

Lectures and discussion sections for this course will be held in person unless the conditions of the COVID-19 pandemic dictate a change to remote instruction.

This syllabus is subject to change. Any schedule changes will be posted on the Canvas site.

Lecture times:

A00: MWF 4-4:50 PM, Center Hall 101

B00: MWF 12:00-12:50 PM, Solis Hall 107

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

Explanation of A00/B00 terminology: I am teaching BILD 3 twice this quarter, and this syllabus applies to both classes. As a result, you will see references to the A00 class and the B00 class. Each class has its own Canvas site, so when you interact with the class on Canvas you will only see material for your own course.

Welcome to BILD 3! This is a challenging time for many reasons. As your professor, I value your health, wellbeing, and learning. This course will challenge you to deepen your understanding and to grow as a student. However, this is not at the expense of your wellbeing. This is an in-person course and we will follow UCSD's guidelines for everyone's health. You should plan on attending the lectures and discussion sections in person if you are well enough to do so. However, I have built flexibility into the course so if you are sick you can take care of yourself. Beyond physical health, I encourage you throughout the quarter to make time for yourself to recharge, relax, and rejuvenate with healthy ways to find joy. Taking time to do so will help you with your studying – we learn best when we are in better states of mind! Finally, while this quarter may have unique challenges, I encourage you to celebrate the victories you will have, both large and small.

Adapted from Claire Meaders and Nicole Gonzalez Van Cleve.

COURSE DESCRIPTION

BILD 3 is an introduction to the biological fields of evolution and ecology. Evolution is the study of how populations of living organisms change over time. 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.

When you have completed this course, you should be able to:

- Explain how heritable traits evolve in populations via natural and sexual selection, and how selection can change allele frequencies and phenotypes over time.
- Explain how mutation, genetic drift, and gene flow can affect allele frequencies, phenotypes, and adaptation.
- Interpret evolutionary trees to determine homology, derived traits, common ancestors, and relationships between taxa.

- Identify the relative order of, and approximate elapsed time between, major events in earth's history, including the origin of the earth and of major taxonomic groups.
- Explain the processes by which new species arise and the mechanisms of reproductive isolation.
- Describe the evolution of *Homo sapiens*, including anatomical differences from our ancestors and our evolutionary relationship with non-human primate species.
- Identify the evolutionary relationships among the 3 domains of life: Archaea, Bacteria, and Eukaryota.
- Compare and contrast animals, plants, and fungi, including their adaptations, ecological roles, and evolutionary relationships.
- Identify the major phyla of animals and major plant groups based on their characteristics.
- Describe how abiotic factors such as the sun and geography drive large-scale temperature/precipitation patterns across the planet and how those patterns influence the location of biomes.
- Describe the ecological roles of producers, consumers, and decomposers and how they interact in a food chain/web.
- Describe how energy flows, and nutrients cycle, within ecosystems.
- Explain how species in an ecological community interact with one other and their environments.
- Describe factors that produce different population growth patterns.
- Describe the causes and major consequences of global climate change.

IN-PERSON INSTRUCTION IN THIS CLASS

This is an in-person class. I have built in some flexibility to accommodate students who need to miss individual lectures or sections for reasons such as emergency, illness, or required quarantine. However, those mechanisms are emergency measures; they are not intended as a way for you to take all or even a substantial part of the class remotely. If you are unable to attend this class in person most of the time, please drop it. I will also be teaching BILD 3 again in the spring.

The midterm and final exam are in-person exams.

If you have special circumstances regarding your ability to attend most of the class in person, please email me as soon as possible to discuss your situation: sarahs@ucsd.edu. I will not make accommodations for students who wish to take two classes that are scheduled at the same time.

If you develop COVID-19 symptoms and/or test positive for COVID-19 during the quarter, please make your safety and the safety of others your top priority: take advantage of the flexible course policies to stay home and get better, and use the podcasts to keep up with lectures until it is safe for you to return to in-person class. As of this writing, if you test positive for COVID you must isolate for at least 5 days. Please follow UCSD's requirements for isolation and masking:

<https://blink.ucsd.edu/safety/resources/public-health/covid-19>

PROFESSOR CONTACT INFORMATION

Dr. Sarah Stockwell (she/her) <sarahs@ucsd.edu>

Office hours: Wednesdays 2:30-3:30 PM, Muir Biology 1112.

