in reading guidelines to indicate that you should use my lectures or outlines, or Discussion-section material, as guides to details and terms you are required to know. I'll point out any special instructions with regard to reading material – if there are any - and end-of-chapter questions that you should be able to answer for an exam.

Discussion Section

Once/week you'll meet with your IA (get to know him or her!), who will expose you to new material, in most cases. She or he will also get you familiar with the assignment for that week. **It will totally enhance your Discussion section experience if you read the writeup, and have a look at the assignment (the worksheet, if there is one), ahead of time.** As with lecture, it will totally help your performance in the class if you attend in real time, if you can. (If you do, you'll get to participate in the Kahoot review games at the ends of some of them.) **One Discussion section each week will be recorded and posted by the end of Thursday.**

I will post all Discussion-section-related exercises on the Tuesdays preceding sections on Wednesdays and Thursdays. All assignments for Weeks 1-9 are due the following Tuesdays at 7:00 pm. Week 10's assignment (Discussion #10) will be posted early and is due Friday 12/3 at 7:00 pm.

Assignments (other than ones due during Week 10) submitted late will lose 2 points per day. Such assignments will not be accepted after five days late. Assignments due Week 10 will not be accepted late.

Regarding the grading of assignments, **we will not post any kind of key or indicate on your work why you lost points;** sorry. (I don't want my grading criteria posted for future students to see.) **If you lose points and want to know why, ask your IA, or me, in office hours.** Really; do it!

Exams

As above, **exams are open-book, and the "book" should be your own notes.**

You will be able to take Exams 1 and 2 twice over a 24-hour period, including one class time. On your second attempt, about 1/3 of the questions from the first time will repeat. You will not see your first attempt before you take your second. **Both attempts will be timed** (45 questions/50 minutes) and you won't have a lot of it to be looking around for question/answer material. You should prepare for exams as if they were to be in-person -> no notes allowed. I'll keep the highest of your two scores for each exam.

Unless you experience an actual emergency, you cannot take Exam 1 or 2 outside of the posted 24 hours. If you do experience an emergency, you must contact me within the 24 hours for possible rescheduling. -> This is absolute.

The final will be cumulative. You get only one attempt, and you must take it at 8:00 am on Friday 12/10. This is absolute. Read that last bolded sentence aloud to yourself. Remember it five weeks from now.

Here are things you CAN'T do during exams, or I will consider it cheating (see below, Academic Honesty and Integrity):

1. **share questions, answers, or any other information with anybody else while you or they are taking an exam, and**
2. **take, save, copy, post, or send pictures or screenshots of exam questions.**

I'll talk about exam format and content as exam dates approach.

Communication

The course Canvas site will be used to post everything: Zoom links, PPT presentations, lecture outlines, Discussion-related material, IA information, reading guidelines, exams, and scores. I'll be communicating weekly (every Sunday) through e-mail to remind you of the week's events, including exams and Discussion-related due dates, and I'll email during the week with any details or issues that come up.

I have two office hours/week – Mon 3:30 and 5:30 pm - on Zoom, where you can ask about course mechanics and class material. Your IA will have an office hours each week, too. **If you email us, you need to put something meaningful on the subject line! -> For me, please don't just hit Reply to an earlier one of mine,** unless your email is directly related to it.

Academic Honesty and Integrity

From the Office of Academic Integrity: "According to the UCSD Policy on Integrity of Scholarship, a course instructor has full discretion over the grade in the class and how you will be academically sanctioned for academic misconduct. The academic sanction can range from a failing grade on the assignment, quiz, or exam in question, to a failing grade in the class. That grade will remain on your transcript and calculated into your GPA, even if you retake the class."

My policy: zero-tolerance toward cheating, of any kind. Plagiarism - using someone else's work and submitting it as your own – is cheating. All of your submitted writing will pass through Turnitin (Canvas' anti-plagiarism software), and we'll know if you have copied and pasted: Don't do it!

If you are caught cheating on an assignment in any way, **you will receive zero points** for the assignment in question **and your actions will be reported to the Office of Academic Integrity. A second time? I will Fail you.**

If you are caught cheating on one of my exams, which, again, includes taking pictures or screenshots - or copying or posting - of exam questions, I will report you to the Office of Academic Integrity and fail you.

