



## BILD 3: Organismic and Evolutionary Biology Winter 2022

Dr Carolee Caffrey [cacaffrey@ucsd.edu](mailto:cacaffrey@ucsd.edu) Lecture: MWF 3-3:50 <https://ucsd.zoom.us/j/2429831670>  
Office hour (on Zoom): Weds 9-10 am, 5:30-6:30 pm, or by appt.

Discussion sections (PST): Mon 4:00 pm, Weds 9-9:50 pm; Fri 8-8:50 am, 9-9:50 am, 1-1:50 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 3-3:50 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 (especially if you're still getting used to this).

Reading the syllabus is another way to increase your chance of acing this class. **The syllabus is required reading. A Syllabus Quiz is 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 Sunday 1/9 at 9:00 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. (Don't worry about other stuff.) 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 absolutely 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 do, you'll get to participate in the Kahoot review games at the ends of some of them.) Even more reason to attend: **IAs will be giving each student 0, 5, 10, or 15 pts for participation in section over the quarter. One Discussion section each week will be recorded and posted by the end of Friday.**

**I will post all Discussion-section-related exercises on the Sunday preceding each week. All assignments for Weeks 1-9 are due the following week on Thursdays at 9:00 pm. Week 10's assignment (Discussion #10) will be posted early and is due Sunday 3/13 at 9:00 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 and exam questions**

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 so you won't have a lot of it to be looking around for question/answer material. Want to do really well? -> Prepare for exams as if they were to be in-person and no notes were 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 3:00 pm on Wednesday 3/16.** This is absolute. Read that last bolded sentence aloud to yourself. Remember it 10 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 do not want images of my exam questions to end up online. As above, if you take a picture of, or copy, one during an exam, you will fail my class. But **also, if you take a picture or copy one outside of exam time, you'll get a zero on the exam from which the question comes.** When exams are over, you will be able to view the questions/your answers, and you can share your screen with me or an IA to ask about them. **Please don't ignore, or forget about, this!**

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, recordings, 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 – Weds 9-10:00 am and 5:30-6:30 pm - on Zoom, where you can ask about course mechanics and class material. Your IA will have an office hour 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 with each other 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, including lots of new clothes and 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 Week	Lecture Topic	Disc Week	Discussion Topic, pts
1	M 1/3 Intro, Course mechanics, Genetic diversity.	1	Intro 12
	W 1/5 Evolution 1: Darwin.		Genetic Diversity Quiz 15
	F 1/7 Evo by Natural selection: The process.		
2	M 1/10 Evolution 2: Modes of selection.	2	Process of Science 28.5
	W 1/12 Sexual selection.		
	F 1/14 Genetic Drift. Hardy Weinberg Equilibrium.		
3	M 1/17 <b>no class</b>	3	HW Equilibrium 31
	W 1/19 Cont. Evolution 3: Patterns of evo descent.		
	F 1/21 Cont. Evo 4: Speciation.		
4	M 1/24 Cont. Pace of evolution.	4	Purple Mountains 25
	W 1/26 Cont.		cladogram review
	F 1/28 <b>Exam 1</b>		
5	M 1/31 Biodiversity 1: Cell types. Protists.	5	Biodiversity 1 34.5
	W 2/2 Fungi. Plants.		Disc Quiz 9
	F 2/4 Cont.		
6	M 2/7 Biodiversity 2: Sponges. Cnidarians.	6	Biodiversity 2 32
	W 2/9 Gastrulation. Flatworms. Molluscs. Annelids.		Disc Quiz 9
	F 2/11 Nematodes. Arthropods.		
7	M 2/14 Biodiversity 3: Echinoderms. Chordates.	7	Biodiversity 3 33
	W 2/16 Cont.		Disc Quiz 9
	F 2/18 Cont.		
8	M 2/21 <b>no class</b>	8	Scripps Coastal Reserve 30.5
	W 2/23 <b>Exam 2</b>		
	F 2/25 Life History Strategies.		
9	M 2/28 Ecosystems. Community Ecology.	9	Biomes, Upwelling 35
	W 3/2 Cont. Energy flow.		
	F 3/4 Biogeochemical Cycles.		
10	M 3/7 Cont.	10	Human Evolution Quiz 18
	W 3/9 Population Ecology.		Kahoot review
	F 3/11 Human population size considerations.		
W 3/16	<b>Final Exam 3:00 pm</b>		

Points available	Syllabus Quiz	12
	2 Lecture Exams	225
	Cumulative Final	212.5
	Discussion Section assignments	321.5
	Discussion Section participation	15
	<b>Total</b>	<b>786</b>