GRADUATE TEACHING ASSISTANT CONTACT INFORMATION

A00 (4 PM lecture class): Jackie Kinch <jekinch@ucsd.edu>

B00 (noon lecture class): Kelly Bowen <kflanders@ucsd.edu>

IA terminology: We have both graduate teaching assistants (TAs) and undergraduate Instructional Apprentices (UGIAs) helping us with our course. TAs will lead the discussion sections and UGIAs will support the discussion sections. "IA" (Instructional Assistant) refers to both TAs and UGIAs.

Office hours for all IAs are posted under "Discussion sections, IAs, and office hours" on the Canvas site. You can go to the office hours of any IA, and of course you are always welcome in my office hours.

EMAIL POLICY:

Please contact me only in case of an emergency. The best way to contact me if needed is via email. For other inquiries, please do one of the following:

- Post your question on the Piazza forum on Canvas. Other students and the IAs will help answer it.
- If it is a question you prefer not to ask publicly, you can email the IAs at this address: BILD3Stockwell_IAs-G@ucsd.edu

All emails to professors and IAs should be polite and respectful, include your **first and last name** in the body of the email, and have **BILD 3 in the subject line**. Because there are so many students in this course, we cannot explain course content via email. To get your questions about course content answered: Ask during class, attend discussion sections, go to IA and professor office hours, and post on the class Piazza site.

COURSE WEBSITE

IMPORTANT! For reading assignments to complete before class, lecture slides to download after class, discussion section assignments, grades, etc., use the Canvas site:
canvas.ucsd.edu (click on BILD 3 link).

YOU WILL NEED TO CHECK THE CANVAS SITE SEVERAL TIMES A WEEK.

Canvas student help guides and videos are located on the left-side menu's help section (the question mark icon). Should you need any technical assistance with Canvas, please send an email to servicedesk@ucsd.edu. In the header of the email, please write "Canvas". Make sure to include your name, course title and section, as well as your contact information in the email body.

Instruction on how to access your account for logging on to UCSD's Canvas sites can be found here: <http://acms.ucsd.edu/students/accounts-and-passwords/index.html>
Concurrent enrollment (extension) students are not added to Canvas automatically. More information for extension students can be found here: <https://extendedstudies.ucsd.edu/student-resources>

REQUIRED MATERIALS

- **Textbook:** Campbell Biology 10th, 11th, or 12th edition. The 12th edition has a blue flower on the cover, the 11th edition has a sunflower on the cover, and the 10th edition has a dandelion on the cover. Make sure you have Campbell Biology rather than Campbell Biology in Focus; they are substantially different books. I will assign readings from the textbook for most lectures, and there will be reading quiz questions as well, so you need access to the book to succeed in the class.

- **How to get the textbook?**

- If you want access for this quarter only: We are doing the publisher's Inclusive Access program for the textbook. This means that you can access the eBook from the "BryteWave Course Materials" area in the left panel of our class Canvas site, where it will be available for the duration of the quarter. You may lose access to it after the quarter ends. If you only want access to the textbook for this quarter, this is the cheapest and easiest option. You don't have to do anything to buy the book; it will automatically be available to you via Canvas. **VERY IMPORTANT NOTE: INCLUSIVE ACCESS IS AN OPT-OUT PROGRAM. This means that your student account will automatically be billed for the eBook at the end of the second week of class (approximately \$40). If you don't want to buy textbook access this way, you must opt out before the deadline: October 13th, 2023, 11:59 PM. If you wish to opt out, visit this portal before the deadline: <https://accessportal.follett.com/2298>**
- If you want permanent access: If you are a Biology major who plans on taking other BILD classes, you may want to buy the textbook in a way that lets you keep it beyond the end of this quarter, because BILD 1, 2, and 3 all use the same textbook. In that case, you can buy a physical copy of the textbook or you can buy permanent access to the eBook. Either of these options are more expensive than the Inclusive Access option, but they let you keep the textbook as long as you want. **If you choose one of these options, you should opt out of Inclusive Access so you don't get charged for it.**
 - To buy lifetime access to the eBook: go to the UCSD Bookstore textbook site, enter the information for the class, choose the 12th edition (blue flower), and click "Buy" (not "Rent").
 - To buy the physical book: The UCSD bookstore may or may not have physical copies for sale. If not, you can buy new or used copies from other book sellers such as abebooks.com. Note: If you are browsing outside booksellers, you may come across a used copy of a paperback excerpt of the textbook that includes only the chapters relevant to this class. It would be labeled BILD 3. This is fine to use for BILD 3, though it won't be useful for BILD 1 or 2. Note that there is an excerpt for an old version of BILD 3 that has a picture of red blood cells on the cover; that's an excerpt from a different textbook and you shouldn't buy it.
- The book may be on reserve at Geisel Library. This is the least convenient option but has the merit of being free.
- Note: The publisher of Campbell Biology offers paid web sites/services called Modified Mastering Biology and MyLab. They cost extra money and are NOT required for this course. They are not included in the Inclusive Access program for this course.
- **iClicker:** You will need to bring a physical iClicker remote to class. A used one is fine (look online), and all models of iClicker remotes work for our class. You cannot share an iClicker remote with another student enrolled in this class, but you can share with someone who is NOT in our class. We are not using the iClicker app for cell phones in this course because it depends on reliable wifi in the classrooms, which is not always available.

