

Organismic and Evolutionary Biology (BILD 3)
Fall 2012

Professor: Dr. Carolyn Kurle (ckurle@ucsd.edu)
Muir Biology Building, Room 4218
Office hour: Tuesday, 10-11 or by appointment

BILD 3 addresses topics related to the living world at the level of the whole organism, populations, communities, biomes, ecosystems, and the biosphere. BILD 3 is an introduction to the fields within biology known as ecology, evolution, and behavior. Ecology is the study of the relationships between living organisms and their environment. To best understand why there are so many different kinds of living things and their myriad of complex interactions, we will study evolution and evolutionary processes. We will also focus on organismal diversity and the importance of a general understanding of these topics within biology so as to be better stewards of the earth's biota. We will also discuss human impacts on global climates, species extinctions, environmental alterations, and the role of conservation.

Lecture Schedule

Date	Lecture Topic	NON-Required Textbook Chapter
September		
27	1. History of evolutionary thought	22
October		
2	2. Evidence of evolution	22
4	3. Natural selection	23
9	4. The genetics of populations	23
11	5. Evolutionary processes and genetic variation	23
16	6. Speciation	24
18	7. History of life	25
23	8. Phylogenetic trees	26
25	9. Human evolution	Papers ¹ , Book ²
30	MIDTERM	
November		
1	10. Organismal diversity I (bacteria, archaea, protists)	27, 28
6	11. Organismal diversity II (plants, fungi)	29, 30, 31
8	12. Organismal diversity III (invertebrates, vertebrates)	32, 33, 34
13	13. Physical environment and biomes	52
15	14. Population ecology	53, 54
20	15. Community ecology	54
22	16. Ecosystem ecology	55
27	17. Ecosystem ecology	55
29	18. Conservation	56
December		
6	19. Conservation: special topic	56
11	FINAL, 8-11 am	

¹A selection of papers will be made available on this topic via our BILD 3 site on Ted

²Wade, N (2006) Before the Dawn: Recovering the Lost History of our Ancestors. Penguin Books, New York, NY

Textbook: Campbell Biology, 9th edition (NOT REQUIRED). We will cover material from chapters 22-34 and 52-56, but you are NOT required to buy this book and you are encouraged to use it only if you want clarification on a topic. I will NOT test on material in this book. If you want further reading and don't want to buy this book, almost everything I discuss can be found for free in more detail online (just Google or Bing a topic). The publisher of Campbell Biology offers various supplemental materials including a CD, a web site called Mastering Biology, and a book of exercises. These supplemental materials may be useful to you, but they are NOT required. Used copies may be available online or at the bookstore. You may also find copies at a new website called UCSD.PostYourBook.com. Several copies of the text are on reserve at Geisel Library.

Old editions of the textbook: You may own an older version of the Campbell Biology textbook and that could also be helpful to you. I will use figures from and refer to chapter numbers from the 9th edition. Previous editions are similar but not identical, but will still be a good resource.

Contact: The best way to contact me is via email (ckurle@ucsd.edu). On all emails **PLEASE put BILD 3 in the subject line** to indicate your email is about this course. Because there are hundreds of students in this course, I cannot individually answer questions about course content by email. Attend lectures and discussion sections and talk to your fellow students and TAs.

Lectures: All material presented in lectures is fair game for the exams. You are adults and it is your choice to attend lecture, but you will be responsible for the material whether you choose to attend or not. Do not expect to skip lectures and still do well in the course. Lecture notes will be posted on Ted.ucsd.edu before each lecture, but they are, at best, outlines, **and essential material will be presented in class that does not appear on web-posted notes or in the textbook.** Lectures will also be posted as a **video podcast** within 24 hours after each class time and can be accessed at Podcast.ucsd.edu.