Special Accommodations

For those of you associated with the Office for Students with Disabilities, I'm happy to work with you and them to provide what you need. -> I'll hear from them, but if you want to email me, too, I'll respond so you know all is well.

Zoom Etiquette for Lecture and especially Discussion Sections

Please have your **name, as enrolled, up at all times**, and your **camera on, at least in Discussion section and Office Hours**. Please **mute your mic when you are not speaking**.

Use the chat in lecture to post questions for me; I'll answer them at the end. (Please someone remind me to do this if I forget!) Please do not carry on conversations in the chat while I'm lecturing -> it's rude!

Use the chat in Discussion sections to engage with other participants in a supportive and courteous way.

If you would like to speak, unmute yourself.

Practice respect, humility, and honest listening.

Help create a BILD-3 safe space by having patience and compassion for others with views different than yours.

If you want, temporarily add your pronoun to your Zoom display name as you begin a Zoom session: Click on "Participants" at the bottom of the screen, mouse over your name and click on More, Rename.

One more course policy: go greener!

As you learn more and more about our global and local pollution and environmental-abuse issues, you will come to understand the importance of changing the behavior of lots of people, and so it's good to start with yourself. Think about ways to use less electricity and gasoline, and water, and then actually do those things (e.g., take shorter showers, combine similarly-located errands into a single trip, use fans and not the AC!). Reduce meat consumption and your use of toxic products. Buy less stuff, especially it-will-be-here-forever plastics. Bring your own grocery bags to the store. Live by the five Rs: Refuse, Repair, Reuse, Recycle, and Regift!

And vote!



Lect		Lecture Topic	Disc	Discussion Section	
Week			Week	Topic	pts
0	F 9/24	Intro. Course mechanics. Genetic diversity.			
1	M 9/27	Evolution 1: Darwin.	1	Intro	12
	W 9/29	Cont. Evo by Natural selection: The process.		Genetic diversity	15
	F 10/1	Cont. Evolution 2: Modes of selection.			
2	M 10/4	Cont. Sexual selection.	2	Process of Science	28.5
	W 10/6	Cont. Evo by Genetic Drift.			
	F 10/8	Hardy Weinberg Equilibrium.			
3	M 10/11	Evolution 3: Patterns of evo descent.	3	HW Equilibrium	31
	W 10/13	Cont. Reproductive Isolating Mechanisms.			
	F 10/15	Evolution 4: Speciation.			
4	M 10/18	Pace of evo.	4	Purple Mountains	25
	W 10/20	Exam 1		Cladogram review	
	F 10/22	Biodiversity 1: Protists			
5	M 10/25	Fungi. Plants.	5	Biodiversity 1	34.5
	W 10/27	Cont.		Disc Quiz	9
	F 10/29	Biodiv 2: Sponges. Cnidarians.			
6	M 11/1	Gastrulation. Flatworms. Molluscs. Annelids.	6	Biodiversity 2	32
	W 11/3	Cont. Arthropods.		Disc Quiz	9
	F 11/5	Cont. Biodiv 3: Echinoderms.			
7	M 11/8	Cont. Chordates.	7	Biodiversity 3	33
	W 11/10	Cont.		Disc Quiz	9
	F 11/12	Cont.			
8	M 11/15	Exam 2	8	Scripps Coastal Reserve	30.5
	W 11/17	Life History Strategies.			
	F 11/19	Ecosystems. Community Ecology.			
9	M 11/22	Cont. Energy flow.	9	Biomes, Upwelling	35
	W 11/24	Biogeochemical Cycles.			
	F 11/26	No class			
10	M 11/29	Cont.	10	Human evolution	18
	W 12/1	Population Ecology.		review	
	F 12/3	Human population size considerations.			
	F 12/10	Final Exam 8:00 am			

Points available

Syllabus Quiz	6
2 Lecture Exams	225
Cumulative Final	212.5
Discussion Sxn assignments	<u>321.5</u>
Total	765