GRADING

- 20 points: Week 3 quiz (on Canvas, open-book)
- 40 points: Midterm (in person, closed-book)
- 60 points: Final exam (in person, closed-book, cumulative)
- 25 Points: Clicker participation in lectures

50 points: Daily Quizzes on Canvas
45 points: Discussion section activities
20 points: Biodiversity and climate change assignments

Total: 260 points.

These point totals may change slightly.

See below for details on each of these components of your grade.

To give everyone time to get up to speed, there will be no points for clicker participation or Daily Quizzes until the second full week of class (October 9). I will do them so you can practice, but all points for those will be wiped out after the first week and everyone will start fresh in week 2. Take this opportunity to troubleshoot any problems with iClickers, Canvas quizzes, etc. I will assume that you have solved any problems with your iClicker or Canvas quiz access by the second week. Make sure you keep up with the lectures, readings, assignments, etc. from the beginning so you don't fall behind with the material. Quarters go fast!

Exams and the Week 3 Quiz will cover material covered in lecture, readings assigned for lecture and section, and section activities and assignments. Use the learning objectives that will be posted on Canvas as we go through the quarter as a guide to what you need to know for the exams and quizzes.

Week 3 Quiz:

The quiz will be open for 24 hours. Once you start the quiz, you will have **25 minutes** to complete it. The quiz will open at 11 AM on Sunday, October 22nd and close at 11 AM on Monday, October 23rd, so be sure to start taking it by 10:30 AM on Monday at the latest.

If you send me email once you have started the quiz, do not count on getting a reply within 25 minutes. If you have questions, get them answered before you start the quiz.

The purpose of the Week 3 Quiz is to give you feedback on how you are doing in the class. For this reason, **I have set up the grading so that you can entirely recover from a low score on the Week 3 Quiz as long as you take the opportunity to improve your study strategy after the quiz.** It works like this: If you do better on the midterm than on the Week 3 quiz, your midterm percentage will replace your Week 3 Quiz percentage. For example: if you got 12 points on the Week 3 quiz (60%) but then got 80% on the midterm, I will count your Week 3 Quiz grade as 16 points (80%) when I calculate grades at the end of the quarter. If you get a lower percentage score on the midterm than on the Week 3 Quiz, your Week 3 Quiz score will not change.

The grading policy is also intended to cover technical glitches, illness, etc. for the Week 3 Quiz. If your Internet connection fails or your laptop runs out of battery halfway through the quiz or you have food poisoning, you have my sympathy but you don't need to email me about it; just study hard for the midterm, and your midterm percentage will become your Week 3 Quiz score as well.

The Week 3 quiz will cover all material from the first 3 weeks. It will be given on Canvas, using a similar format to the daily quizzes except that you will only get one chance to answer each question. If you have had technical problems taking the daily quizzes, please resolve those by the time of the Week 3 quiz. The IT folks recommend using Chrome for Canvas quizzes, especially if you have problems with pictures not showing up in your browser. If that fails, email servicedesk@ucsd.edu.

The Week 3 quiz will be open-book and open-notes, but you must take the quiz on your own. That is: you may consult the readings, lectures, your own notes, and other materials from the class this quarter, but you may not communicate in any way with anyone else about the quiz while it is open. Do not use Internet resources or other resources outside our class to answer quiz questions. Do not discuss or share information about the quiz with other students in the class for 48 hours after

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the quiz ends. Do not share information about the quiz outside the class at any time. You may use a calculator if needed. Please see the Academic Integrity policy in the syllabus.

