## BILD 3 ORGANISMIC AND EVOLUTIONARY BIOLOGY

# **LECTURE SCHEDULE Spring 2021**

Date	Торіс	Reading
Mar. 29	Introduction, Understanding Covid 19	
Mar. 31	Covid 19, Darwin	Ch. 22
Apr. 2	Darwin, Evolution by Natural Selection	Ch. 23,24
Apr.5	The Origin and History of Life on Earth	Ch. 25
Apr. 7	The History of Life on Earth	Ch. 25
Apr. 9	Evolution I: Evidence	Ch. 22 -24
Apr. 12	Evolution II: Mechanisms Ch. 22-24	
Apr. 14	Evolution III: Speciation Ch. 22-24	
Apr. 16	Behavioral Ecology and Sexual Selection	Ch. 51
Apr. 19	Phylogeny and Systematics I	Ch. 26
Apr. 21	Phylogeny and Systematics II	Ch. 26
Apr. 23	Prokaryotes	Ch. 27
Apr. 26	Eukayotic life	Ch. 28
Apr. 28	Plant diversity	Ch. 29-30
Apr. 30	Fungi and Animal Diversity I	Ch. 31-34
May. 3	Animal Diversity II	Ch. 31-34
May. 5	Human Evolution	Ch. 27
May. 7	Evolution and Development	Ch. 27
May. 10	Population Ecology	Ch. 52-53
May. 12	Population Ecology	Ch. 52-53
May. 14	Community Ecology	Ch. 54
May. 17	Community Ecology	Ch. 54
May. 19	Ecosystems	Ch. 55
May. 21	Biomes	Ch. 55
May. 24	Global Change Biology	Ch. 56
May. 26	Conservation Science	Ch. 56
May. 28	ТВА	
May. 31	Memorial Day Holiday	
June 2	TBA	
June 4	Review	
June 11	FINAL EXAM 11:30-2:29	

#### **COURSE OUTLINE**

Dr. Joshua Kohn 1258 Muir Biology 534-8233, jkohn@ucsd.edu Office Hours: Tuesdays, 3-4 pm (or by appointment) email correspondence encouraged, please put BILD 3 in the subject line

Because of the small enrollment in this course, we have a unique opportunity. In my nearly 30 year career at UCSD I have never had fewer than seventy students in any course. Despite teaching online, I hope we can develop an inclusive, supportive, and fun educational experience and engage one another in a more personal way than is possible with typical, large enrollment, courses. I am very much looking forward to actually meeting all of you (even if online). - Josh

**Course Goals.** This course deals with biological compexity at the levels of whole organisms, populations, communities, and ecosystems. It is an introduction to the history and diversity of life on earth, and the fields of evolution, systematics, ecology and behavior. A major focus of the course will be on the evolutionary, ecological, and historical processes that have shaped life on earth. Knowledge of these processes is essential for understanding biology in general, increasingly useful in modern health sciences, and provide the tools for stewardship of the earth's biota into the future.

**PREREQUISITES:** The recommended prerequisite for the course is BILD 1 or a good high school course in biology. The course assumes that you know Mendelian genetics, mitosis and meiosis, and the basics of molecular biology — the transfer of genetic information from DNA to RNA and then to proteins. If you don't have a command of these topics, you will be at a disadvantage unless you do some extra reading in the text.

**LECTURES: MWF 11:00 to 11:50 see link on course website.** Lectures will be delivered on zoom at the scheduled time and recorded for asynchronous viewing and reviewing. However, **if you can attend the live lecture session it would be greatly appreciated.** Lectures are always more inclusive, interesting, and engaging when students are there live asking questions. I **ALWAYS** appreciate questions at any time during lectures. If there is something you are not understanding, I can guarantee other students are also having difficulty. We have a small class and can take the time to discuss. If you cannot view synchronously that is fine, but please feel free to pepper me with questions through email.