Exams: There is one midterm, worth 100 points and a final exam worth 200 points. Only material presented in lecture will be covered on the exams (I will NOT test on any material from the book as it is NOT required). All questions will be multiple choice and a Scantron sheet will be provided for both exams. We will check photo ID at each exam, so please bring a student ID or driver's license. The midterm will be given in class and contain material for that section of the course up to the lecture preceding the exam. The final exam will be cumulative. Exam scores will be available after grading is complete as will your individual Scantron sheets, but the exams will not be returned. Questions concerning exams will be dealt with in discussion sections or in TA and/or Professor office hours.

There are no re-grades or make-up exams. If you miss an exam, then you will be required to provide official documentation of an unavoidable emergency (serious illness, etc.). Without such documentation, you will receive no points for that exam. If you miss the midterm AND have valid documentation, the proportion of your grade that is based on your final exam will be increased to cover the missed midterm. If you miss the final exam AND have valid documentation, you will receive an incomplete for the course and be re-tested in the next quarter.

Ted: Lecture notes will be available on Ted (<https://ted.ucsd.edu>) by the end of the business day preceding each lecture. They can be found in the BILD 3 Lectures file. If you are registered for the course (or if you are on the wait list), then you should have access to the course web site now.

Instruction on how to access Ted can be found here: <http://acms.ucsd.edu/students/index.html>.

Concurrent enrollment (extension) students are not added automatically. Extension students can bring proof of enrollment to the ACMS Help Desk (Applied Physics and Math bldg. 1313, M-F, 8:00-4:30) to obtain Ted access. More information for extension students can be found here: <http://extension.ucsd.edu/student/index.cfm>.

Grading: Your final letter grade will be based on your TOTAL number of points. If everyone earns enough points that they fall at or above 90%, I have no problem giving everyone an A. However, that is unlikely (but I'd love to have you prove me wrong!). Therefore, if warranted, letter grades will be based on a curve; approximately the top 20% of students will receive A grades; the next 30% of students will receive B grades; the next 40% of students will receive C or D grades, and the final 10% will receive F grades.

Thus, if you earn the median score (half of your classmates have higher scores and half have lower scores) your score will fall at (or near) the C cutoff. Students earning less than 50% can expect to receive F grades unless there are mitigating circumstances. The final course curve is determined based on the students that are enrolled in the course at the end of the quarter. I do give plus and minus grades but only on the final course grades. The pluses and minuses do not make the curve easier, they only help to differentiate the scores within the ranges above. Please note that the university will not allow us to change a letter grade after they are turned in except in cases of demonstrable clerical error.

Discussion sections: Tutor-led sections are not required, but you are urged to attend them in order to discuss lecture material and other topics with your course tutors. Sections will not meet during the first week (but they will meet starting the week of October 1). See TritonLink and the TA list below for information regarding times and locations of discussion sections. You may choose whichever discussion section you want and you don't have to attend the same one all quarter.

Clickers: We will **NOT** be using clickers in this course.

Wait list: If you are on the wait list for this class you will be automatically added if space becomes available. If you have any concerns, please contact the Biology Student Affairs Advising Services office at 858-534-0557 or go to their website (<http://biology.ucsd.edu/undergrad/advising-services.html>).

Extra Credit, Self-guided field trip to the Scripps Coastal Reserve: This optional assignment is worth ten points. I will provide more information regarding this assignment after lecture 12.

Cheating: Don't do it. You are a responsible adult and I expect you to behave that way. The prospect of doing poorly on an exam can incite anxiety and lure you into irresponsible behavior, but resist the urge to cheat! It hurts everyone's morale, is simply a bad way to behave, and my students are clearly better than that. In the unlikely event that you succumb to temptation and decide to cheat, you will be caught and handed over to the Academic Integrity Coordinator, which reports directly to the Dean of the student's college. For information on academic integrity at UCSD: <http://students.ucsd.edu/academics/academic-integrity/index.html>.

OSD students: If you need testing accommodation for this class, please give a copy of your OSD Authorization for Accommodation (AFA) form to Maggie Tilley in Biology Student Affairs. Usually she will schedule your accommodation, and you will need to fill out forms for her. However, if you need specialized equipment, arrangements may need to be made with OSD rather than the Biology office. You also need to coordinate scheduling of exams with me.