Students suspected of academic integrity violations on quizzes or exams will be invited to Zoom follow-up meetings where they will be asked to (in real time, on video) justify their answers. If the instructor is not convinced during the meeting, or if the student refuses to participate, the violations will be reported to the Academic Integrity Office.

Studying note: Because the quiz is timed, you should study for it just as much as you would if they were closed-book. You will probably have time to double-check a specialized term or two if your notes are organized, but that's about all. So make sure you understand all the material, including the concepts and how to apply them, before the quiz starts.

Midterm and final exam:

These exams will be held in person and will be closed-book (i.e., you may not use notes or any resources other than your own brain). The midterm will contain material for weeks 1-5. The final exam will be cumulative, covering the whole class but weighting the second half of the class more heavily. Exam scores will be available after grading is complete, but the exam questions will not be returned. Questions concerning exams will be addressed in IA and/or professor office hours. **We will check photo ID at each exam, so please bring a photo ID. Students who do NOT have photo ID will not be permitted to turn in an exam.**

During the quarter, if you become unable to take an exam due to serious illness, quarantine, or other emergency, email me before the exam (the earlier the better) and we will discuss your options. If you have COVID symptoms or a positive COVID test, please follow UCSD's requirements here: <https://blink.ucsd.edu/safety/resources/public-health/covid-19>

If you are concerned that you would endanger others by attending an in-person exam, please email me as soon as possible to discuss your situation (sarahs@ucsd.edu). If you have extraordinary circumstances that make it impossible for you to take the exam in person, please email me as soon as possible and we will discuss your options. Otherwise you will receive a 0 on a missed exam.

Clicker participation in lectures

We will be using clickers (iClickers) in lectures. **To avoid issues with connectivity in the classrooms, we will only be using the physical iClicker remotes, not the iClicker app.** iClickers are a response system that allows you to answer questions I pose in class. The questions are intended to spark discussion and to help both of us — you and me — gauge how well you are understanding the material. These are graded on participation (you get credit for clicking in, regardless of which answer you choose). For each lecture in which you attend and participate in the iClicker questions, you will receive 1 point. To receive credit, you need to register your iClicker remote at the beginning of the quarter using the link on our Canvas course site. iClickers will be used during every lecture. See the last pages of the syllabus for more details on clickers.

Threshold grading: There are 25 lecture days in the quarter beginning with week 2. I understand that conflicts and sick days come up, so clicker points are graded using a threshold model: **If you get the clicker points for 65% of the lecture days during the quarter, you will get full credit for completing all the days. This policy is intended to cover illness, quarantine, and personal emergencies, so attend class when you are healthy and able to do so. If you skip classes in the first part of the quarter and then become sick or have another personal emergency, you will likely fall under the 65% threshold.**

Daily Quizzes on Canvas

To help you prepare for the exams and the Week 3 Quiz, I will post one Daily Quiz for each class day on Canvas. You must complete the Daily Quiz by the start of class time to get credit for it. Each Daily Quiz will have two questions. The first question will test whether you read and understood the reading assignment. The second question is about material covered in the previous lecture; it generally requires more thought and **is an example of the kind of question I ask on exams**. Think of the second questions as exam practice.

The Daily Quizzes are designed as a tool to help you check your understanding. As a result, you can take each quiz multiple times until you get it right. Answer these questions using only your brain, no notes/book/slides/etc., so you can check how well you understand/recall the material. **I strongly encourage you to monitor how well you do on these. If you find that you often get them wrong on the first try, change your study strategy, or you are likely to do poorly on the exams and Week 3 quiz.** I have posted study tips for BILD 3 on the Canvas site; I urge you to read them and take the advice.

Discussion section participation

Discussion sections **are required** and will be held **in person**. You must attend the discussion section you registered for. Each discussion section has an activity that is worth 5 points. All the information about what you need to do for each week's section will be posted on Canvas.

Some sections have additional homework, which is worth additional points, that will be posted on Canvas in advance. The homework assignments are required even if you don't attend section that week, so it's your responsibility to check the Canvas page even if you can't come to section.

