

BILD 3 Organismic and Evolutionary Biology
MTWTH 9:30-10:50AM, Center Hall 119

CONTACT INFORMATION

Dr. Maxi Polihronakis Richmond (mrichmond@ucsd.edu)
Office: 2208 Muir Biology
Office Hours: Thursday 1:00-2:00PM

WEBSITE: <https://ted.ucsd.edu> (podcast of lectures at <http://podcast.ucsd.edu>)

COURSE DESCRIPTION

The first principles of evolutionary theory, classification, ecology, and behavior; a phylogenetic synopsis of the major groups of organisms from viruses to primates. Prerequisites: none. (Note: EBE majors should complete this course during their first year at UC San Diego.)

COURSE GOALS

This course deals with the living world at the level of whole organisms, populations, species assemblages, ecosystems, biomes, and the biosphere. BILD 3 serves as an introduction to the fields of evolution, behavior, and ecology. A key focus of the course will be on evolution. An understanding of evolutionary processes provides insight into why there are so many different kinds of living things, how they are related to one another, and how these organisms interact with each other to produce complex ecosystems. BILD 3 also provides a basis for understanding human impacts on global climate, species extinctions, environmental alterations, pest outbreaks, emergent diseases, and ecosystem services.

REQUIRED MATERIALS

- Campbell Biology in Focus (2014)
 - Supplemental materials, including access to the MasteringBiology website, are optional and require an access code or can be purchased separately online.
 - Alternate and earlier editions of the text may be used, however you are responsible for determining page conversions and identifying any changes in content.
 - The textbook is on reserve at Geisel Library.
- iclicker2
 - Older versions of the iclicker can be used, as long as the remote ID can be read and the remote can be registered on TED.
 - You cannot share an iclicker remote with another student enrolled in this class.

PIAZZA

This term we will be using Piazza for answering questions or discussion of issues related to BILD 3. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Sign-up for this class on Piazza: <https://piazza.com/ucsd/summer2014/bild3>
Piazza course page: <https://piazza.com/ucsd/summer2014/bild3/home>

DISCUSSION SECTIONS

Discussion sections will review the week's subject matter or discuss related material. Sections will begin Tuesday, August 5th. Please attend the section of your choice and sign in with your TA. You may attend any or all sections as you choose each week. When a section falls on a holiday, please choose another section to attend that week. Questions about the lecture, reading, videos, and exams will be answered during section. **Your attendance and participation at sections can influence borderline grades at the end of the semester.**

Section	Day/Time	Location	TA
A01	M 1:00-2:50PM	CENTR 207	Ronnie Steinitz
A02	M 11:00AM-12:50PM	CENTR 207	Ronnie Steinitz
A03	Th 11:00AM-12:50PM	CENTR 207	Kimberly Narel
A04	Th 1:00PM-2:50PM	CENTR 207	Joanna Bustamente
A05	Tu 11:00AM-12:50PM	CENTR 207	Kristen Richardson
A07	W 11:00AM-12:50PM	CENTR 217A	Kristen Richardson

TA OFFICE HOURS

All TAs have taken and excelled in many biology courses. They are a great resource for the course, so take advantage of their knowledge. You may attend the office hours of any TA. Office hours will be posted on TED.

EXAMS

There will be two midterms and a final exam, each worth 100 points. All exams are closed book (no notes), and they are not cumulative. The format of exams will be a combination of multiple choice, true/false, and matching. Exams are based primarily on lecture material, but this may include information briefly discussed in class that is more extensively presented in the textbook. All exams will use Scantrons. Please bring your ID and a #2 pencil to each exam. **Students who do NOT have photo ID will not be permitted to take the exam.** Scantron sheets and answer keys will be available after grading is completed, but the exams themselves will not be returned. You are encouraged to attend section to discuss exam questions that you missed. The midterms will be held during regularly scheduled class time. The final exam is Friday, September 5th 8:00-11:00AM (location TBA).

There are no regrades and no make-up exams. If you miss an exam due to an unforeseen and unavoidable emergency (e.g. medical emergency, death in your immediate family), AND you provide official documentation within 1 week of the missed

exam, the weight of your missed exam will be transferred to the final. This means if you miss a midterm, your final exam will be worth 200 points. You cannot make up more than one missed exam.

Make-up exams will not be offered for schedule conflicts. This means you should confirm now that you will be able to make all exam times. If you signed up for two classes with identical finals, or you have a senior project at the same time as the final exam, you'll need to switch into another course to avoid the conflict.

CLICKERS

You are required to purchase an iclicker2 remote for in-class participation. iclickers are a response system that allows you to answer questions I pose during class. You will be graded on your in-class participation. To receive credit, you need to register your iclicker remote using the link on our TED course menu. iclickers will be used every day in class.

Any students who are found to be clicking in for classmates who are not in lecture, or if someone else is clicking in for you when you are not in lecture, will get an automatic zero for clicker points. This is considered cheating, and as such it will be reported to the Academic Integrity Office.