All of these arrangements should be made within the first two weeks of the quarter. Please note that the Biology office is closed in the evenings. More information can be found by contacting the Office of Students with Disabilities (OSD) at 858.534.4382, 858.534.9709 (TTY) or through their website (<http://disabilities.ucsd.edu/index.html>).

How to excel in this class: Here is what I would do if I were a responsible student hoping to get an A in Dr. Kurle's BILD 3 class: 1) print out the lecture notes from Ted and bring them with you to class, 2) go to lecture and take notes while referencing the figures and other materials on the lecture notes, 3) don't try and write down every word, 4) go over your notes within the next day or so and fill in details missed in lecture or topics you didn't understand using material presented in the book or online, 5) rely on your own notes rather than attempting to rely solely on the posted notes which won't be complete (writing your own notes forces you to summarize, organize, and restate concepts in your own words which is always better for understanding material), 6) if you miss lecture, listen to the podcast with the printed notes as if you were in class, 7) if you need review on a topic, listen to the podcast multiple times, and 8) go to the discussion sections to have questions answered, discuss topics in detail, and get extra help and guidance.

Bring any questions to discussion section, contact course tutors through email or office hours, or come to my office hour. Office hours are the best place to ask complex questions as you will get a much more thorough answer. That said, please feel free to ask questions during class! Don't wait until the last minute and really try to gain a clear understanding of all examples presented in lecture. Use the text, internet, and/or discussion sections to reinforce concepts discussed in lecture.

Problems? If you have serious medical or personal problems during the quarter, the university does allow medical withdrawals. Contact the Biology Student Affairs Advising Services office at 858-534-0557 or go to their website (<http://biology.ucsd.edu/undergrad/advising-services.html>).

BILD 3 tutors/teaching assistants:

Tutor	Email	Discussion Time (PM)	Place	Office hour time and place
Hussein Abdul-Rassoul	habdulra@ucsd.edu	M, 6-6:50	APM 2301	Wed, 1:30, Cafe Roma, Price Center
Narek Akopyan	nakopyan@ucsd.edu, nakopyan@gmail.com	W, 4-4:50	PCYNH 120	Mon, 10:00, Cafe Roma, Price Center
Jonathan Chan	jcc011@ucsd.edu	M, 5-5:50	APM 2301	Tues, 2:00, Cafe Roma, Price Center
David Dannecker	ddanneck@ucsd.edu	M, 4-4:50	APM 2301	Thurs, 9:30, 2nd floor lounge, Price Center East
Maryam Jafari Rasht	mjafarir@ucsd.edu	W, 3-3:50	PCYNH 120	Mon, 12:30, Price Center Theater lobby area
Timothy Juwono	tjuwono@ucsd.edu	W, 6-6:50	PCYNH 120	Tues, 5:00, CMMW, room 00 (Cellular Molecular Medical-West Bldg.)
Rohan Mehta	rsmehta@ucsd.edu	M, 2-2:50	APM 2301	Thurs, 10:00, Muir Bio Bldg 2155
Novis Naoom	nnaoom@ucsd.edu	M, 7-7:50	APM 2301	Thurs, 5:00, School of Medicine, ground floor of Leichtag Bldg.
Ray Sheng	y1sheng@ucsd.edu	W, 7-7:50	PCYNH 120	Thurs, 12:30, Sun God Lounge
Kelsey Shoberg	kshobergvbis@gmail.com	W, 2-2:50	PCYNH 120	Tues, 9:30, Commuters Lounge by Price Center
Christopher Tam	catam@ucsd.edu	M, 3-3:50	APM 2301	Mon, 4:00, Sun God Lounge
Stephanie Tu	sktu@ucsd.edu	W, 5-5:50	PCYNH 120	Wed, 4:00, Tapioca Express in Price Center