In order to get the points for the section activity, you must be present and actively participating throughout the discussion section. If you turn in the activity assignment but you were absent or not participating, you will not receive credit for the assignment. Active participation means that you:

- Arrive on time.
- Come prepared, having done anything assigned in advance.
- Engage with your group on the day's activity and contribute actively to the activity throughout the class.
- Contribute to class discussions.
- If a section is held on Zoom due to unusual circumstances: Participation on Zoom means that you are able to speak into a microphone, share your screen, and work on a collaborative document. Being repeatedly late to section will lower your section points.

Sections will meet beginning in the first full week of classes. **All material from section readings, activities, and assignments is fair game for the exams/quiz.** If you miss your section, talk with a classmate or IA to find out about the activity so you learn the material covered that day.

See the "Discussion sections, IAs, and office hours" page on the class Canvas site for information regarding times and locations of discussion sections.

There is no way to make up the points for a missed section. However, in order to give you some flexibility (life happens!), you can miss up to 2 discussion sections without affecting your grade. I will drop the lowest 2 discussion section scores when I calculate final grades. Save your free misses in case you need them unexpectedly!

LEARNING OBJECTIVES

BILD 3 has a lot of material. To help you focus your studying on the main ideas, I have written **learning objectives** for each topic we cover. These are the key to the class and they are what I base the exams and Week 3 quiz on. I will post learning objectives for each topic as we go through the quarter.

LETTER GRADES

Your final letter grade will be based on your **TOTAL** number of points. If you get over 90% of the points you will receive an A, over 80% you will receive at least a B, etc. **If needed** to adjust the distribution of letter grades upward, grades **may** be based on a curve. The curve will only be used (if it is used) to move letter grade thresholds down, so it can only help your grade, not hurt it. Don't assume there will be a curve; in many quarters, the point distribution is high enough that there is no need to adjust the thresholds. The final course curve, if there is one, is based on the students that are enrolled in the course at the end of the quarter. For those taking the class pass/no pass (P/NP), the minimum final grade to receive a grade of P is a C-. Please note that the University will not allow me to change a letter grade after it has been turned in except in cases of clerical error.

WHAT TO DO FOR EACH LECTURE DAY

I will post a page on Canvas for each lecture day telling you what you need to do for that class. There will also be a page for each week's discussion section. The Canvas page for a typical lecture day will include:

Due by the start of class time:

- **Reading assignment.** The first Daily Quiz question is based on the day's reading assignment.
- **Daily Quiz** to be completed on Canvas.

Posted after class:

- **Lecture slides.** I will post the slides for each day's lecture to help you review. Be aware that they are, at best, outlines of the lecture, and essential material will be presented in lecture that does not appear on them or in the textbook. If you want to do well in the class, you will need to come to class; the slides are not enough.
- **Video podcasts** of the lectures will be posted in the Media Gallery on Canvas and/or on podcast.ucsd.edu. If you miss a lecture in person, watch the podcast as soon as possible, but be aware that there are sometimes technical problems with the podcast recordings so don't assume that they are a reliable substitute for coming to lectures. If you notice a persistent problem with the podcasts, please email me to let me know.

PIAZZA

Piazza is a discussion platform where you can post questions and help answer your classmates' questions too. IAs will check Piazza periodically to help answer questions. If you have a question about class content, please post it on Piazza rather than emailing a member of the instructional team. You are always welcome to ask questions in class, discussion section, or office hours as well! To get to Piazza, click the Piazza link on the left side of the class Canvas site. If you have problems or feedback for the developers, email team@piazza.com.

SUPPLEMENTAL INSTRUCTION

In addition to the lectures and discussion sections that are part of our course, there are optional (but useful!) Supplemental Instruction sessions that you are invited to attend. They are free

sessions led by a student who has done well in BILD 3 in the past and who has been trained to facilitate your learning the material. The SI program gives students a safe and inclusive environment to engage with, ask questions, and review lecture material with their peers. The SI Leaders facilitate these discussions through activities and guided questioning.

The BILD 3 SI sessions for our class are led by Chaska Kentish (ckentish@ucsd.edu) and meet on the following schedule. You are always welcome to attend!

In person: Mondays 9-10:20 AM, Teaching and Learning Commons (TLC) 1504.