**COURSE TEXT**: Biology 11th Edition, by Campbell et al. We will cover material from units Four, Five, and Eight. The text is not required but useful to bolster concepts presented in lectures. Besides, it's the same text used in BILDs 1 and 2 and you can arrange e-access.

**ENROLLMENT**: If you drop the class, please do so using WebReg right away so that we know who is an active student.

**WEB SITE:** Enrolled and waitlisted students should have access to the course website at <u>https://canvas.ucsd.edu</u>. What is on the web site? The slides for each class will be posted after

each lecture. In addition, lectures will be recorded for non-synchronous viewing or reviewing. Other useful material will be posted that will help you with course material and quizzes. Announcements related to the course will be posted in the header of site homepage. **Check the site often for announcements and other changes**! Finally, a discussion board that allows you to post questions and view answers is available –the TAs will monitor the board daily, but if you want to ask Dr. Kohn a question (**and I highly encourage this**) please do so by emailing me directly (jkohn@ucsd.edu) with "BILD 3" in the subject line of your email. Dr. Kohn **will not monitor the discussion board on Canvas**.

**QUIZZES**: Five online quizzes worth 50 points each will make up the bulk of your grade. These quizzes will cover material from the previous two weeks and will consist of multiple choice, short answer, and perhaps paragraph long essay questions. There will be no make-up quizzes, but your lowest of five quiz scores will be dropped, so missing one quiz is not a huge problem. Quizzes will be timed (30 min) and open book. You will have a two-day window within which to complete each quiz.

Quiz Schedule: All quiz taking windows open on Sundays at noon and close on Tuesdays at midnight.

Quiz1: Noon Sunday April 11<sup>th</sup> – Midnight Tuesday April 13<sup>th</sup> Quiz2: Noon Sunday April 25<sup>th</sup> – Midnight Tuesday April 27<sup>th</sup> Quiz3: Noon Sunday May 9<sup>th</sup> – Midnight Tuesday May 11<sup>th</sup> Quiz4: Noon Sunday May 23<sup>rd</sup> – Midnight Tuesday May 25<sup>th</sup> Quiz5: Noon Sunday June 6<sup>th</sup> – Midnight Tuesday June 8<sup>th</sup>

### **GRADES**:

#### Section quizzes (50pts each with lowest of five scores dropped): 200 points

**GRADES**: It is expected that approximately 20% of the students will get A's, 30% B's, 30% C's, and the rest D's and F's. Exact grade cutoffs will be determined by the professor at the end of the course.

**REGRADES:** If a grading error has been made on your exam, you may submit a regrade petition to the professor within one week of return of the exam. A regrade petition must clearly and concisely state the reason(s) why you think your answer is deserving of additional credit. Regrade requests will not be processed without a written petition.

**CHEATING:** Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity downloadable here: <u>http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/Appendices/2</u>). Cheating will not be tolerated, and we will fail any student caught engaging in academic dishonesty. **All exams will be open book and open notes** and will be timed. Any student caught cheating on any exam, quiz, or assignment will receive a failing grade for the course. He or she may also be suspended from UCSD.

SECTIONS: THERE WILL BE NO SECTIONS THE FIRST WEEK. During the first week,

in consultation with students, we will decide how sections will be handled. Because of the low number of students and relatively high number of instructional assistants, we may handle things a bit differently this term. I will update the syllabus when these decisions are made.

IA	Contact	Section and time	Office hour time, place
Daniella Fairbank	dfairban@ucsd.edu	DO3 Wed. 3-3:50pm DO4 Wed. 4-4:50pm	
Sophia Lin	sol030@ucsd.edu	DO5 Wed. 5-5:50	
Sabine Manachi	smanachi@ucsd.edu	DO2 Mon. 10-10:50	
Nikki Mercer	nmercer@ucsd.edu	DO1 Mon. 9-9:50	

### INSTRUCTIONAL ASSISTANTS