Organismic and Evolutionary Biology (BILD 3): Fall quarter 2011

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

Textbook: Campbell Biology, 9th edition (required). We will cover material from chapters 22-34 and 52-56. The publisher 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. You can buy or sell used textbooks at this website. Three copies of the text are on reserve at Geisel Library.

Old editions of the textbook: It is up to you whether or not you use an older version of the Campbell Biology textbook. I will only use the 9th edition. Previous editions are similar but not identical. If you already own an older edition, my suggestion is that you compare your copy to the 9th edition, and decide if the editions are similar enough for you to live with. **Again, the material you are responsible for is in the 9th edition.**

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 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. All questions will be multiple choice and you will need a Scantron sheet 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, 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 regrades 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 be expected to take an oral final exam or you will receive an incomplete for the course.

Ted: Lecture notes will be available on Ted (formerly WebCT) (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/units/iwdc/password.shtml. Concurrent enrollment (extension) students are not added automatically. Extension students can bring proof of enrollment to the ACS 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://sdacs.ucsd.edu/~icc/ce.php

Grading: Your final letter grade will be based on your TOTAL number of points. 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 grades or lower. 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 B- / 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 section: 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. See TritonLink for information regarding times and locations of discussion sections.

Clickers: We will **NOT** be using clickers in this course. During lecture, however, I will ask you practice exam questions; these questions are not for credit but will serve as a way to test your knowledge of the material. Note that these multiple-choice questions will not be included in the posted lecture notes.

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 Biology Student Affairs at 858-534-0557 or email question@biology.ucsd.edu.

Self-guided field trip to the Scripps Coastal Reserve: This optional assignment is worth ten points. We 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://www-senate.ucsd.edu/manual/appendices/app2.htm

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), osd@ucsd.edu or http://osd.ucsd.edu

How to excel in this class: Here is what I would do if I were a responsible student: 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. That way, you don't have to copy down any pertinent figures that I present in PowerPoint, 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 using material presented in the book. Rely more on your own notes rather than relying solely on the posted notes which won't be complete. If you write your own notes, you force yourself to summarize, organize, and restate things in your own words, which is always better for understanding material.

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. Don't wait till the last minute and really try to gain a clear understanding of all examples presented in lecture and the book. Use the text to reinforce concepts discussed in lecture. Anything in the text is fair game for exams, but the lecture material will be emphasized.

Problems? If you have serious medical or personal problems during the quarter, the university does allow medical withdrawals. Contact the Biology Student Affairs at 858-534-0557 or email question@biology.ucsd.edu.

BILD 3 tutors/teaching assistants:

1. ACHIS, JAMIE, jachis@ucsd.edu
Section: Tu, 3:00-3:50, Office hour: Th, 3:00-4:00, Cafe Roma
2. AKOPYAN, NAREK, nakopyan@ucsd.edu
Section: We, 5:00-5:50, Office hour:We, 6:00-7:00, Cafe Roma
3. BABAJANIAN, ERIC, ebabajan@ucsd.edu
Section: Th, 1:00-1:50, Office hour: We, 4:00-5:00, Cafe Roma
4. CHAN, JONATHAN, jcc011@ucsd.edu
Section: Tu, 11:00-11:50, Office hour: Th, 11:00-12:00, Cafe Roma
5. CHEN, TINGJUN (BILL), tic010@ucsd.edu
Section: Mo, 2:00-2:50, Office hour: Mo, 3:00-4:00, Cafe Roma
6. FELLOWS, BROCK, bfellows@ucsd.edu
Section: Mo, 8:00-8:50, Office hour: Mo, 9:00-10:00, Cafe Roma
7. FERNANDES, MALCOLM, m9fernan@ucsd.edu
Section: We, 8:00-8:50, Office hour: TBA
8. HODOSEVICH, ZACHARY, zhodosev@ucsd.edu
Section: Fr, 1:00-1:50, Office hour: 2:00-3:00, Geisel Library, Humanities Library Section
9. KNIPPRATH, ERIK, eknippra@ucsd.edu
Section: Tu, 1:00-1:50, Office hour: 2:00-3:00, Cafe Roma
10. MIZAR, MARINA, mmizar@ucsd.edu
Section: Fr, 12:00-12:50, Office hour: 1:00-2:00, Muir Biology, room 2165
11. SCHUMACHER, JOEL, jschumac@ucsd.edu
Section: We, 4:00-4:50, Office hour: 9:30-10:30, Cafe Roma
12. TAM, CHRISTOPHER, catam@ucsd.edu
Section: Fr, 2:00-2:50, Office hour: 3:00-4:00, Sun God Lounge in the Price Center
13. YANAGITSURU, YUZO, yyanagit@ucsd.edu
Section: Fr, 8:00-8:50, Office hour: Fr, 9:00-10:00, Muir Biology, room 1208
14. ZONA, ADAM, abzona@ucsd.edu
Section: Th, 2:00-2:50, Office hour: Mo, 5:00-6:00, Muir Biology, room 1208