Zoom: Wednesdays 6:30-7:50 PM. <https://ucsd.zoom.us/j/99276971726>

Note: to attend the Zoom session, you will need to sign in with your UCSD Zoom account, which you can access via <http://ucsd.zoom.us>

LATE ASSIGNMENTS POLICY

Late assignments will be marked down 20% for each calendar day (or part of a day) that they are late.

ACADEMIC INTEGRITY

Academic Integrity is expected of everyone at UC San Diego. This means that you must be honest, fair, responsible, respectful, and trustworthy in all of your actions. Lying, cheating or any other forms of dishonesty will not be tolerated because they undermine learning and the University's ability to certify students' knowledge and abilities. Thus, any attempt to get, or help another get, a grade by cheating, lying or dishonesty will be reported to the Academic Integrity Office and will result in sanctions. Sanctions can include an F in this class and suspension or dismissal from the University. So, think carefully before you act by asking yourself: a) is what I'm about to do or submit for credit an honest, fair, respectful, responsible & trustworthy representation of my knowledge and abilities at this time and, b) would my instructor approve of my action? You are ultimately the only person responsible for your behavior. So, if you are unsure, don't ask a friend — ask your instructor, instructional assistant, or the Academic Integrity Office. You can learn more about academic integrity at academicintegrity.ucsd.edu. (Source: Academic Integrity Office, 2018)

Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. Academic misconduct is broadly defined as any prohibited and dishonest means to receive course credit, a higher grade, or avoid a lower grade. Academic misconduct misrepresents your knowledge and abilities, which undermines the instructor's ability to determine how well you're doing in the course. Please do not risk your future by cheating.

To uphold academic integrity, students shall:

—Complete and submit academic work that is their own and that is an honest and fair representation of their knowledge and abilities at the time of submission.

—Know and follow the standards of the class and the institution.

Thus, no student shall engage in an activity that undermines academic integrity or facilitates academic integrity violations by others. This includes, but is not limited to, the following behaviors:

- No student shall procure, provide, or accept any material that contains questions or answers to any examination or assignment unless the student's possession of the material has been authorized by the instructor.
- No student shall complete, in part or in total, any academic work (e.g., examination, assignment, paper) or obtain academic credit (e.g., attendance, participation) for another person.

- No student shall allow any academic work or academic credit to be completed or obtained, in part or in whole, for themselves by another person or entity. This includes generative AI such as ChatGPT.
 - No student shall plagiarize or copy the work of others and submit it as their own work.
 - No student shall employ aids in undertaking course work or in completing any exam or assignment that are not authorized by the instructor.
 - No student shall alter graded class assignments or examinations and then resubmit them for regrading without the instructor's permission.
 - No student shall submit substantially the same material more than once without prior authorization from the instructor, such as a paper that was written and submitted in another class.
- (Source: UCSD Policy on Integrity of Scholarship, <http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/Appendices/2>).

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 <https://academicintegrity.ucsd.edu/process/policy.html>

Generative AI (e.g., ChatGPT) policy:

All the writing that you turn in in this class must be in your own words, based on your own understanding. Using generative AI technology such as ChatGPT for your assignments in this course will be considered cheating and will be dealt with as an academic integrity violation.

Please do NOT post my lectures or class materials on public websites like Course Hero, Chegg, Quizlet, etc. I work hard on my lectures and other course materials and I do not appreciate the material being made public for anyone to see or download.

ENROLLMENT

Wait list: If you are on the wait list for this class, you should attend classes and do the assignments so if you get in, you won't be behind. You will have access to the Canvas site so you can keep up with the class while you are on the waitlist. You will be automatically enrolled in the class if space becomes available. Please do not ask me or the IAs to add you to the class; we do not have any control over this process. 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/education/undergrad/advising/index.html>

Enrollment questions: Administrative, advising, or registration questions should be submitted via the Virtual Advising Center (vac.ucsd.edu).