For the first three lectures, we will be practicing with the clickers and the points will not count. This is a great opportunity to make sure you know how to use your clicker and your clicker is working properly. I will post the points on TED so you can check. Starting August 7 you will receive points for answering clicker questions in lecture. I will assume your clickers are working properly by this time. See page 8 - 9 of this document (*Clicker Instructions*) for details.

GRADING

Class points will be distributed as follows:

Midterm Exams (2 x 100 points each)	200
Final Exam	100
In-class clicker points	25
Total points possible	325

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 30% of students will receive C grades, and the remaining 20% will receive D or F grades. Thus, if you earn the median score (half of your classmates have higher scores and half have lower scores), then 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 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.

For those taking the class as pass/no pass (P/NP), the minimum final grade to receive a grade of P (pass) is a C-.

SPECIAL ACCOMMODATIONS

Students requesting accommodations and services due to a disability for this course need to provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD), prior to eligibility for requests. Receipt of AFAs in advance is necessary for appropriate planning for the provision of reasonable accommodations. OSD Academic Liaisons also need to receive current AFAs. For more information, contact the OSD at (858) 534.4382 (V); (858) 534-9709 (TTY); osd@ucsd.edu, or <http://disabilities.ucsd.edu>.

AS LECTURE NOTES

If there are AS Lecture Notes offered for this course, they will **NOT** be reviewed or proof-read by the instructor. Use at your own risk.

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.

ACADEMIC HONESTY

Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind.

Specifically, no student shall

- Knowingly procure, provide, or accept any unauthorized material that contains questions or answers to any examination or assignment to be given at a subsequent time.
- Complete, in part or in total, any examination or assignment for another person.
- Knowingly allow any examination or assignment to be completed, in part or in whole, for himself or herself by another person.
- Plagiarize or copy the work of another person and submit it as his or her own work.
- Employ aids excluded by the instructor in undertaking course work or in completing any exam or assignment.
- Alter graded class assignments or examinations and then resubmit them for regrading.
- Submit substantially the same material in more than one course without prior authorization

Any violation of UCSD's Policy on Integrity of Scholarship will be reported to the Academic Integrity Office. If you do not understand these expectations and

authorizations, please speak with the Instructor as soon as possible. Please read the official UCSD policy at <http://students.ucsd.edu/academics/academic-integrity/policy.html>

ETIQUETTE FOR EMAILS AND IN THE CLASSROOM

All emails to professors and TAs should use proper grammar, include your **first and last name** in the body of the email, and put **BILD 3 in the subject line**. Do not rely on email as a sure and immediate form of communication with the instructor. The most certain way to get your questions answered is to attend office hours.

You are expected to arrive on time for lecture, turn off cell phones, and respect your classmates.

BILD 3 - TIPS FOR SUCCESS

Here is what I would do if I were a student: 1) go to lecture and take notes using the powerpoint outlines as a template (DON'T just fill in the blanks -- there is a LOT more material discussed in lecture than is on the slides), 2) go over lecture notes within the next day or so and fill in details using the podcast and textbook, and 3) attend discussion section/office hours.

My recommendation is that you rely more on your own good notes rather than just filling in the blanks on the posted incomplete slides (use them as a reference only). Learning to listen to a lecture and record your own notes is a valuable skill. Take extensive and complete notes (use an outline format so you don't write down every single word). You will retain much more information if you listen and then translate the information into your own notes. In fact, you will find it much easier and quicker to understand the subject matter by actively listening to a lecture and taking notes than by reading the text or looking at lecture slides by yourself. It is too easy to just stare at the posted notes without really digesting the material. If you force yourself to write your own notes, however, you force yourself to summarize, organize, and restate things in your own words.

This is not a very difficult course but the amount of material presented can seem overwhelming if you don't keep up on a regular basis. I will make an effort to adjust the lectures to your pace. However, because the lectures build on each other, you must put a constant and steady amount of effort into the lectures. If you fall behind, the interaction between the different lectures will make it difficult for you to recover. If you keep pace, this course should be rewarding.

Bring any questions to discussion section, contact TAs through email or office hours, or come to my office hours. Office hours are the best place to ask complex questions – you will get a much more thorough answer. Don't wait until the last minute. You should have a clear understanding of all the examples - why was each example important? Use the text to reinforce concepts discussed in lecture. Exams cover primarily lecture material, however the (optional) textbook can often explain concepts in a slightly different way or offer additional examples that may be helpful.

If you are having academic difficulty, OASIS (<http://oasis.ucsd.edu/>) can help. They provide tutoring, as well as classes in study skills and time management. If you are having personal difficulties, do not hesitate to seek help at Psychological and Counseling Services (psychservices.ucsd.edu/resources_students_web/resources_students.html), which is free to students. They can help you get over many types of hurdles

BILD 3 SCHEDULE

Schedule and associated readings are approximate and subject to change based on instructor discretion

