



BILD 3: Organismic and Evolutionary Biology Winter 2021

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Lecture: MWF 12-12:50

<https://ucsd.zoom.us/j/2429831670>

Office hour (on Zoom): Monday 5:00 pm or by appt.

Discussion sections: Mon 2-2:50 pm, 3-3:50 pm
 Weds 9-9:50 am, 5-5:00 pm, 6-6:00 pm, 7-7:00 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. I was told there may be some help at vcsa@ucsd.edu if you don't have a device and are concerned about being able to afford one.

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 8/31/20.

<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

Student mastery of course material will be assessed through open-notes multiple choice exams and Discussion-section-related exercises. **Grades will be based on the total points earned (of all points available) over the quarter** and will be at least as low as 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.** -> Keep track of how many points you have earned, via all routes, and compare it to the total available at any given time. I will keep you posted as to total points available throughout the quarter.

Lecture

I'll lecture MWF from 12-12:50 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 8-10 minutes before class, and I'll 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.

This syllabus is required reading.

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 exercises, as guides to details and terms you are required to know. I'll point out any special instructions with regard to reading material, and end-of-chapter questions that you should be able to answer for an exam.

Discussion Section

Each week you'll have activities to complete, and your IAs are there to educate, instruct, clarify, help, and encourage. Get to know yours! As with lecture, it will totally help your performance in the class if you attend in real time, if you can. **One Discussion section/week will be recorded and posted on our Canvas page by Weds evening.**

I will post all Discussion-Section-related exercises, except for Week 1, on the Friday before your section meets on Monday or Wednesday. No matter the day your section meets, **all assignments are due on the Sunday following your section, by 5:00 pm PST. Assignments submitted late will lose 1 point per day. Assignments will not be accepted after one week late.**

Regarding the grading of assignments, we will not post any kind of key. If you lose points and want to know why, ask your IA, or me, in office hours.

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 48-hour period, including one class time. On your second attempt, about 30-40% of the questions from the first time will repeat. **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 48 hours. -> This is absolute.

The final will be cumulative.

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, 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 exercises, 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 an office hour on Mondays (5-6:00 pm), on Zoom, where you can ask about course mechanics and class material. Your IA will have an office hour/week, too. If you email me, **you need to put something meaningful on the subject line** or

I'm not going to open your email! -> Do not 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 of exam questions, I will 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, 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 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.

If you would like to permanently change your display name, you can do this before entering a Zoom session: Click on your profile image, Settings, My Profile.

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. Put your groceries back into the basket and transfer them to reusable bags in your car (and leave the plastic bags at Von's). Live by the five Rs: Refuse, Repair, Reuse, Recycle, and Regift!

And vote!



Lect		Lecture Topic	Disc	Discussion
Week			Week	Topic pts
1	M 1/4	Intro, Course mechanics, Genetic diversity	1	Intro 12
	W 1/6	Evolution 1: Darwin		Production of Genetic diversity 15
	F 1/8	Evo by Natural selection: The process		
2	M 1/11	Evolution 2: Modes of selection	2	Process of Science 30
	W 1/13	Sexual selection		
	F 1/15	Evo by Genetic Drift, Hardy Weinberg Equilibrium		
3	M 1/18	no class	3	HW Equilibrium 40
	W 1/20	Evolution 3: Patterns of evo descent		
	F 1/22	Reproductive Isolating Mechanisms		
4	M 1/25	Evolution 4: Speciation	4	Purple Mountains 25
	W 1/27	Pace of evo		cladogram review
	F 1/29	Catch up!		
5	M 2/1	Exam 1	5	Biodiversity 1 42
	W 2/3	Biodiversity: Protists		
	F 2/5	Biodiversity: Plants		
6	M 2/8	Cont. Fungi	6	Biodiversity 2 42
	W 2/10	Biodiversity: Sponges, Cnidarians, Flatworms		
	F 2/12	Biodiversity: Roundworms, Molluscs, Annelids		
7	M 2/15	no class	7	Biodiversity 3 42
	W 2/17	Biodiversity: Arthropods, Echinoderms		
	F 2/19	Biodiversity: Chordates		
8	M 2/22	Cont.	8	Scripps Coastal Reserve 35
	W 2/24	Exam 2		
	F 2/26	Life History Strategies		
9	M 3/1	Ecosystems, Community Ecology	9	Biomes, Upwelling 35
	W 3/3	Energy flow		
	F 3/5	Biogeochemical Cycles		
10	M 3/8	Cont.	10	ecosystem review
	W 3/10	Population Ecology		
	F 3/12	Human population size considerations		
	W 3/17	Final Exam 11:30 am		

Points available

Syllabus Quiz	6
2 Lecture Exams	225
Cumulative Final	212.5
Discussion Sxn assignments	<u>318</u>
Total	761.5