RESOURCES

UC San Diego (as an institution) and I (as a person and as the instructor of this course) are committed to full inclusion in education for all people. Services and reasonable accommodations are available to students with temporary and permanent disabilities, to students with DACA or undocumented status, to students facing mental health issues, other personal situations, and to students with other kinds of

learning needs. Please feel free to let me know if there are circumstances affecting your ability to participate in class. Some resources that might be of use include:

- Office for Student with Disability: <https://students.ucsd.edu/well-being/disability-services/index.html>
- UC San Diego CAPS (Counseling & Psychological Services): <https://caps.ucsd.edu> If you are having personal difficulties, don't hesitate to seek help here. It is free to students. They can help you get over many types of hurdles.
- UC San Diego Undocumented Student Services: <https://uss.ucsd.edu>
- The UCSD Basic Needs HUB is part of a UCSD network to address basic needs insecurity, including housing and food. It contains the Triton food pantry and other organizations. Students can obtain personal care products from the HUB for free, including shampoo, menstrual products, toothpaste, and even diapers for students with young dependents. 39% of UCSD students reported having trouble obtaining food: you are not alone, so I encourage you to take advantage of the support that's available. <https://basicneeds.ucsd.edu/>

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://osd.ucsd.edu>. **You will need to coordinate scheduling of exams and the week 3 quiz with me. All of these arrangements should be made within the first two weeks of the quarter.**

The Academic Achievement Hub offers services to help you learn:

- Content tutoring, including for BILD 3: <https://aah.ucsd.edu/content-tutoring/index.html>
- Writing Hub: <https://writinghub.ucsd.edu/>
- Learning Strategies self-paced course: The Learning Strategies Canvas course offers students general academic skills development through a series of training modules. These modules include topics like overcoming challenges, goal setting, time management, note-taking, and exam preparation. This is not a for-credit course that you enroll in; this is an online resource that you can use to improve your learning skills. <https://aah.ucsd.edu/faculty-resources/learning-strategy.html>

For transfer students:

- The Triton Transfer Hub offers services to transfer students including study spaces, peer coaches, learning strategists, free printing, and community building opportunities. <https://transferstudents.ucsd.edu/transfer-hub/index.html>
- Transfers in Science is a student group dedicated to providing science majors with resources and connections to succeed in their educational endeavors. They host social events and help connect transfer students with professional development and research opportunities. https://www.instagram.com/tis_ucsd/?hl=en

If you are having academic difficulty, OASIS can often help. They provide tutoring, as well as classes in study skills and time management. <http://oasis.ucsd.edu>

Problems? If you have serious medical or personal problems during the quarter, the university allows medical withdrawals. Contact the Biology Student Affairs Advising Services office at 858-534-0557 or go to their website.

BILD 3 TIPS FOR SUCCESS

Here is the best strategy for getting an A in this class:

1. Use the learning objectives! I base exams and quizzes on these. They are your guide to what you should focus on.
2. Read “How to study for BILD 3,” posted on the Canvas site.
3. Make a study schedule for yourself to make sure you keep up with the class. Quarters go very fast and you can get behind before you know it. It’s much easier to keep up than to catch up.
4. Do the reading assignments before each class.
5. Go to lectures and your discussion section, participate in discussions, and take notes.
6. When you take notes, write down a summary and essential details of the lecture; don’t try to write down every word. The process of synthesizing and summarizing the lecture in your notes helps you learn the material.
7. 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 or in discussion section. You should have a clear understanding of all the examples in lecture - why was each example important and what did it illustrate?
8. If you miss lecture, listen to the podcast and take notes as if you were in class. However, it’s better to come to class so you can participate in class activities, ask questions, etc.
9. Study in groups! It’s more efficient and helps build your confidence. It’s a big class and a big university, and you will do best if you build a network of peers to learn with and get support from. Quiz each other on the learning objectives and other class material to find out what you actually know vs. what you thought you knew until you had to explain it to a friend!
10. Reflect on how many of the Daily Quiz questions you get right on the first try, and how confident you are in your answers. These are the kinds of questions you should expect to see on exams and quizzes. If you are getting many of them wrong, change your study strategy.
11. Go to your discussion section each week to have questions answered, discuss topics in detail, and get extra help and guidance. Post questions on the class Piazza forum.
12. Ask for clarification during lecture. **I mean it, ask questions during lecture!**
13. **Go to the professor and IA office hours and ask questions. It’s not an imposition; we expect and want you to do it! Asking for help doesn’t mean you’re struggling; it means you’re taking advantage of the resources available to you. Office hours are the best place to ask complex questions – you will get a much more thorough answer. You are also welcome to come and just say, “I’m confused about X; can you help?” We are happy to help you with material you are confused about, no matter where you are in your learning!**

The amount of material presented in this course 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.

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, nor can you get clicker credit for handing in questions on paper, etc.**

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. Make a note of your ID number in case it becomes unreadable.