Date	Lecture #	Topic - Biology in Focus Chapter
August 4	L1	History of Evolutionary Thought – Chapter 19 (overview, 19.1-2)
August 5	L2	Evidence of Evolution – Chapter 19 (19.3)
August 6	L3	Natural Selection – Chapter 21 (overview, 21.1, 21.3-4)
August 7	L4	Hardy-Weinberg, Gene Flow, Genetic Drift – Chapter 21 (21.2, 21.4)
August 11	L5	Speciation – Chapter 22 (all)
August 12	L6	Phylogenetic Trees – Chapter 20
August 13		MIDTERM 1 (L1 – L6)
August 14	L7	Organismal Diversity: Bacteria, Archaea, Protists – Chap. 24 & 25
August 18	L8	Organismal Diversity: Plants, Fungi – Chapter 26
August 19	L9	Organismal Diversity: Invertebrates, Vertebrates – Chapter 27
August 20	L10	Human Evolution – Chapter 27
August 21	L11	The Physical Environment and the Biosphere – Chapter 40 (40.1-4)
August 25	L12	Population Ecology I – Chapter 40 (40.4 & 40.6)
August 26		MIDTERM 2 (L7 - L12)
August 27	L13	Population Ecology II – Chapter 40 (40.5)
August 28	L14	Community Ecology – Chapter 41 (41.1-3)
September 1		LABOR DAY – no class
September 2	L15	Ecosystem Ecology I – Chapter 42 (42.1-3)
September 3	L16	Ecosystem Ecology II – Chapter 42 (42.4-5) & Chapter 43 (43.4)
September 4	L17	Conservation Ecology – Chapter 43 (43.1-3)
September 5		FINAL EXAM (L13 - L17) - 8:00AM-11:00AM , location TBA

Important Dates: Last day to add or drop the class – August 8. After this date you have to petition to drop the course (UCSD students: see the Academic Senate regulations, non-UCSD students: contact the Summer Services Manager).

CLICKER INSTRUCTIONS

It is your responsibility to have your clicker with you at lecture and to make sure it is working properly. There will be no make-up opportunities for clicker questions, for any reason, nor can you get clicker credit for handing in questions on paper, etc.

Clicker Grading

You will be graded on your in-class participation using iclickers, but NOT on having the correct response, as often I will use these questions to identify confusing topics or poll students.

If you answer

> 80% of clicker questions	you will receive	25 points
> 60% of clicker questions		20 points
> 40% of clicker questions		15 points
> 20% of clicker questions		10 points

Recommendations

- Bring extra batteries (clickers require 2 AAA batteries)
- Put your name on your clicker
- Cover the ID number on the back with a piece of clear tape to prevent it from rubbing off

Register your clicker

You will register your clicker using the link on our TED page (on the left hand side of the screen, under the list of Announcements, Syllabus, etc.). If you have used an iclicker2 for a previous class, and registered it through TED, you do not need to register it again.

NOTE: The instructions that come with your remote ask you to register your iclicker at www.iclicker.com. While you are welcome to do this, it is not necessary. You must register your iclicker through TED to receive credit for responses during class.

You will not see your clicker points on TED until you have registered your iclicker. To ensure your clicker is working properly, please register as soon as possible. Every student in this course must have their own iclicker to receive clicker points. You will not receive any clicker points until you correctly register your iclicker online.

Using your clicker

Turn your clicker on with the bottom button. I will ask questions, and you will respond by pushing buttons A – E. Please wait until I start the voting before you respond. There will be a timer on the screen when the voting has begun. When your answer has been received, you will see a checkmark at the top of the screen. While the timer is going, you can change your answer as many times as you want. Just press a different button.

You get credit for answering the question, regardless if your answer was correct or incorrect. Like all technologies, clickers sometimes malfunction. This is why I give full clicker credit if you answer 80% of the questions or more. I do not adjust scores in other ways.

Lost clickers

If you lose your clicker mid-quarter and you use a different clicker, you need to change your registration on-line AND you need to email me the following (before the next lecture): a) PID b) your clicker ID

Clicker Troubleshooting

The first three days of class the clicker points will not count toward your grade. During this time, however, clicker points will be on blackboard as soon as possible after lecture so you can check to see if you are getting the clicker points you deserve. (They will be erased before I tally the final scores.) Some clickers are not functional – this is your time to find that out. I do not adjust scores for malfunctioning clickers. It is your responsibility to use this these first two weeks, when the points do not count, to learn how to use your clicker and to ensure that your clicker is working properly.

If you have problems, go through the troubleshooting guide below. Starting August 7, the clicker points will count, and I will assume all problems have been sorted out.

If you are not getting the points you deserve:

- Be sure you have registered. This means through the link on TED (NOT at www.iclicker.com)
- Make sure your remote is on the correct frequency (**AC, for this class**)
- Make sure you wait until I start the question before you answer - you should see the timer going.
- Make sure you answer BEFORE time has run out. No answer is accepted after the time has ended.
- Every student in this class needs there own clicker – if you are sharing with another student one of you will not get any points.
- Are your batteries good?

If you have done everything correctly, please come to my office hours. We can check you clicker there. If your clicker is malfunctioning the bookstore will exchange it. I cannot do anything to check your clicker over email, nor can I check it before or after class. It is your responsibility to make sure you are getting the points you deserve. If there is a problem, you need to see me right away so we can resolve the problem for future lectures. I will not give clicker points retroactively.