Register your clicker:

You must register your clicker through the class Canvas site by the end of the second week to receive credit for responses during class. On the left side of the Canvas page, there is a list of modules. Click the “iClicker Registration” module and follow the instructions. You will not see your clicker points on Canvas until you have registered your clicker.

NOTE: The instructions that come with your remote ask you to register your clicker at www.iclicker.com. While you are welcome to do this, it is not necessary. It does **not** take the place of registering your clicker via Canvas.

Using your clicker

Turn your clicker on with the orange power button. Set it to the frequency in our room. 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 clicker screen. While the timer is going, you can change your answer as many times as you want by pressing different buttons. Like all technologies, clickers sometimes malfunction. This is why I use threshold grading for clickers. **I do not adjust scores in other ways, so please don't ask.**

Lost clickers

If you lose your clicker mid-quarter and use a different clicker, you need to change your registration in Canvas *and* you need to email me with this information **before the next lecture**): your student ID number and your clicker ID.

Sometimes clickers break, and some days there is a good reason for missing lecture. **That is the reason for the threshold grading policy.** It is your responsibility to use this grace period to learn how to use your clicker and make sure that your clicker is working, as I do not adjust scores for malfunctioning clickers.

To be clear, if your clicker is not working, I will NOT award points retroactively, so you MUST figure out why it's not working immediately. No exceptions.

If you have problems, check these things:

- Be sure you have registered. This means through the course site on Canvas (NOT at www.iclicker.com)
- Make sure your remote is on the correct frequency.
- 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 their own clicker. If you are sharing with another student, one of you will not get any points.
- Are your batteries still good?

If you have done everything correctly, but your clicker is still not working, please see me immediately after lecture for assistance. I will help you troubleshoot your clicker and check it. If your clicker is malfunctioning, the bookstore will exchange it. We cannot do anything to check your clicker over email. **It is your responsibility to make sure you are getting the points you deserve.** If there is a problem, you need to solve it or see us right away so we can resolve the problem for future lectures.

DISCUSSION SECTION SCHEDULE (subject to change at instructor discretion)

Materials for discussion sections can be downloaded from the Canvas site.

Week	Activity
1	Syllabus scavenger hunt
2	Selection activity
3	Genetic drift activity
4	Population genetics exercise (Hardy-Weinberg equilibrium)
5	Phylogenetics activity
6	Species activity (may be held in lecture due to Veterans' Day)
7	Mass extinction reading discussion
8	<i>No sections this week due to the Thanksgiving holiday</i>
9	Biodiversity Show and Tell
10	Climate change activity

For discussion section times and locations, see the “Discussion sections, IAs, and office hours” page on the Canvas site.

Important Dates: Wait lists end: October 12. Last day to drop without a “Withdrawal” (W) on transcript: October 27. Last day to drop with a W: November 13.

Portions of this syllabus adapted from Carlyne Kurle.

Schedule of lecture topics (subject to change at instructor discretion):

Week 0 (September 29):

Introduction to the class

Week 1 (October 2-6)

Introduction to evolutionary biology

History of evolutionary thought

Week 2 (October 9-13):

History of evolutionary thought

Evidence of evolution

Week 3 (October 16-20):

Evidence of evolution

The genetics of populations

Week 3 Quiz: Open 11 AM Sunday Oct. 22 – 11 AM Monday Oct. 23. On Canvas, open-book.

Week 4 (October 23-27):

Natural selection revisited

Phylogenetics

Week 5 (October 30 - November 3):

Phylogenetics

Species and speciation

Midterm exam: Saturday November 4, 2-3 PM. In person, closed-book.

Note that the midterm exam is only 1 hour long, not 1.5 hours.

A00 class: Peterson Hall 110. B00 class: Solis Hall 107

Week 6 (November 6-10):

History of life on Earth

(Note: no lecture on Friday November 10 because of the Veterans' Day holiday.)

Week 7 (November 13-17)

History of life on Earth

Human evolution

Week 8 (November 20-24):

Biodiversity

(Note: no lecture on Friday November 24 because of the Thanksgiving holiday.)

Week 9 (November 27 – December 1):

The physical environment and the biosphere

Population ecology

Week 10 (December 4-8)

Community ecology

Ecosystem ecology

Climate change

Final exam: Saturday December 9, 3-4:30 PM. In person, closed-book, cumulative.

Note that the final exam is only 1.5 hours long, not 3 hours.